# Conversion of Non-Recyclable Plastics-to-Oil Products Feasibility Study, Madison County, New York

*Prepared for:*


New York State Department of Environmental Conservation
Division of Materials Management
625 Broadway, 9th Floor
Albany, NY 12233-7253

*Prepared by:*

PARSONS
301 Plainfield Road, Suite 350
Syracuse, New York 13212

*and*

MSW CONSULTANTS

June 2017

# Table of Contents

## TABLES



## FIGURES



## APPENDICES

# Acronyms

| Acronym | Definition / Description |
|---|---|
| ABS | Acrylonitrile Butadiene Styrene |
| ACRC | Ag Container Recycling Council |
| ASR | Automotive Shredder Residue |
| C&D | Construction and Demolition |
| ELV | End of Life Vehicle |
| HDPE | High Density Polyethylene |
| HIPS | High Impact Polystyrene |
| ISRI | Institute of Scrap Recycling |
| LSWMP | Local Solid Waste Management Plan |
| MSW | Municipal Solid Waste |
| NYSDEC | New York State Department of Environmental Conservation |
| RAPP | Recycling Agricultural Plastics Program |
| RHRF | Recyclables Handling and Recovery Facility |
| SMA | Supplier Market Area |
| VDF | Vehicle Dismantling Facility |

# Executive Summary

## BACKGROUND

- In February 2016, Madison County, New York issued a Request for Proposal for a facility to convert non-recyclable plastics-to-oil products.
- In August 2016, New York State Department of Environmental Conservation Division of Materials Management requested that Parsons Engineering of New York, Inc., in collaboration with MSW Consultants, perform a regional waste plastics and waste tire market assessment (Feasibility Study) to assess the available feedstock and to understand the economics of supplying this facility.

## PROJECT OBJECTIVES

- Quantify the potential feedstock of waste plastics and waste tires by performing a macro-supply analysis and conducting supplier market research to identify point-source generators.
- Evaluate handling and transportation costs to collect, store and deliver feedstock to the proposed Madison County plastics-to-oil facility in a cost effective and efficient manner.
- Compare the economics of aggregating and transporting potential feedstock with local disposal costs to provide Madison County with economical estimates to assess break-even disposal fees.

## SUPPLIER MARKET AREA

- The Supplier Market Area (SMA) included 25 counties in a 100-mile radius from the geographic center of Madison County.
- The SMA is comprised of approximately 2.2 million people (one million households).

## FEEDSTOCK SUPPLY ANALYSIS

- The macro-supply analysis identified a theoretical annual supply of approximately 133,000 tons of waste plastics if appropriate programs were in place to recover every piece of waste plastic in the disposed municipal solid waste and construction and demolition debris disposal streams.
- The macro-supply analysis identified a theoretical annual supply of approximately 25,000 tons of waste tires based on population.
- Supplier market research identified the following approximate quantities of waste plastics from point sources: agricultural farms (1,500 tons per year); recyclable handling recovery facilities (11,000 tons per year); industrial plastic manufacturers, electronic recycling facilities, and privately owned construction and demolition (C&D) processing facilities (3,000 tons per year).
- Supplier market research identified the following quantities of waste tires from point sources: vehicle dismantling facilities, waste tire storage facilities, tire retreaders, and other county-specific drop-off locations (14,000 tons per year).

### HANDLING AND TRANSPORTATION ECONOMICS

- For waste plastics, the most efficient and economical transportation method is to densify and bale the material and use a tractor trailer to transport the material to the proposed plastics-to-oil facility in Madison County.
- For waste tires, a tractor trailer is also the most economical transportation method.

### COUNTY LEVEL ECONOMICS

- Break-even disposal fees were calculated for each county for waste plastics and waste tires.
- Madison County may use break-even disposal fees to evaluate the actual distance the proposed plastics-to-oil facility would need to go to source plastics or tires to meet their supply requirements economically.
- Madison County will need to evaluate market pricing conditions and potentially offer a lower disposal fee to "attract" waste plastics away from the current local disposal option.

### CONCLUSIONS

- The projected total feedstock of waste plastics in the 100-mile SMA, including quantities from the macro-supply analysis and point-source generators is approximately 150,000 tons per year. Higher recovery rates may be achieved through additional education, implementation of new programs, and substantial evolution in the existing material recovery infrastructure to effectively separate, densify and ship these materials.
- Results from this Feasibility Study suggest the most organized current source for waste plastics, is from electronic recycling facilities and other plastic manufacturers where the material is currently being source separated and, in many cases baled.
- Tractor trailers are projected to be the most economically efficient mode of transportation for waste plastics in every county except Madison County, where a roll-off may be more economical.
- The projected total feedstock of waste tires from point-source generators in the 100-mile SMA is approximately 14,000 tons per year. Securing locally generated waste tires will require undercutting and disrupting the current market.
- Tractor trailers are projected to be the most economical means to collect whole tires especially from large quantity generators, for all counties in the SMA.
- For the Madison County plastics-to-oil facility to be successful, market-building should be performed to identify the framework for moving the project forward, initiating development with potential suppliers, and negotiating terms with the suppliers to ensure a steady supply of materials.

# 1.0 Introduction

This section provides background information for the project and identifies the project objectives and contents of each section within this report.

## 1.1 Project Background

In February 2016, Madison County, New York issued a Request for Proposal for a facility to convert non-recyclable plastics-to-oil products. To assess the available feedstock and to understand the economics of supplying this facility, the New York State Department of Environmental Conservation (NYSDEC) Division of Materials Management requested Parsons Engineering of New York, Inc., in collaboration with MSW Consultants, perform a regional waste plastics and waste tire market assessment (Feasibility Study) to determine if the regional market can supply the desired quantity and quality of feedstock.

The keys for the successful development of the plastics-to-oil facility are identifying a consistent supply (feedstock) of non-recyclable (waste) plastics and scrap (waste) tires and identifying an economically viable means of transporting these materials to the facility. Based on current recycling practices within New York State, waste plastics are defined as plastics that are currently not being recycled and can be generated by industrial manufacturers, farms (e.g., agricultural plastics used for wrapping feed or hay), commercial suppliers (e.g., seasonal wrap for boats), construction and demolition (C&D) facilities, and municipal sources (plastic residue from recyclables processing facilities). Since there are currently a limited number of options to handle non-recyclable plastics in a useful manner, most are landfilled. Waste tires are those at the end of their useful life and may include passenger tires, light truck tires, commercial tires (e.g., tractor trailer), or off-the-road tires. NYSDEC regulation prohibits the disposal of tires in a landfill and requires an alternative management method (e.g., beneficial reuse, conversion into value added products, energy conversion).

The feedstock available from the supplier market area (SMA) for this Feasibility Study was assessed within a 100-mile radius from the geographic center of Madison County (Figure 1). The SMA is comprised of approximately 2.2 million people (one million households) based on the 2015 United States Census and includes a combination of urban, suburban and rural areas. Twenty-five counties are located within the SMA and include: Broome, Cayuga, Chemung, Chenango, Cortland, Delaware, Fulton, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Schuyler, Schoharie, Seneca, Tioga, Tompkins, Wayne and Yates. These counties are organized into 23 local planning units in five different NYSDEC regions. The use of the terms planning unit and county are interchangeable for all counties except Oneida, Herkimer, Jefferson and Lewis Counties. Oneida and Herkimer Counties fall under the Oneida-Herkimer planning unit, and Jefferson and Lewis Counties fall under the Development Authority of the North Country planning unit. Each planning unit is responsible for developing and implementing local solid waste management plans (LSWMPs) and updating these plans every 10 years. Table 1 identifies each county in the SMA, its corresponding planning unit, the NYSDEC region it falls under, and the status of the planning unit's LSWMP.

## 1.2 Project Objectives

The objectives of this Feasibility Study are listed below.

- Quantify the potential feedstock of waste plastics and waste tires within the SMA by performing a macro-supply analysis and conducting supplier market research to identify point-source generators.
- Evaluate handling and transportation costs to collect, store and deliver feedstock within the SMA to the proposed Madison County plastics-to-oil facility in a cost-effective and efficient manner.
- Compare the economics of aggregating and transporting potential feedstock with local disposal costs to provide Madison County with economical estimates to assess disposal fees.

## 1.3 Report Organization

In addition to this introduction, the report is organized into the following five sections:

- Section 2: Feedstock Supply Analysis and Results – describes the methods and results of the macro-supply analysis and supplier market research.
- Section 3: Handling and Transportation Economics – describes the methods and results for handling and transportation of potential feedstock to the proposed facility in Madison County.
- Section 4: County Level Economic Analysis – compares economics of handling and transporting potential feedstock with local disposal costs to assess break-even disposal fees by county.
- Section 5: Conclusions – Summarizes the findings.
- Section 6: References – Lists the resources used to complete this report.

# 2.0 Feedstock Supply Analysis and Results

This section presents the methodology and results for performing the macro-supply analysis and supplier market research for potentially available feedstock.

## 2.1 Macro-Supply Analysis – Waste Plastics

The purpose of the macro-supply analysis for waste plastics was to quantify the theoretical amount potentially available in the SMA in an ideal situation where every piece of non-targeted plastic (plastic currently not being recycled) could be recovered from the municipal solid waste (MSW) and C&D disposal streams. The macro-supply analysis was completed by estimating the total quantity of MSW and C&D debris generated by each county within the SMA, reviewing published waste characterization studies to estimate the fraction of plastics typically found in MSW and C&D debris and extrapolating these data to project the theoretical quantity of mixed plastics available in the disposed waste streams for each county. These macro-supply analysis elements are described in greater detail below.

### 2.1.1 County-Level Waste Generation

Each planning unit is required to complete an Annual Planning Unit Recycling Report to account for all the solid waste generated by the planning unit during the year. These reports document the disposal facilities (e.g., county, municipal, private) within the planning unit and the total quantity (tons) of MSW and C&D debris managed. NYSDEC provided a directory of electronic copies of these reports for review by the Project Team. Data analysis was limited to the 2015 annual reports.

Reports were available for all planning units (counties) except Cayuga, Oswego and Seneca. For these counties, the quantity of disposed MSW and C&D debris was calculated by multiplying the number of households in each county by the average quantity of disposed material per household in the SMA (1.2 tons for MSW and 0.28 tons for C&D debris). For counties combined under one planning unit (Oneida-Herkimer and Development Authority of the North Country) the total quantity of MSW and C&D debris reported was extrapolated to the individual counties based on the number of households in that county. A review of the available data indicates approximately 1.27 million tons of MSW and 307,000 tons of C&D debris are disposed each year by residential and commercial suppliers in the SMA. Table 2 identifies the population, number of households and quantities of disposed MSW and C&D debris for each county.

### 2.1.2 Waste Characterization

The Project Team reviewed data from regional and state MSW characterization studies and C&D debris waste characterization studies to identify the average percent of waste plastics typically associated with disposal streams representative of the SMA. The fraction of waste plastics calculated in these waste characterization studies was applied to the total quantity of disposed MSW and C&D debris for the SMA (Section 2.1) to estimate the theoretical supply of waste plastics associated with these two disposal streams. These waste characterization studies are summarized below.

### MSW Waste Characterization

The Project Team identified several MSW waste characterization studies within New York State and adjacent regional areas where the types of wastes being disposed are representative of the types of waste likely to be found in the SMA. The MSW waste characterization studies reviewed included the following:

- Statewide studies from Connecticut (Connecticut Department of Energy 2016), Vermont (Vermont Department of Environmental Conservation 2013) and Delaware (Delaware Solid Waste Authority 2017);
- Disposal facility watershed studies in Massachusetts (Covanta Energy Haverhill 2014; Covanta Energy Springfield 2014; Covanta Energy SEMASS 2014; Wheelabrator North Andover 2014; Wheelabrator Millbury 2014; and Wheelabrator Saugus 2014); and
- A study for Albany County, New York (Capital Region Solid Waste Management Partnership planning unit 2009).

Each of these studies reported the total quantity of MSW disposed per year. They also provided a detailed analysis of the types of waste plastic materials typically found in the waste stream, including plastics targeted for curbside recycling programs (e.g., #1 and #2 bottles) and non-targeted plastics (e.g., bulky rigid plastics, film, agricultural plastics, marine shrink wrap, plastic films, grocery bags). The percent or fraction of targeted and non-targeted plastics in each MSW stream was calculated for each study, and the results were averaged. The data from these studies indicates an average of 2.9 percent of the MSW stream is targeted plastics and 10.5 percent is non-targeted plastics (13.4 percent total). The minimum and maximum total quantity of plastics in disposed MSW ranged between 10.8 and 15.9 percent (see Table 3).

These numbers were consistent for the SMA based on limited data included in LSWMPs for Chemung (2010), Chenango (2015), Cortland (2014), Onondaga (2013) and Ontario (2011) Counties. These five counties used the NYSDEC composition and recovery projection tool to estimate the quantity of plastic that could be recovered or diverted from the MSW stream if appropriate programs were in place. The results estimated between 13.7 and 13.8 percent of the MSW stream for these five counties are plastics.

For this study, the average fraction of non-targeted plastics identified from the regional and state waste characterization studies (10.5 percent) was applied to the total quantity of disposed MSW identified in Section 2.1.1 to estimate the theoretical supply (Section 2.1.3). Data from these studies were used for extrapolation compared to applying the results from the NYSDEC composition and recovery projection tool because the waste characterization study data are comparable to the SMA and most of these studies are more current and better capture ongoing trends in disposed waste characterization.

### C&D Debris Characterization

The Project Team also reviewed C&D debris characterization studies to identify the types of waste plastics found in a typical C&D stream and included data from four studies. These included a statewide study in Massachusetts (Massachusetts Department of Environmental Protection 2008), a study in Mecklenburg County, North Carolina (2008), and two studies in Kentucky (Lexington-Fayette

Urban County Government 2014 and Louisville Metro Government 2016). These reports also included detailed analysis of the types of waste plastic found in the C&D debris waste stream. Targeted plastics for recycling typically included high density polyethylene (HDPE) #2 buckets, tires, polyethylene terephthalate (PET) and other plastic containers (#3-7). Non-targeted plastics included items such as clean recoverable film, other composite/mixed plastic, vinyl siding, and plastic bags. The data from these studies indicate an average incidence of waste plastics in disposed C&D of 1.2 percent, with a range between 0.9 and 1.6 percent (Table 4). For this study, the average fraction (1.2 percent) was used to calculate the theoretical supply of waste plastics that may be found in C&D debris. The reported percentages from these waste characterization studies are consistent with the average incidence rate of one percent identified by a point-source generator as described in Section 2.3.1.

### 2.1.3 Theoretical Supply - Plastics

The extrapolated quantity or fraction of waste plastics associated with disposed MSW was calculated by multiplying the average percentage of non-targeted plastics (10.5 percent) from the waste characterization studies (Section 2.1.2) by the total quantity of disposed MSW in each county (Section 2.1.1). The results indicate approximately 132,827 tons of waste plastics would be available per year (511 tons per working day) if appropriate programs were in place to recover every piece of waste plastic in the disposed MSW stream. Waste plastics associated with such items as greenhouse potting containers, marina shrink wrap and flexible film from packaging were assumed to be included in the currently disposed MSW. Therefore, plastic associated with these materials is included in this theoretical supply quantity. The quantity calculated for each county is shown in Table 5.

The extrapolated quantity or fraction of waste plastics associated with C&D debris was calculated by multiplying the average percentage of non-targeted plastics (1.2 percent) identified in the waste characterization studies (Section 2.1.2) by the total quantity of disposed C&D debris in each county (Section 2.1.1). The results indicate approximately 3,686 tons of waste plastic would be available per year (14.2 tons per working day) if appropriate programs were in place to recover every piece of waste plastic in the disposed C&D stream. The quantity calculated for each county is shown in Table 5.

## 2.2 Macro-Supply Analysis – Waste Tires

The purpose of the macro-supply analysis for waste tires was to quantify the theoretical amount potentially available in the SMA in an ideal situation where every waste tire could be recovered. The theoretical quantity of waste tires in the SMA was calculated using the industry standard established by the Rubber Manufacturer's Association (email correspondence, November 7, 2016), which estimates approximately one passenger tire equivalent is generated per person per year (22.5 pounds). This quantity was extrapolated to the population in each county to calculate the theoretical supply of waste tires generated annually in the SMA. The results indicate approximately 25,196 tons (97 tons per working day) of waste tires would be available per year. The quantity calculated for each county is shown in Table 5.

## 2.3 Supplier Market Research

The purpose of the supplier market research task was to quantify the potential feedstock of waste plastics and tires available in each county from point-source generators that may not be accounted for in the macro-supply analysis. The types of solid waste facilities that may serve as a point source for waste plastics and/or tires include recyclables handling and recovery facilities (RHRFs), electronic recycling facilities, C&D debris processing facilities, vehicle dismantling facilities (VDF) and waste tire storage facilities. This task relied on primary research with trade associations, reviewing letters of interest to Madison County, reviewing annual operating reports for private facilities designated as solid waste management facilities by NYSDEC, and conducting a direct survey of plastic manufacturers and tire retreaders in the SMA. The remainder of this section describes the methods and results for the supplier market research task.

### 2.3.1 Trade Associations

Eleven trade associations were contacted to either obtain a directory of potential suppliers (point-source generators) in the SMA or to identify industry standards for use in quantity calculations. Below is a list of each trade association contacted and a summary of the information obtained.

**Cornell Recycling Agricultural Plastics Program (RAPP)**

The Cornell RAPP was a NYSDEC funded program designed to develop sustainable means for New York State farmers to manage agricultural plastics by reusing, recycling or minimizing waste plastics generated. These plastics have traditionally been buried/burned at the farms and are most likely not being disposed with MSW. As such, agricultural plastics were considered as a separate source of waste plastics in this study.

An attempt was made in November 2016, to contact members of this program to discuss the findings in the publication: *Agricultural Plastics Recycling in New York State*, September 1, 2013, through March 31, 2016. The program has disbanded, and no members were available to discuss results of this study. As such, information obtained from this organization was limited to the findings identified in the publication and to a letter Cornell RAPP had written to Madison County Department of Solid Waste on June 3, 2014. This letter was included as an attachment in the 2016 *Final Request for Proposals (RFP) Issued by Madison County for the Conversion of Non-Recyclable Plastics-to-oil Products*.

The 2016 publication summarized the quantity of agricultural plastics successfully collected by Cornell RAPP between September 1, 2013 and March 31, 2016. For the counties in the 100-mile radius around Madison County, Cornell RAPP reportedly collected approximately 150 tons per year. The referenced letter further indicated approximately 10 pounds of agricultural plastics (mostly film plastics used for feed storage) are generated from each mature cow per year. This consumption rate was used to calculate the theoretical quantity of agricultural plastics available in the SMA by applying it to the number of mature dairy cows in each county (National Agricultural Statistics Service 2014). The dairy industry is reportedly the largest contributor to used agricultural plastics in New York State (Cornell Waste Management Institute 2014).

The theoretical quantity of agricultural plastics in the SMA based on 304,090 mature dairy cows and a generation rate of 10 pounds of agricultural plastic per year per cow is 1,522 tons per year. Of the

25 counties in the SMA, only four have theoretical quantities greater than 100 tons per year. These include Madison County (101 tons), Lewis County (136 tons), Jefferson County (142 tons) and Cayuga County (172 tons). Table 6 summarizes the number of cows, the theoretical quantity of agricultural plastics calculated for the SMA, and the quantity of plastics collected by Cornell RAPP for each county. The results indicate the Cornell RAPP was able to capture approximately 10 percent of the theoretical supply. The theoretical quantity is also shown in Table 7 as agricultural plastics. Additional education, outreach and coordination would be necessary to capture a greater percentage of the theoretical supply.

### Ag Container Recycling Council (ACRC)

The ACRC was contacted in October 2016. This trade association is responsible for the collection of triple rinsed or pressure washed high density polyethylene (HDPE) pesticide containers. The containers are currently being ground and sold for reuse as corrugated agricultural pipe. The ACRC is currently selling this material for $0.30 to $0.32 per pound ($600 to $640 per ton) and indicated approximately 150,000 pounds (75 tons) of this type of plastic were recovered in New York State last year, largely within a 100-mile radius of the Interstate I-90 corridor. The plastic quantities identified from this trade association were not included as part of this Feasibility Study because the material is currently being recycled and a point-source location was not determined.

### C&D Recycling Association

Direct survey with the C&D Recycling Association identified one facility in the SMA (Taylor Montgomery facility, Montgomery County) and one outside the project area (Triad Recycle and Energy, Erie County). Multiple attempts were made to speak with a representative for the Taylor Montgomery facility in October and November 2016 but were not successful. Contact was made with Triad Recycle and Energy in October 2016. It was initially thought a facility operated within the SMA; however, it was later confirmed the primary facility is in Erie County.

Triad Recycle and Energy indicated most waste plastics typically associated with C&D debris are landfilled due to a high level of contamination (e.g., metal handles on buckets, material residual in buckets, random brackets, screws). In personal communication on November 3, 2016, Triad Recycle and Energy confirmed the approximate quantity of waste plastics typically found in C&D debris is one percent based on quantities of C&D plastic the facility recovered for sale as bulky rigid plastics in 2013. This percentage of waste plastics in C&D material is consistent with the average quantity identified in the waste characterization studies presented in Section 2.1.2. This percentage was used to estimate the fraction of waste plastics from C&D point-source facilities by multiplying the total annual input received by the facility by one percent (see Section 2.3.4).

### Rubber Manufacturer's Association

In November 2016, the Rubber Manufacturer's Association provided a copy of the 2016 Scrap Tire and Rubber Users Directory, which identified two point-source generators for waste tires inside the SMA (Rid-O-Vit, Onondaga County, and Seneca Meadows, Seneca County) and one just beyond the SMA (Casings, Greene County). This trade association also provided industry standard weights for passenger/light truck tires (22.5 pounds), commercial tractor trailer tires (120 pounds), and for an unspecified mix of tires (32.5 pounds). The standard weights were applied to known tire quantities

managed by various point-source generators to estimate the total tonnage available in each county (see Section 2.3.5).

### Tire Retread and Repair Information Bureau

In December 2016, the Tire Retread and Repair Information Bureau provided a directory identifying nine tire retreaders in the SMA. Each tire retreader was contacted by telephone for direct survey. Most tires generated from these suppliers are commercial tractor trailer tires. The results are presented in Section 2.3.5.

### Institute of Scrap Recycling Industries

The Institute of Scrap Recycling Industries (ISRI) was contacted in February 2017, to identify the industry standard for the fraction of plastics in automotive shredder residue (ASR). One large automobile shredder was identified in the project area: Ben Weitsman - Upstate Shredding located in Owego, New York (Tioga County). The shredding of automobiles and large household appliances results in a mixture of ferrous metal (70 to 75 percent), non-ferrous metal (5 percent) and ASR (20 percent), which consists of glass, fiber, rubber, automobile liquids, plastic and dirt (California Environmental Protection Agency 2006; Millennium Waste Inc. 2014; and Waste Management 2015). The fraction of plastics in ASR is highly variable and is dependent on the composition of the feedstock. However, it is estimated that 50 percent of the ASR may consist of plastics and rubber (California Environmental Protection Agency 2006). Historical studies completed by ISRI are consistent with these fractions; however, ISRI suggests collecting and analyzing a representative sample of ASR from a designated facility for an accurate assessment of the plastic fraction of this material. No quantity of ASR was included in the point-source generator feedstock supply calculations for this Feasibility Study.

### Carpet America Recovery Effort

Carpet America Recovery Effort was contacted in October 2016; however, this trade association indicated there are no suppliers in the 100-mile radius around Madison County. The closest supplier is in the New York City/New Jersey area.

### New York State Vegetable Growers Association

Multiple attempts were made to contact the New York State Vegetable Growers Association by telephone and email in October and November 2016, respectively; however, all attempts were unsuccessful.

### Association of Plastic Recyclers

An unsuccessful attempt was made to contact the Association of Plastic Recyclers by telephone in November 2016. One plastics reclaimer in the SMA was identified, but did not respond to attempted contacts.

### Plastics to Fuel and Petrochemistry Alliance

An unsuccessful attempt was made to contact the Plastics to Fuel and Petrochemistry Alliance by telephone in November 2016.

#### Automotive Tire Recyclers Association

An unsuccessful attempt was made to contact the Automotive Tire Recyclers Association by email in December 2016.

### 2.3.2 Letters of Interest to Madison County

Madison County included letters of support in an attachment to the 2016 *Final Request for Proposals (RFP) Issued by Madison County for the Conversion of Non-Recyclable Plastics-to-oil Products*. The Project Team reviewed the letters and identified two potential point-source generators for inclusion in this Feasibility Study. These are described below.

- Cornell University submitted two letters on behalf of Cornell RAPP (letter not dated) and the Cornell Waste Management Institute (June 2014). These letters provided support for using agricultural plastics at the proposed plastics-to-oil facility in Madison County and identified the plastic generation rate per cow (see Section 2.3.1). Furthermore, these letters identified other potential sources of plastic including potting media and bags (e.g., wood pellets and wood shavings). For this Feasibility Study, it was assumed that potting media and bags are currently being disposed as MSW; therefore, related quantities were captured as part of the macro-supply analysis. However, in November 2016, the Project Team contacted the wood pellet manufacturer, New England Pellet (Deposit, New York, Delaware County) and identified the facility generates approximately 6 tons per year of waste plastics. This quantity is included in Table 7 under the Industrial Plastics category.
- Oneida Healthcare (Madison County) submitted a letter indicating the facility would be able to provide Madison County with 70 tons of plastics per year (June 2014). This quantity is included in Table 7 under the Industrial Plastics category.

### 2.3.3 Recyclables Handling and Recovery Facility

RHRFs were considered point-source generators during this Feasibility Study because these facilities receive, sort, and recover a variety of traditional recyclables (e.g., bottles and cans, cardboard, newspaper). They are therefore, well suited to aggregate, densify and ship waste plastics as is the practice for these existing targeted materials. Individual RHRFs have various operational and space constraints that would need to be overcome before they can target and recover additional plastics. This analysis does not attempt to identify and overcome such individual constraints. RHRFs also already generate residual materials that may contain a meaningful fraction of waste plastics. The waste plastic fraction of residuals may be a suitable feedstock for a plastics-to-oil facility if it could be well separated from other residues. As such, these facilities were included as point-source generators in this Feasibility Study.

NYSDEC considers an RHRF a solid waste processing facility that is required to submit an annual operating report to document the quantity and type of material managed at the facility each year. NYSDEC provided the Project Team with a directory of electronic copies of these reports. The Project Team reviewed available RHRF annual reports for 2015 and estimated the total quantity of inbound recyclables processed by these facilities. A total of 84 facilities were identified in the SMA.

The fraction of waste plastics available from RHRFs was calculated by assuming three percent of the inbound recyclables is comprised of waste plastics and extrapolating this to the total quantity processed at each facility. The results indicate approximately 11,280 tons per year (43 tons per working day) are available. The highest quantities would come from Ontario (33.4%), Onondaga (26.6%) and Oneida (21.9%) Counties. The RHRFs represent a potentially significant supplier over the long term if the facilities can be cultivated to seek out, sort, and supply additional waste plastics. The quantity of waste plastics associated with RHRFs by county is included in Table 7.

### 2.3.4 Industrial Plastics

The category of industrial plastics in this Feasibility Study primarily includes waste plastics from plastic manufacturers, electronic recycling facilities, and privately owned C&D processing facilities located in the SMA. The quantity of waste plastics from these industrial sources was identified through direct surveys or by reviewing facility annual operating reports. Waste plastics from VDF and an automobile shredding facility were also considered; however, the Project Team concluded no significant supply of waste plastics was available from either point-source generator at the time this report was prepared. The remainder of this section provides a brief description of how the data were obtained for each industrial point source followed by a discussion of results.

#### Plastic Manufacturers

Internet searches for plastic molding manufacturers, including injection molding and plastic extrusion, were conducted as part of the supplier market research task. The internet searches identified 48 potential point-source generators in the SMA. The Project Team contacted 40 of these facilities (83 percent); however, the response rate varied by county. Personal communication was successful with 21 facilities, 12 of which indicated no waste plastic was available. The reasons given were either that the facilities are already recycling the material and are not interested in an alternative disposal method or the material is ground and reused in the manufacturing process.

#### Electronic Recycling Facilities

NYSDEC considers electronic recycling facilities solid waste management facilities; however, these facilities are not required to complete an annual report. Fourteen facilities were identified in the SMA. The Project Team contacted all 14 facilities; however, the response rate varied by county. Personal communication was successful with nine facilities. Each facility was surveyed directly by telephone to identify the total tons of waste plastic available.

#### C&D Processing Facilities

NYSDEC considers C&D debris processing facilities solid waste management facilities. As such, these facilities are required to submit an annual report to NYSDEC identifying the total tons of C&D debris managed each year. NYSDEC provided the Project Team with a directory of electronic copies of these reports. Four C&D processing facilities anticipated to have a supply of waste plastics were identified in the SMA. Other C&D processing facilities exist in the SMA but appear to largely process such materials as woody materials, asphalt, concrete, and soil. These were excluded from this Feasibility Study. One C&D processing facility each was identified in Delaware, Schuyler, Tompkins and Wayne Counties; however, annual reports were not available for the facilities in Delaware or Wayne Counties. The quantity of C&D material included in the 2015 annual reports for the other two

facilities was multiplied by the average incidence of waste plastics (one percent) identified from the Triad Recycle and Energy C&D facility (Erie County) described in Section 2.3.1.

### Vehicle Dismantling Facilities and Automobile Shredder

Direct survey of seven VDFs in Madison County indicated plastics are not being separated at these facilities because the vehicles are either being sent off-site whole or are being crushed prior to shipment. It may be possible for the VDF to remove plastic bumpers from end of life vehicles (ELVs) and collect them in a roll-off for use at the proposed plastics-to-oil facility prior to the vehicle being sent-off site. Quantities of potential waste plastic associated with bumpers from VDFs were not calculated as part of this Feasibility Study. Most ELVs are sent off-site to the largest vehicle shredder in the SMA, Ben Weitsman - Upstate Shredding located in Tioga County. A direct survey with Upstate Shredding indicated plastics in ASR are currently not being separated at this facility. The fraction of plastics that make up the ASR is unknown, and no attempt was made to estimate this quantity.

### Results

Supplier market research for industrial plastics indicates 2,969 tons are generated annually. Most of the waste is associated with electronic recycling facilities (73.2%), followed by plastic manufacturers (21.1%) and C&D facilities (5.7%). The quantity of industrial plastics by county is included in Table 7. A database containing the breakdown of waste plastics by county and by entity is included in Appendix A.

Onondaga County had the highest quantity of industrial plastics (1,038 tons per year). Approximately 95 percent of the material was associated with Sunnking Syracuse, a NYSDEC registered electronic waste recycling facility with a satellite office in Syracuse, New York (Onondaga County). Any plastic materials generated from this location are sent to the company's headquarters in Brockport, New York (Monroe County, outside the SMA) for processing. Personal communication with Sunnking indicated the facility has 910 tons per year of primarily acrylonitrile butadiene styrene (ABS) plastic. The facility currently separates the material into black and white plastics, then bales the material and sends it to market for $0.08 to $0.12 per pound ($160 to $240 per ton). Sunnking estimated an additional 78 tons of mixed plastics are currently not being recovered at the facility. Future recovery of these materials may be possible but may require economic considerations.

The second highest quantity of industrial plastics was 726 tons per year in Fulton County associated with Evolution Recycling, Inc., another NYSDEC registered electronic waste recycling facility. This facility has a variety of plastics including mixed #1-#7, high impact polystyrene (HIPS), and mixed plastics (rigid plastics from electronics, polyethylene ether, and ABS). Currently, the facility bales the plastics and sends them to market (between $0.07 and $0.17 per pound or $140 to $340 per ton). Evolution Recycling, Inc. is also separating clean rubber from equipment like cathode ray tube televisions, keyboards, and remote controls. The material is currently being sent to market (between $0.03 and $0.07 per pound at the door or $60 to $140 per ton).

The third highest quantity of industrial plastics was 425 tons per year in Broome County associated with Geodis Global Solutions, Inc., a NYSDEC registered electronic waste recycling facility. This facility generated primarily rigid plastics and films (shrink wrap), plasticized foam, and polystyrene foam. The plastic materials are currently being sent to market (minus $0.02 to plus $0.02 per pound or $40 per ton).

### 2.3.5 Waste Tires – Point-Source generators

Point-source generators of waste tires were divided into two categories: planning units and facilities. The results for each category are described below.

#### Planning Units

As described in the macro-supply analysis section, each planning unit is required to submit an Annual Planning Unit Recycling Report to document the types and quantity of solid waste managed. This report includes a section for tires. The Project Team reviewed the 2015 reports to identify waste tire quantities managed by the planning units each year. For counties combined under one planning unit (Oneida-Herkimer and Development Authority of the North Country), the total quantity of tires reported was extrapolated to the individual counties based on the population in that county. The total quantity of tires reported for the SMA is 3,592 tons per year with the highest quantities found in Oneida County (737 tons, 20.5%), Jefferson County (598 tons, 16.6%), Tompkins County (485 tons, 13.5%) and Delaware County (436 tons, 12.1%). The results are presented in Table 7.

#### Facilities

Facility point-source generators for waste tires included 182 VDFs, five waste tire storage facilities and nine tire retreaders. NYSDEC considers the first two facility types to be solid waste management facilities that are required to submit an annual operating report to document the quantity of tires managed at the facility each year. NYSDEC provided a directory of electronic copies of these reports for review by the Project Team. Data analysis was limited to 2015 reports. Tire quantities for tire retreaders were obtained by direct survey. A database containing the breakdown of facility generated waste tires by county and by entity is included in Appendix B. The results are summarized below.

Supplier market research for waste tires from these sources indicates approximately 10,891 tons are generated per year. Approximately 4,729 tons (43.4%) are associated with the waste tire storage facilities, 4,570 tons (42%) are from tire retreaders and 1,592 tons (14.6%) are from VDFs.

The waste tire storage facilities included Nucor Steel (Cayuga County), Worldwide Tire Distribution (Montgomery County), Rid-O-Vit and Industrial Tire of CNY (Onondaga County), and GCR Waste Tires and Service (Chemung County). The tires from these facilities are most likely passenger tires and/or light truck tires (22.5 pounds per tire per the 2016 Scrap Tire and Rubber Users Directory provided by the Rubber Manufacturer's Association). Nucor Steel is not considered a viable source for waste tires because the facility accepts waste tires from other suppliers and beneficially reuses all tires received in the facility's steel making process. The quantity of tires available from the other four point-source generators ranged from 38 tons per year (Industrial Tire of CNY) to 4,000 tons per year (Worldwide Tire Distribution). Nearly 85 percent of the tires associated with waste tire storage facilities are associated with Worldwide Tire Distribution. This facility picks up waste tires within a 100-mile radius around Amsterdam, New York (Montgomery County).

Tire retreader facilities were identified in the following counties: Chemung (two), Cortland (one), Jefferson (one), Oneida (two), Onondaga (one), Schuyler (one), and Schoharie (one). The types of tires typically processed at these facilities are commercial tractor trailer tires (120 pounds per tire, per the 2016 Scrap Tire and Rubber Users Directory provided by the Rubber Manufacturer's Association). The quantity of tires available from these point-source generators ranges between 104 tons per year (GCR Tires and Service, Chemung) and 2,994 tons per year (McCarthy Tire, Schoharie).

Every county in the SMA contained at least one VDF except Hamilton County. The quantity of tires available from individual VDFs ranged between 0 tons per year and 133 tons per year (Gary's U Pull-It, Binghamton, New York, Broome County). One stocking tire dealer with full automotive service and repair capabilities in Madison County (Silver City Tire) generates 135 tons per year. The results by county are presented in Table 7.

### 2.3.6 Regional Tire Processors

During the supplier market research, a regional tire processor was identified just outside the 100-mile radius of the SMA shown on Figure 1. The facility, Casings, Inc. is in Catskill, New York (Greene County) and is registered with NYSDEC as a waste tire storage facility and a permitted tire recycler. The 2015 annual report submitted to NYSDEC for this facility indicated it managed 51,679 tons. Personal communication with this facility in November 2016 indicated the facility would be able to provide materials to Madison County either as whole tires or shredded (2-inch, 4-inch, or 6-10 inch). Nearly 90 percent of the tires received at this facility are passenger tires.

# 3.0 Handling and Transportation Economics

The purpose of this section is to present the methods and results for the handling and transportation economic analysis. Tables in this section present data for each county in order of increasing distance from Madison County.

## 3.1 Methods

### 3.1.1 Material Handling Costing

A proprietary pro-forma model was developed to estimate the handling cost to aggregate, bale and load waste plastics and waste tires for transport to the proposed plastics-to-oil facility in Madison County on a county-by-county basis. The assumptions and factors used to develop associated costs are described below.

**Waste Plastics – Baling and Loading**

Waste plastics are lightweight and require densification for efficient transportation. Two types of equipment were evaluated as part of this Feasibility Study for handling waste plastics: compactor roll-off containers (e.g., 30 to 40 yards) and balers. A compactor is typically used to reduce the size of the material requiring transportation by crushing and compressing the contents. The container would be located at a designated facility, picked up when full, and transported to Madison County.

For larger operations, handling costs would likely include a unit cost to bale plastics to be transported by tractor trailer. The baler would be used to make bales to specification ready for use by Madison County. The bale density and size depends on the characteristics or attributes (resins) of the plastic materials being baled and can significantly vary depending on the types of waste plastics (e.g., rigid, expanded, film) baled together. For this modeling analysis, it was assumed that a hybrid mixed plastic bale was created with a combination of rigid plastics, foam, and film. It was further assumed that the material in the rigid fraction would be a composite with other trace materials. The actual bale weight will determine the number of bales per shipment and will drive the transportation economics. Plastic bales can weigh anywhere from 800 to 1,500 pounds depending on the resin and form of plastic in the bale.

To estimate the capital cost, it was assumed that either a horizontal closed-end baler or a two-stroke baler would be necessary to achieve the bale size and density required by most processors. The operational cost analysis included labor and benefits for a baler and skid-steer operator. Other operating costs for the baler included baler maintenance and baling wire. Operating costs for loading either the baler or the tractor trailers included maintenance costs for the skid-steer, fuel, tires, repairs, and preventive maintenance. The results for handling waste plastics are presented in Section 3.2.1.

**Waste Tires**

Waste tires are relatively dense compared to waste plastics, making transportation more efficient with minimal handling. For this study, no handling costs were identified for waste tires. The transportation and economic analysis focused on whole tires as opposed to shredded tires because the point-source generators of waste tires identified in the 100-mile SMA primarily have whole tires.

Suppliers of waste tires were separated into two categories: a small quantity generator (10 to 300 tires per month) and a large quantity generator (more than 300 tires per month). Direct survey with VDFs in Madison County indicated the small quantity generators were using a box truck or other smaller light weight truck to transport whole waste tires to a local drop-off point. The transportation costing model described in Section 3.1.2 describes the assumptions built into developing costs for this approach. This transportation method assumed labor costs for the collection crew to manually load tires awaiting disposal.

Direct survey with tire retreaders indicated large quantity generators load whole tires onto trailers as the tires are generated. When the trailer is full, a transporter hauls the trailer away leaving an empty trailer behind. Some suppliers indicated the ability to load tires based on what Madison County can accept. One retreading company, Parmenter Inc. (with locations in Chemung, Cortland, and Schuyler Counties), indicated having a range of tires available from passenger tires to commercial truck tires. The facility typically fills a tractor trailer load each month assuming the load is mixed with 75 percent tractor trailer tires and 25 percent passenger tires.

### 3.1.2 Transportation Costing

A proprietary pro-forma model was developed to calculate transportation costs to transport waste plastics and waste tires to the proposed plastics-to-oil facility in Madison County on a county-by-county basis. The cost model included inputs for capital and operating costs. Three primary methods of transportation were considered in this analysis: a long-haul tractor trailer (plastics or tires), a compactor box and roll-off truck (plastics), and a box truck (milk run). It should be noted the pro-forma model was not used for the box truck/milk run analysis as described below. Transportation for waste tires was separated into two categories: a small quantity generator and a large quantity generator, where the former would use a box truck and the latter a long-haul tractor trailer. Assumptions used to construct the model and develop associated costs are summarized below. The results for the transportation costing are presented in Section 3.2.2.

#### Long Haul Tractor Trailer

For the costing model, it was assumed these tractor trailers would have no back-hauls, although incorporation of a back-haul would improve the cost effectiveness of this (or any transportation) option. Costs for this transportation method were used for waste plastics and waste tires. The capital costs included in the model assumed a new tractor and van type trailer. Operating costs included a driver's salary and benefits, fuel, tires, preventive maintenance costs, repair costs, insurance and an overhead cost percentage.

For waste tires, transportation costs for hauling whole tires also considered the number of tires generated monthly based on the types of businesses generating tires in each county and typically assumed the supply was from a large quantity generator. The number of tires generated was used to estimate the number of loads that could be transported each month.

Travel time and mileage were estimated from each county's geographic center to Madison County's geographic center. A unit cost per haul (per ton-mile) was calculated based on the input costs used in the model. Additionally, the cost per ton was computed based on drive time and the estimated weight of a loaded trailer. For waste plastics, the loaded trailer weight was calculated assuming approximately 30 to 35 bales measuring approximately 30 inches by 48 inches by 60 inches and

weighing 1,000 to 1,200 pounds each (35,000 pounds or 17.5 tons total). For waste tires, the loaded trailer weight was calculated assuming the load contained either primarily passenger and light truck tires or primarily commercial tractor trailer tires, where the weight of each loaded trailer was approximately 6 to 8 tons.

#### Compactor Box and Roll-Off Truck

For the costing model, it was assumed that only full compactor roll-off containers would be hauled and transported to Madison County. Costs for this transportation method were applied to waste plastics only. The capital costs included in the model assumed a compactor box and roll-off truck. Operating costs included a driver's salary and benefits, fuel, tires, preventive maintenance costs, repair costs, insurance, an overhead cost percentage and a maintenance cost for the compactor.

Travel time and mileage were estimated from each county's geographic center to Madison County's geographic center. A unit cost per haul (per ton-mile) was calculated based on the input used in the model. Additionally, the cost per ton was computed based on drive time and estimated weight of a loaded compactor box (5.5 tons).

#### Box Truck for Milk Run

Costs for this transportation method assumed loose, whole tires would be loaded onto a box truck by an operator performing a dedicated "milk run" to multiple small generators with the starting point always in Madison County. Transportation costs were calculated by first estimating the number of tires generated monthly based on an estimate of businesses generating tires in each county with all point sources being served as a minimum number of tires is reached. The number of tires generated was used to estimate the number of hours needed to collect and load the tires in a box truck and to calculate the number of loads per month to accommodate the number of tires generated. The milk run costs assume a fully utilized, dedicated collection route that departs Madison County five days per week, collects from a specified set of small waste tire generators, and returns to the proposed plastic-to-oil facility in Madison County.

Capital costs for the model assumed a 26-foot box truck with a lift gate would be used. Operating costs included a driver and laborer's salary and benefits, fuel, tires, preventive maintenance costs, repair costs, insurance and an overhead cost percentage.

Travel time and mileage were estimated assuming Madison County as the starting point for milk runs in each county. A unit cost per haul (per ton-mile) was calculated based on the input costs used in the model. Additionally, the cost per ton was computed based on drive time and the payload of a loaded box truck, estimated at approximately 3.5 tons.

## 3.2 Results

This section presents the results of the estimated handling and transportation economics for moving the waste plastics and tires to Madison County.

### 3.2.1 Handling

#### Waste Plastics

The estimated annualized cost per ton to bale mixed plastics and prepare them for shipment, regardless of location within the 100-mile SMA is $10.61. Table 8 summarizes these costs.

#### Waste Tires

No handling costs were identified for waste tires; however, the milk run transportation method assumed labor costs for the collection crew to manually load tires awaiting disposal.

### 3.2.2 Transportation

Three primary methods of transportation were considered in this analysis: a tractor trailer (baled plastics or whole tires), a roll-off container (plastics) and a box truck (whole tires). The results of the transportation cost analysis are presented in Table 9 and described below.

#### Waste Plastics

Given that longer distance translates into more time and fuel, estimated transportation costs naturally increase with distance from Madison County. As presented in Table 9, estimated costs to transport plastics in a trailer increase from $1.36 per ton within Madison County to $14.32 per ton in Yates County (105 miles away). In comparison, the estimated unit cost to haul waste plastics in a 40-yard roll-off container is more than five times greater with prices ranging between $7.78 per ton in Madison County to $81.65 per ton in Yates County. These estimated costs indicate it would not likely be economical to use a roll-off container to transport plastics over long distances to Madison County: this method may be limited to Madison County. The higher estimated unit cost associated with the roll-off container is due to the lower payload and estimated higher operating cost for this transportation method compared to the tractor trailer.

#### Waste Tires

Transportation costs for hauling waste tires by tractor trailer is significantly more economical compared to dedicated milk runs (collection by box truck) as shown in Table 9. The estimated costs to transport whole tires by tractor trailer ranges from $4.07 per ton in Madison County to $43.11 per ton in Yates County (105 miles away). In comparison, estimated transportation costs for dedicated milk runs vary somewhat with distance from Madison County and range between $122.45 per ton (Otsego County, 66.4 miles away) and $293.89 per ton (Lewis County, 74.7 miles away and Yates County, 105 miles away). The average cost is estimated to be $188.34 per ton. In practice, there may not be enough small waste tire generators to justify a dedicated milk run daily collection route, so these costs should be considered to be the best possible economics for this type of collection. If it is not possible to staff a permanent collection route, the estimated milk run collection costs would likely be greater than what is shown in Table 9.

Three small quantity generators in Madison County were willing to share transportation costs. These included Don's Auto Barn, Tower Mountain Salvage, and Vanderwal's. Don's Auto Barn previously has paid $2 per tire ($177 per ton) for a truck service to pick-up tires. In comparison, the model estimated $209.92 for a milk run pick-up service in Madison County. Don's Auto Barn is currently filling a box truck and disposing of the tires at the Madison County Landfill at a reported $125 per

ton ($1.41 per tire). This price is likely limited to the tip fee required for tire disposal by Madison County and does not include additional transportation costs. The other two generators indicated waste tires are currently transported to the Madison County landfill. The disposal cost per ton based on direct survey with these generators ranged between $100 and $133 per ton. The higher cost was associated with Tower Mountain Salvage; however, according to this facility's annual operating report for 2015, no tires were sent off-site. Considering the latter two facilities are small quantity generators, the facilities likely used box trucks to transport waste tires to the local landfill. The reported costs are likely the tip fees required by the local landfill and may not include actual transportation costs. Although these costs may not be directly comparable to the model results, they are included for informational purposes and are summarized in Table 10.

Two large quantity generators in the SMA that use tractor trailer services provided transportation cost data points which were included for comparison to the small quantity generators. Silver City Tire located in Madison County is a stocking tire dealer and full automotive service and repair center. This generator fills a tractor trailer and a vendor picks-up the load when trailer is full for $1,000 per load ($89 per ton). Silver City Tire reported 1,000 passenger tires could fit onto each trailer load. Similarly, Long Park Tire, a tire retreader in Jefferson County indicated paying $1,400 per trailer load ($93 per ton). These costs are included in Table 10.

With limited point-source data available for model validation, transportation costs for waste tires are highly dependent on the model predictions. Madison County would have to disrupt the existing network for how these tires are currently being managed and may be able to intercept these tires on a case-by-case basis.

# 4.0 County-Level Economic Analysis

A county-level economic analysis was completed to estimate the economics of sourcing waste plastics and tires from the SMA and to quantify the supply economically available to the proposed plastics-to-oil facility. The county-level economic analysis was completed by reviewing the total quantities of waste plastics and tires available in each county (Tables 5 and 7), evaluating the transportation and handling costs of bringing waste plastics and tires to Madison County (Tables 8 and 9) and reviewing the current disposal costs (see Section 4.1 and Table 11). This information was also used to calculate a projected disposal fee (break-even cost) that Madison County may be able to charge to source waste plastics and tires from each county in the SMA. This information is summarized in a county-level fact sheet prepared for each county in the SMA and provided in Appendix C. Subsections below describe the disposal market research and the break-even disposal fees (or rebate) Madison County would be able to charge for point-source generators within each county to be able to deliver their waste plastics or waste tires to a plastics-to-oil facility, incurring no additional costs above the existing local disposal fee.

## 4.1 Disposal Market Research

Disposal market research was completed by obtaining current disposal costs for MSW, C&D debris and tires within each planning unit on the planning unit's website. If a disposal fee was unavailable, the average disposal fee for the SMA was applied to that planning unit. As stated in Section 1.1, the use of planning units and counties are interchangeable for all counties except Oneida and Herkimer Counties, which fall under the Oneida-Herkimer Planning Unit, and Jefferson and Lewis Counties which fall under the Development Authority of the North Country Planning Unit. For the following discussion, planning units are referred to as counties.

Disposal fees for MSW were unavailable for Cayuga, Delaware, Hamilton, Ontario, Schuyler, Seneca, Tioga, Wayne and Yates Counties. Disposal fees for C&D materials were unavailable for Cayuga, Cortland, Hamilton, Montgomery, Ontario, Schuyler, Seneca, Tioga, Tompkins, Wayne and Yates Counties. The average disposal fee across the SMA is $63 per ton for MSW and $58 per ton for C&D.

Disposal fees for waste tires were also found on the planning units' websites. If a disposal fee was unavailable, $2.00 per tire ($178 per ton) was assumed. Disposal fees for tires were unavailable for the following counties: Cortland, Hamilton, Jefferson, Lewis, Ontario, Schuyler, Seneca, Tioga, Wayne and Yates. Delaware County does not charge a disposal fee for tires, though quantity limits do apply. The average waste tire disposal fee across the SMA is $194 per ton, with a range between $100 per ton and $445 per ton. The higher disposal costs suggest the facility accepting the waste tires would rather not be receiving the tires and may prefer the tires be sent elsewhere.

Results from the disposal market research were used to estimate a break-even cost that Madison County could use to assess the economics of sourcing waste plastics and tires to the proposed facility. The disposal costs for MSW, C&D materials and tires are summarized in Table 11.

## 4.2 Break-Even Disposal Fees

Break-even disposal fees were calculated for each county in the SMA by evaluating projected handling and transportation costs for waste plastics and tires by the methods discussed in Section 3

and considering current disposal costs in each county. The break-even disposal fees are the projected minimum costs Madison County would be able to charge (or offer rebate, if negative) to offset transportation and handling costs incurred for sourcing material from each county while considering the local tip fees and the supplier's local disposal alternative. The break-even disposal fee is the amount at which there is no economic difference between two options: it would cost a waste plastic supplier the same amount to dispose of plastics in the local landfill or haul the plastics to Madison County.

Determining break-even or rebate disposal fees for waste tires is more complex than for waste plastics because unlike plastics, a network for tire removal already exists in the SMA. The waste tire market currently connects private organizations. Disposal cost information is therefore neither readily available nor reported by the organizations that are currently providing tire removal services. Consequently, information on removal costs/tire management costs were limited to disposal fees charged by the planning units (Table 11) and information obtained by direct survey with waste tire generators (Table 10).

To evaluate the break-even disposal fees, the waste plastics and tire quantity data from the macro-supply analysis and the point-source generators was organized by county sorted by increasing distance away from Madison County (see Tables 12 and 13). These tables show the cumulative tons of waste plastic and tires available with increasing distance from Madison County and may be used to determine how far away the proposed facility needs to go to source plastics or tires to meet the annual supply requirements. This distance can be used to establish an appropriate disposal fee for the project as well. The larger the quantity of feedstock needed by the plastics-to-oil facility, the further away the material must be sourced and the lower the disposal fee that can be charged. If the source material is far enough away, a rebate (credit) may need to be negotiated. The plastics-to-oil facility will need to evaluate market pricing conditions and potentially offer a lower disposal fee to "attract" waste plastics away from the local and current disposal options.

Data in Tables 12 and 13 show that transportation efficiency increases with proximity to Madison County based on the higher break-even costs for counties closest to Madison County. The further away a supplier is, the less efficient/economical it will be to transport materials to Madison County.

For example, if the plastics-to-oil facility required 35,000 tons per year of waste plastics, and it were possible to capture all plastics generated (which is not operationally practical, but used as an example to illustrate the findings), the proposed facility would need to source only as far as Onondaga County (25 miles) at an estimated break-even disposal fee per ton of $69.86 for tractor trailer or $63.86 for a roll-off. If the quantity of material required was 150,000 tons per year, Madison County would need to source all counties within 98.3 miles at an estimated break-even disposal fee per ton of $19.98 for tractor trailer or would have to offer a rebate of $32.44 for material in a roll-off from this distance.

To continue the example with tires, if the plastics-to-oil facility required 1,200 tons per year of waste tires, and it were possible to capture all tires generated, the proposed facility would need to source only as far as Onondaga County (25 miles) at an estimated break-even disposal fee per ton of $91.67 for tractor trailer but would have to offer a rebate of ($85.37) for a milk run (box truck). If the quantity of material required was 14,200 tons, Madison County would need to source all counties

within 98.3 miles at an estimated break even disposal fee of $62.03 for tractor trailer and would have to offer a rebate of $70.66 for a milk run.

# 5.0 Conclusions

The projected total feedstock of waste plastics in the 100-mile SMA, including quantities from the macro-supply analysis and point-source generators, is 152,284 tons per year. The largest percentage of this total (87.2 percent), is associated with the fraction of waste plastics theoretically included in MSW followed by waste plastics in RHRF residue (7.4 percent), waste plastics in C&D debris (2.4 percent), industrial plastics (1.9 percent) and agricultural plastics (1 percent). In practice, it is not reasonable to approach a high rate of recovery of these waste plastics without a combination of the following factors:

- Additional education
- Implementation of new programs in each planning unit because these materials (excluding industrial plastics) currently are not source separated
- Substantial evolution in the existing material recovery infrastructure (collection programs and sorting facilities) to effectively separate, densify and ship these materials.

Although industrial plastics make-up a minor fraction of the total waste plastic quantity estimated for the SMA, it may be more practical to establish a supply with these sources, particularly electronic recycling facilities because these suppliers are currently source separating plastics and many have baling capabilities. Approximately 2,969 tons per year of waste plastics are available from industrial plastic sources, of which 2,173 tons per year are associated with electronic recycling facilities.

Regardless of the source, the quantity of waste plastics that could economically be delivered to Madison County, if separated, aggregated and densified, will depend on multiple factors including distance from Madison County and the selected mode of transportation. Tractor trailers are projected to be the most economically efficient mode of transportation for waste plastics in every county except Madison County where the estimated break-even disposal fee is $60.03 for tractor trailer and $64.22 for roll-off. A rebate would be required for sourcing waste plastics and transporting them by roll-off for all counties located 86 miles or more from the geographic center of Madison County.

Of greater importance to a prospective plastics-to-oil facility, a long lead time would be required to identify aggregators willing to separate plastics from the currently disposed MSW, C&D debris, or RHRF and establish a steady feedstock from these generators. By far, most waste plastics are being disposed within the residential and commercial MSW stream. Conceptually, it may be possible to entice RHRFs to add waste plastics to the facility's list of targeted recyclables. This would enable the facility to start sorting out a new commodity stream for sale in a plastics-to-oil market. Operationally, many RHRFs are already maximizing processing and storage capacity with existing commodities that are comparably easier to sort, and may resist a move to add waste plastics that do not process through automated sort lines. If so, it is not likely that a significant fraction of currently disposed waste plastics can be quickly recovered.

For waste tires, the projected total feedstock in the 100-mile SMA, including quantities from point-source generators, is 14,483 tons per year. The largest quantity of feedstock available is associated with waste tire storage facilities and tire retreaders (9,299 tons per year). Securing locally generated waste tires will require undercutting and disrupting the current market. For small-quantity

tire generators, a box truck making a "milk run" does not appear to be an efficient means for collecting tires because Madison County would likely have to offer a rebate (credit) to point sources in all counties in the SMA. The projected break-even disposal fees suggest use of a tractor trailer would be more economical for collecting whole tires from large quantity generators for all counties in the SMA. The break-even disposal fee for the tractor trailer steadily decreases with increasing distance from Madison County where the estimated fee would be $98.15 per ton to Yates County where it is reduced to $59.11 per ton.

In conclusion, a mature system for waste tire separation, collection and disposal already exists outside of the MSW and C&D waste streams. The quantity of waste tire suppliers is limited to the automotive industry, and each already has a system in place for managing tires. In comparison, a system for waste plastics is not as developed. Waste plastics are typically mixed with other refuse and consist of several different resin types. Furthermore, waste plastics are widely generated and may come from commercial, industrial, and agricultural sources. The results of this Feasibility Study suggest the most organized current source for waste plastics is from electronic recycling facilities and other plastic manufacturers where the material is currently being separated. Although much of this material is currently being sent to market, most of the suppliers were interested in keeping the material for local use. For the Madison County plastics-to-oil facility to be successful, market-building should be performed to identify the framework for moving the project forward, initiating development with potential suppliers, and negotiating terms with suppliers to ensure a steady supply of materials. The economic and financial analysis contained in this report should provide helpful inputs to a business plan that may be developed for the proposed Madison County plastics-to-oil facility.

# 6.0 References

California Environmental Protection Agency 2006. Evaluation of Shredder Residue as Cement Manufacturing Feedstock. Department of Toxic Substances Control. Office of Pollution Prevention and Technology Development. March

Capital Region Solid Waste Management Partnership planning unit *2009. Capital Region Solid Waste Management Plan,* Volume 2, Appendix D Waste Characterization Field Study. March.

Connecticut Department of Energy and Environmental Protection *2016. 2015 Statewide Waste Characterization Study*. March 15.

Covanta Energy Haverhill *2014. Waste Characterization Study in Support of Class II Recycling Program*. Submitted to Massachusetts Department of Environmental Protection. February 14.

Covanta Energy Springfield *2014. Waste Characterization Study in Support of Class II Recycling Program*. Submitted to Massachusetts Department of Environmental Protection. February 14.

Covanta Energy SEMASS *2014. Waste Characterization Study in Support of Class II Recycling Program.* Submitted to Massachusetts Department of Environmental Protection. February 13.

Cornell Waste Management Institute 2014. Letter sent to Madison County Department of Solid Waste. June 3.

Delaware Solid Waste Authority *2017. Statewide Waste Characterization Study.* January 9.

Final Request for Proposals for the Conversion of Non-Recyclable Plastics-to-oil Products. Issued by Madison County, February 2016.

Lexington-Fayette (KY) Urban County Government *2014. County-wide Waste Stream Analysis.* November 10.

Louisville (KY) Metro Government *2016. Louisville Metro 2016 Waste Characterization Study.* July.

Massachusetts Department of Environmental Protection *2008. 2007 Massachusetts Construction and Demolition Debris Industry Study*. May 16, 2008.

Mecklenburg County (NC) 2008. *Construction and Demolition Debris Composition Study*. September.

Millennium Waste Incorporated 2014. Automotive Shredder Residue, Special Waste Disposal. November 28.

National Agricultural Statistics Service, 2014. 2012 Census of Agriculture, New York State.

Vermont Department of Environmental Conservation 2013. *State of Vermont Waste Composition Study Final Report.* May.

Waste Management 2015. Automotive Shredder Residue (ASR) Management: An Overview. Volume 45. Pages 143-151. November.

Wheelabrator North Andover *2014. Waste Characterization Study.* Submitted to Massachusetts Department of Environmental Protection. January 17.

Wheelabrator Millbury 2014. *Waste Characterization Study*. Submitted to Massachusetts Department of Environmental Protection. January 17.

Wheelabrator Saugus *2014. Waste Characterization Study*. Submitted to Massachusetts Department of Environmental Protection. January 17.

# TABLES

## TABLE 1 - PLANNING UNITS IN SUPPLIER MARKET AREA

| COUNTY | PLANNING UNIT | NYSDEC REGION | LSWMP STATUS[1,2,3] |
|---|---|---|---|
| Broome | Broome County | Region 7 | Draft Plan Received. Under Review. |
| Cayuga | Cayuga County | Region 7 | No LSWMP submitted. |
| Chemung | Chemung County | Region 8 | Approved through 12/31/25 |
| Chenango | Chenango County | Region 7 | Draft Plan Received. Under Review. |
| Cortland | Cortland County | Region 7 | Approved through 12/31/24 |
| Delaware | Delaware County | Region 4 | Comments issued. |
| Fulton | Fulton County | Region 5 | Approved through 12/31/21 |
| Hamilton | Hamilton County | Region 5 | Draft Plan received. Under Review. |
| Herkimer | Oneida-Herkimer Solid Waste Authority | Region 6 | Approved through 12/31/20 |
| Jefferson | Development Authority of the North Country | Region 6 | Approved through 12/31/25 |
| Lewis | Development Authority of the North Country | Region 6 | Approved through 12/31/25 |
| Madison | Madison County | Region 7 | Approved through 12/31/20 |
| Montgomery | Montgomery County | Region 4 | Approved through 12/31/16 |
| Oneida | Oneida-Herkimer Solid Waste Authority | Region 6 | Approved through 12/31/20 |
| Onondaga | Onondaga County (except Skaneateles Town and Village which are not part of a recognized planning unit) | Region 7 | Final draft LSWMP Approved. Reported dated Sept 2016. |
| Ontario | Ontario County | Region 8 | Approved through 12/31/23 |
| Oswego | Oswego County | Region 7 | Draft Plan Received. Under Review. |
| Otsego | Otsego County | Region 4 | Approved through 12/31/16 |
| Schuyler | Schuyler County | Region 8 | Comments Issued. |
| Schoharie | Schoharie County | Region 4 | Approved through 12/31/16 |

## TABLE 1 - PLANNING UNITS IN SUPPLIER MARKET AREA

| COUNTY | PLANNING UNIT | NYSDEC REGION | LSWMP STATUS[1,2,3] |
|---|---|---|---|
| Seneca | Seneca County | Region 8 | No LSWMP submitted |
| Tioga | Tioga County | Region 7 | Draft Plan Received. Under Review. |
| Tompkins | Tompkins County | Region 7 | Draft Plan Received. Under Review. |
| Wayne | Wayne County | Region 8 | No LSWMP submitted |
| Yates | Yates County | Region 8 | No LSWMP submitted |
| Town of Skaneateles | Not members of a recognized planning unit | Region 7 | |
| Village of Skaneateles | Not members of a recognized planning unit | Region 7 | |

Notes:

1. Comments Issued: Draft LSWMP has been submitted to NYSDEC and commented on; however, the planning unit has not submitted a response to NYSDEC comments or an updated draft LSWMP.

2. Draft Plan received: Draft LSWMP has been received by NYSDEC and is under review. No comments have been issued.
3. No LSWMP: The planning unit does not have a LSWMP approved and has not submitted a draft to NYSDEC.

Acronyms:

NYSDEC: New York State Department of Environmental Conservation
LSWMP: local solid waste management plan

## TABLE 2 - COUNTY OVERVIEW

| County | Population (2015) [1] | Households (2015) [1] | Disposed MSW (tons) [2] | Disposed C&D (tons) [2] |
|---|---|---|---|---|
| Broome | 196,567 | 89,640 | 158,081 | 18,871 |
| Cayuga[3] | 78,288 | 36,451 | 43,741 | 10,206 |
| Chemung | 87,071 | 38,340 | 8,902 | 870 |
| Chenango | 48,844 | 24,905 | 24,145 | 1,189 |
| Cortland | 48,494 | 20,503 | 15,948 | 7,916 |
| Delaware | 46,053 | 31,178 | 13,048 | 5,542 |
| Fulton | 53,992 | 28,656 | 20,418 | 8,411 |
| Hamilton | 4,712 | 8,777 | 5,891 | 0[4] |
| Herkimer | 63,100 | 33,323 | 40,192 | 11,910 |
| Jefferson (DANC) | 117,635 | 59,123 | 70,918 | 31,626 |
| Lewis (DANC) | 26,957 | 15,314 | 18,355 | 8,186 |
| Madison | 71,849 | 31,761 | 37,490 | 8,753 |
| Montgomery | 49,642 | 23,188 | 34,270 | 11,104 |
| Oneida | 232,500 | 103,861 | 125,206 | 37,104 |
| Onondaga | 468,463 | 204,970 | 249,596 | 64,015 |
| Ontario | 109,561 | 49,903 | 62,321 | 16,416 |
| Oswego[3] | 120,146 | 53,661 | 64,393 | 15,025 |
| Otsego | 60,636 | 30,692 | 38,463 | 8,594 |
| Schoharie | 31,330 | 17,217 | 21,188 | 4,821 |
| Schuyler | 18,186 | 9,577 | 19,951 | 666 |
| Seneca[3] | 34,833 | 16,210 | 19,452 | 4,539 |
| Tioga | 49,453 | 22,162 | 54,762 | 10,398 |
| Tompkins | 104,926 | 42,272 | 49,321 | 9,407 |
| Wayne | 91,446 | 41,447 | 53,445 | 11,605 |
| Yates | 25,048 | 13,743 | 15,505 | 170 |
| **Total** | **2,239,732** | **1,046,874** | **1,265,002** | **307,344** |

Notes:

1. Source for Population and Household data: 2015 U.S. Census Data: http://www.census.gov/quickfacts
2. Source for Disposed MSW and C&D: 2015 Annual Planning Unit Recycling Reports.
3. Quantity of disposed MSW and C&D debris was calculated by multiplying the number of households in each of these counties by the average quantity of disposed material per household in the Supplier Market Area.
4. Disposed C&D tonnage not reported separately. C&D included in disposed MSW.

Acronyms:

MSW: Municipal Solid Waste
C&D: Construction and Demolition Debris
DANC: Development Authority of the North Country

TABLE 3 - PERCENTAGE OF WASTE PLASTICS IN DISPOSED MUNICIPAL SOLID WASTE

| | CT Statewide | VT Statewide Residential | VT Statewide Commercial | MA-Covanta 2013 | | | MA-Wheelabrator 2013 | | | DE Statewide | Albany (CRDA) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Waste Plastics** | **2015** | **2011-12** | **2011-12** | **Springfield** | **SEMASS** | **Haverhill** | **Milbury** | **Saugus** | **N Andover** | **2015-16** | **2009** |
| Targeted Curbside Recyclables | 2.6% | 2.2% | 1.4% | 3.6% | 2.9% | 3.3% | 2.4% | 2.3% | 2.7% | 3.0% | 5.3% |
| Other Plastics | 9.2% | 8.6% | 10.8% | 10.4% | 11.9% | 12.6% | 11.6% | 12.2% | 9.4% | 11.8% | 7.2% |
| **Total Plastic Waste** | **11.8%** | **10.8%** | **12.2%** | **14.0%** | **14.8%** | **15.9%** | **14.0%** | **14.5%** | **12.1%** | **14.8%** | **12.5%** |

| Waste Plastics | Average | Min. | Max. |
|---|---|---|---|
| Targeted Curbside Recyclables | 2.9% | 1.4% | 5.3% |
| Other Plastics | 10.5% | 7.2% | 12.6% |
| Total Plastic Waste | 13.4% | 10.8% | 15.9% |

Sources:

**CT Statewide 2015:** Connecticut Department of Energy and Environmental Protection 2016. 2015 Statewide Waste Characterization Study. March 15

**VT Statewide 2011-12:** Vermont Department of Environmental Conservation 2013. State of Vermont Waste Composition Study Final Report. May.

**MA-Covanta 2013:**

**Springfield:** Covanta Energy Springfield 2014. Waste Characterization Study in Support of Class II Recycling Program. Submitted to Massachusetts Department of Environmental Protection. February 14.

**SEMASS:** Covanta Energy SEMASS 2014. Waste Characterization Study in Support of Class II Recycling Program. Submitted to Massachusetts Department of Environmental Protection. February 13.

**Haverhill:** Covanta Energy Haverhill 2014. Waste Characterization Study in Support of Class II Recycling Program. Submitted to Massachusetts Department of Environmental Protection. February 14.

**MA-Wheelabrator 2013:**

**Milbury:** Wheelabrator Millbury 2014. Waste Characterization Study. Submitted to Massachusetts Department of Environmental Protection. January 17.

**Saugus:** Wheelabrator Saugus 2014. Waste Characterization Study. Submitted to Massachusetts Department of Environmental Protection. January 17.

**N Andover:** Wheelabrator North Andover 2014. Waste Characterization Study. Submitted to Massachusetts Department of Environmental Protection. January 17.

**DE Statewide 2015-16:** Delaware Solid Waste Authority 2017. Statewide Waste Characterization Study. January 9.

**Albany CRDA 2009:** Capital Region Solid Waste Management Partnership Planning Unit 2009. Capital Region Solid Waste Management Plan, Volume 2, Appendix D Waste Characterization Field Study. March.

TABLE 4 - PERCENTAGE OF WASTE PLASTICS IN DISPOSED CONSTRUCTION AND DEMOLITION DEBRIS

| Study | Year Completed | Waste Plastic (%) |
|---|---|---|
| Mass DEP | 2008 | 1.6% |
| Lexington, KY | 2014 | 1.1% |
| Louisville, KY | 2016 | 0.9% |
| Mecklenburg County, NC | 2008 | 1.1% |
| Average | | 1.2% |

Sources:

**MASS DEP:** Massachusetts Department of Environmental Protection 2008. 2007 Massachusetts Construction and Demolition Debris Industry Study.
**Lexington, KY:** Lexington-Fayette (KY) Urban County Government 2014. County-wide Waste Stream Analysis. November 10.
**Louisville, KY:** Louisville (KY) Metro Government 2016. Louisville Metro 2016 Waste Characterization Study. July.
**Mecklenburg County, NC:** Mecklenburg County (NC) 2008. Construction and Demolition Debris Composition Study. September.

TABLE 5 - POTENTIAL FEEDSTOCK OF WASTE PLASTICS AND WASTE TIRES FROM MACRO-SUPPLY ANALYSIS

| County | Waste Plastics in MSW[1] (Ton/Year) | Waste Plastics in C&D[1] (Ton/Year) | Theoretical Waste Tires[2] (Ton/Year) |
|---|---|---|---|
| Broome | 16,599 | 226 | 2,211 |
| Cayuga | 4,593 | 122 | 881 |
| Chemung | 935 | 10 | 980 |
| Chenango | 2,535 | 14 | 549 |
| Cortland | 1,675 | 95 | 546 |
| Delaware | 1,370 | 67 | 518 |
| Fulton | 2,144 | 101 | 607 |
| Hamilton | 619 | 0 | 53 |
| Herkimer | 4,220 | 143 | 710 |
| Jefferson (DANC) | 7,446 | 380 | 1,323 |
| Lewis (DANC) | 1,927 | 98 | 303 |
| Madison | 3,936 | 105 | 808 |
| Montgomery | 3,598 | 133 | 558 |
| Oneida | 13,147 | 445 | 2,616 |
| Onondaga | 26,208 | 768 | 5,270 |
| Ontario | 6,544 | 197 | 1,233 |
| Oswego | 6,761 | 180 | 1,352 |
| Otsego | 4,039 | 103 | 682 |
| Schoharie | 2,225 | 58 | 352 |
| Schuyler | 2,095 | 8 | 205 |
| Seneca | 2,042 | 54 | 392 |
| Tioga | 5,750 | 125 | 556 |
| Tompkins | 5,179 | 113 | 1,180 |
| Wayne | 5,612 | 139 | 1,029 |
| Yates | 1,628 | 2 | 282 |
| **Total** | **132,827** | **3,686** | **25,196** |

Notes:

1. Calculated quantity by applying fraction of waste plastics from waste characterization studies to total quantity of disposed material identified in Planning Unit Annual Reports.

2. Calculated quantity based on county population and Rubber Manufacturer's Association tire generation rate of 22.5 passenger tire equivalents per year per person.

Acronyms:

MSW: Municipal Solid Waste
C&D: Construction and Demolition Debris
DANC: Development Authority of the North Country

TABLE 6 - THEORETICAL QUANTITY OF AGRICULTURAL PLASTICS AVAILABLE IN SUPPLIER MARKET AREA

| COUNTY | # Dairy Cows[1] | Theoretical Quantity (Ton/Year)[2] | Participated in Cornell RAPP[2] | Used Plastics Collected by Cornell RAPP[3] | Additional Comments[3] |
|---|---|---|---|---|---|
| Broome | 4,929 | 25 | x | | See Chenango County. |
| Cayuga | 34,489 | 172 | x | Baling occurred at 3 farms, generating 5,000 lb (2.5 tons) of plastic which went to NBF Plastics in Auburn. | In 2014/2015, County was collecting agricultural plastics from 11 dairy farms, 2 beef producers, a horticulture operation and a marina. Collection has been reduced to fewer participants due to lack of a cooperator for the baler, limited funding and limited personnel. Also, see Tompkins County. |
| Chemung | 1,914 | 10 | | Since July 2015, farms collected and baled ~35,000 lbs of plastic during an 8 month collection period (~26 tons/year). | Have 8 active farms recycling plastic, though majority of plastic comes from one farm. Material was sent to unspecified market. |
| Chenango | 12,137 | 61 | | Collected 14,000 lbs (7 tons) of agricultural plastics from 6 farms. Material was shipped to Brooklyn, NY market in Dec. 2015 for processing into garbage bags. | Chenango County had generated interest with more than 30 farms in both Chenango and Broome Counties. Approximately, 6 farms are actively bringing bale wrap into one of the County recycling centers. |
| Cortland | 10,351 | 52 | x | | See Tompkins County. |
| Delaware | 8,530 | 43 | x | Exceeded a 50% collection rate for used agricultural plastics during the winter of 2015/16. RAPP Report indicated during autumn 2015 and winter 2016 70,630 lbs (~35 tons) of agricultural plastics were sent to market. | Farmers, marina operators and other generators self convey plastics to designated locations in Delaware County. They have 85 active participants recycling agricultural plastics. |
| Fulton | 1,549 | 8 | | No information available. | |
| Hamilton | 0 | 0 | | No information available. | |
| Herkimer | 13,128 | 66 | | No information available. | Three farms from Herkimer County participate in agricultural plastic collection organized by Otsego County. |

TABLE 6 - THEORETICAL QUANTITY OF AGRICULTURAL PLASTICS AVAILABLE IN SUPPLIER MARKET AREA

| COUNTY | # Dairy Cows[1] | Theoretical Quantity (Ton/Year)[2] | Participated in Cornell RAPP[2] | Used Plastics Collected by Cornell RAPP[3] | Additional Comments[3] |
|---|---|---|---|---|---|
| Jefferson | 28,430 | 142 | | | Ended participation in Sept. 2014 due to reduced staff and funding, though farmers and marinas in area wanted a continuation of the program. The Development Authority of the North Country is interested in maintaining agricultural (and marina) recycling in the area and reportedly is developing a proposal to continue such recycling in Jefferson, St. Lawrence and Lewis Counties. Also, see Lewis County. |
| Lewis | 27,235 | 136 | x | 11 participating farms. Collected 20,534 lb (10.3 tons) in 2015. Also collected 19,000 lbs (9.5 tons) from Jefferson County. Materials sent to Brooklyn, NY. | Lowville Transfer Station continues to receive baled agricultural plastics. Plans for this material will be included in proposal to be prepared by Development Authority of the North Country. Also, see Jefferson County. |
| Madison | 20,248 | 101 | x | Department of Solid Waste and Recycling shipped to market 128.58 tons of agricultural plastics and film plastics between Nov 2014 and Nov 2016. Approx. 80 tons were sent for processing into fuel (source from personal communication, Jim Zecca, 11/18/16). | Farmers, marina operators and other generators self convey plastics to designated locations in Madison County. Ag. Plastics can be collected at most township transfer stations. |
| Montgomery | 13,660 | 68 | | No information available. | |
| Oneida | 16,171 | 81 | | No information available. | |
| Onondaga | 19,155 | 96 | | No information available. | |
| Ontario | 19,598 | 98 | x | | A survey submitted to farmers in April 2015 suggested a willingness to recycle approximately 60 tons/year of used plastics. This was based on a survey response rate of 40%. The other 60% of the farms did not respond to the survey. Also see Seneca County. |

TABLE 6 - THEORETICAL QUANTITY OF AGRICULTURAL PLASTICS AVAILABLE IN SUPPLIER MARKET AREA

| COUNTY | # Dairy Cows[1] | Theoretical Quantity (Ton/Year)[2] | Participated in Cornell RAPP[2] | Used Plastics Collected by Cornell RAPP[3] | Additional Comments[3] |
|---|---|---|---|---|---|
| Oswego | 2,301 | 12 | | No information available. | |
| Otsego | 10,502 | 53 | x | Collected approximately 15,000 lbs (7.5 tons) of agricultural plastics (including wood pellet bags) during four collection events in 2015. | |
| Schoharie | 5,285 | 26 | | No information available. | |
| Schuyler | 6,573 | 33 | x | No information available. | |
| Seneca | 8,568 | 43 | x | | RAPP assisted coordinating a market for two farm supply businesses in Ontario and Seneca counties using a privately owned baler. They reported baling and shipping approximately 63,000 lbs (31.5 tons) of mostly bale wrap to NBF Plastics in Auburn. |
| Tioga | 6,454 | 32 | x | | See Tompkins County. |
| Tompkins | 9,085 | 45 | x | Collected 27,000 lbs (13.5 tons) of agricultural plastics regionally in fall of 2015. | All collected plastics went to NBF Plastics in Auburn. The RAPP Report suggests Tompkins County was teaming with Cayuga, Cortland and Tioga Counties for baling and collection efforts. |
| Wayne | 8,229 | 41 | | No information available. | |
| Yates | 15,569 | 78 | | No information available. | |
| **TOTAL** | **304,090** | **1,522** | | | |

**Notes:**

1. Numbers are based on the 2012 Census of Agriculture, New York State, National Agricultural Statistics Service, May 2014.
2. Approximately 10 lb of agricultural plastics (mostly film plastics used for feed storage) generated per dairy cow per year (Letter from Cornell Waste Management Institute to Madison County Department of Solid Waste, dated June 3, 2014.
3. Cornell Waste Management Institute, Agricultural Plastics Recycling in New York State, September 1, 2013 - March 31, 2016.

TABLE 7 - POTENTIAL FEEDSTOCK OF WASTE PLASTICS AND WASTE TIRES FROM POINT-SOURCE GENERATORS

| County | Agricultural Plastics[1] (Ton/Year) | RHRF[2] (Ton/Year) | Industrial Plastics[3] (Ton/Year) | Planning Unit Tires[4] (Ton/Year) | Facility Tires[5] (Ton/Year) |
|---|---|---|---|---|---|
| Broome | 25 | 515 | 426 | 63 | 270 |
| Cayuga | 172 | 198 | 2 | 0 | 27 |
| Chemung | 10 | 230 | 47 | 0 | 330 |
| Chenango | 61 | 2 | 0 | 0 | 49 |
| Cortland | 52 | 123 | 300 | 52 | 201 |
| Delaware | 43 | 0 | 6 | 436 | 5 |
| Fulton | 8 | 77 | 726 | 15 | 10 |
| Hamilton | 0 | 11 | 0 | 50 | 0 |
| Herkimer | 66 | 1 | 0 | 200 | 6 |
| Jefferson (DANC) | 142 | 68 | 0 | 598 | 499 |
| Lewis (DANC) | 136 | 8 | 0 | 137 | 29 |
| Madison | 101 | 92 | 196 | 236 | 182 |
| Montgomery | 68 | 0 | 0 | 105 | 4,019 |
| Oneida | 81 | 2,468 | 5 | 737 | 431 |
| Onondaga | 96 | 3,005 | 1,038 | 133 | 873 |
| Ontario | 98 | 3,765 | 8 | 0 | 44 |
| Oswego | 12 | 0 | 0 | 0 | 80 |
| Otsego | 53 | 0 | 0.4 | 0 | 150 |
| Schoharie | 26 | 0 | 0 | 51 | 3,014 |
| Schuyler | 33 | 3 | 101 | 47 | 420 |
| Seneca | 43 | 0 | 0 | 0 | 105 |
| Tioga | 32 | 714 | 0 | 238 | 0 |
| Tompkins | 45 | 0 | 69 | 485 | 40 |
| Wayne | 41 | 0 | 45 | 3 | 56 |
| Yates | 78 | 0 | 0 | 6 | 51 |
| **Total** | **1,522** | **11,280** | **2,969** | **3,592** | **10,891** |

Notes:

1. Theoretical quantity available.
2. RHRF - Recyclables Handling and Recovery Facility, quantities from Annual Operating Reports.
3. Sources include plastic manufacturers, electronic waste recyclers, and privately owned C&D facilities.
4. Quantities from Planning Unit Annual Operating Reports for reporting facilities only.
5. Facility tires include tires from vehicle dismantling facilities, tire retreaders and waste tire storage facilities.

## TABLE 8 - HANDLING COSTS FOR BALING PLASTICS FOR SHIPMENT

| Expense Item | Annualized $/Ton | Notes |
|---|---|---|
| Baler (2-ram) | $1.55 | $265,000 capital cost |
| Baler operator | $2.76 | |
| Baling wire | $1.55 | |
| Baler maintenance | $0.29 | |
| Skid steer and operator | $4.46 | Includes $14,000 equipment plus operator |
| **Total** | **$10.61** | |

**Notes:**

Assumptions: Waste plastic bales ranged between 800 and 1,500 lb.

TABLE 9 - HANDLING AND TRANSPORTATION COSTS FOR WASTE PLASTICS AND WASTE TIRES TO MADISON COUNTY

| County | One-way Mileage to Madison County | Waste Plastics | | | | Waste Tires | |
|---|---|---|---|---|---|---|---|
| | | Trailer | | | Roll-off | Trailer | Milk Run |
| | | Handling (Baling) Cost | Transport. Cost | Sub-Total | Transport. Cost | Transport. Cost | Transport. Cost |
| Madison | 0.0 | $10.61 | $1.36 | $11.97 | $7.78 | $4.07 | $209.92 |
| Onondaga | 25.9 | $10.61 | $3.53 | $14.14 | $20.14 | $10.55 | $187.59 |
| Oneida | 32.3 | $10.61 | $4.41 | $15.02 | $25.12 | $13.19 | $187.59 |
| Cortland | 42.5 | $10.61 | $5.80 | $16.41 | $33.05 | $17.33 | $146.95 |
| Chenango | 44.3 | $10.61 | $6.04 | $16.65 | $34.45 | $18.17 | $146.95 |
| Oswego | 51.1 | $10.61 | $6.97 | $17.58 | $39.74 | $20.86 | $183.68 |
| Cayuga | 60.0 | $10.61 | $8.18 | $18.79 | $46.66 | $24.45 | $183.68 |
| Herkimer | 64.3 | $10.61 | $8.77 | $19.38 | $50.00 | $26.33 | $226.07 |
| Otsego | 66.4 | $10.61 | $9.06 | $19.67 | $51.63 | $27.14 | $122.45 |
| Broome | 68.4 | $10.61 | $9.33 | $19.94 | $53.19 | $27.89 | $188.39 |
| Tompkins | 69.9 | $10.61 | $9.53 | $20.14 | $54.35 | $28.63 | $209.92 |
| Wayne | 72.4 | $10.61 | $9.87 | $20.48 | $56.30 | $29.64 | $163.27 |
| Lewis (DANC) | 74.7 | $10.61 | $10.19 | $20.80 | $58.09 | $30.69 | $293.89 |
| Schoharie | 81.5 | $10.61 | $11.12 | $21.73 | $63.38 | $33.61 | $244.91 |
| Montgomery | 85.0 | $10.61 | $11.59 | $22.20 | $66.10 | $34.76 | $146.95 |
| Tioga | 86.0 | $10.61 | $11.73 | $22.34 | $66.87 | $35.31 | $146.95 |
| Seneca | 87.1 | $10.61 | $11.88 | $22.49 | $67.73 | $35.60 | $209.92 |
| Fulton | 87.9 | $10.61 | $11.99 | $22.60 | $68.35 | $36.06 | $133.59 |
| Schuyler | 90.1 | $10.61 | $12.29 | $22.90 | $70.06 | $37.88 | $180.86 |
| Delaware | 90.8 | $10.61 | $12.38 | $22.99 | $70.61 | $37.43 | $163.27 |
| Hamilton | 91.4 | $10.61 | $12.47 | $23.08 | $71.07 | $40.92 | $180.86 |
| Ontario | 91.8 | $10.61 | $12.52 | $23.13 | $71.38 | $37.56 | $200.38 |
| Jefferson (DANC) | 93.8 | $10.61 | $12.79 | $23.40 | $72.94 | $38.26 | $183.68 |
| Chemung | 98.3 | $10.61 | $13.41 | $24.02 | $76.44 | $40.19 | $172.88 |
| Yates | 105.0 | $10.61 | $14.32 | $24.93 | $81.65 | $43.11 | $293.89 |

TABLE 10 - TRANSPORTATION COST DATA POINTS FOR WASTE TIRES FROM POINT-SOURCE GENERATORS

| GENERATOR | COUNTY | UNIT COST TO DISPOSE | DISPOSAL COST | NOTES |
|---|---|---|---|---|
| Don's Auto Barn | Madison | | $125/ton<br>$1.41/PTE | Delivered to County Landfill using box truck. |
| Tower Mountain Salvage | Madison | $1.50/tire | $133/ton<br>$1.49/PTE | Delivered to Madison County. Transportation method not specified. |
| Vanderwal's | Madison | | $100/ton<br>$1.13/PTE | Delivered to County Landfill Transportation method not specified. |
| Long Park Tire | Jefferson | $1,400/ trailer load | $93/ton<br>$1.05/PTE | Delivered to Niagara County using tractor trailer. |
| Silver City Tire | Madison | $1,000/load | $89/ton<br>$1.00/PTE | Registered vendor from Erie County picks up tires with tractor trailer. |

Acronyms:

PTE: Passenger Tire Equivalent

## TABLE 11 - DISPOSAL FEES IN SUPPLIER MARKET AREA

| County | Local MSW Disposal Tip Fee (per ton) | Local C&D Disposal Tip Fee (per ton) | Local Tire Disposal Tip Fee (per ton) |
|---|---|---|---|
| Broome | $45.00 | $45.00 | $155.00 |
| Cayuga | $62.69 * | $57.96 * | $178.00 |
| Chemung | $44.00 | $52.00 | $250.00 |
| Chenango | $58.00 | $58.00 | $178.00 |
| Cortland | $60.00 | $57.96 * | $178.00 * |
| Delaware | $62.69 * | $87.00 | $0.00 |
| Fulton | $55.00 | $55.00 | $250.00 |
| Hamilton | $62.69 * | $57.96 * | $178.00 * |
| Herkimer | $66.00 | $58.00 | $190.00 |
| Jefferson (DANC) | $46.00 | $46.00 | $178.00 * |
| Lewis (DANC) | $46.00 | $46.00 | $178.00 * |
| Madison | $72.00 | $72.00 | $125.00 |
| Montgomery | $72.50 | $57.96 * | $250.00 |
| Oneida | $66.00 | $58.00 | $190.00 |
| Onondaga | $84.00 | $46.00 | $444.00 |
| Ontario | $62.69 * | $57.96 * | $178.00 * |
| Oswego | $65.00 | $50.00 | $125.00 |
| Otsego | $65.00 | $65.00 | $444.00 |
| Schoharie | $73.50 | $73.50 | $140.00 |
| Schuyler | $62.69 * | $57.96 * | $178.00 * |
| Seneca | $62.69 * | $57.96 * | $178.00 * |
| Tioga | $62.69 * | $57.96 * | $178.00 * |
| Tompkins | $85.00 | $57.96 * | $150.00 |
| Wayne | $62.69 * | $57.96 * | $178.00 * |
| Yates | $62.69 * | $57.96 * | $178.00 * |
| **Average** | **$62.69** | **$57.96** | **$193.96** |

Notes:

*Indicates a tip fee was unavailable for the county and the average tip fee was applied instead.

Acronyms:

MSW: Municipal Solid Waste

C&D: Construction and Demolition Debris

DANC: Development Authority of the North Country

TABLE 12 - PROJECTED BREAK-EVEN DISPOSAL FEE (REBATE) AT PLASTICS-TO-OIL FACILITY IN MADISON COUNTY FOR WASTE PLASTICS

| | | | | | | | | | Break-even Disposal Fee (Rebate = "-") | |
|---|---|---|---|---|---|---|---|---|---|---|
| County | One-way Mileage to Madison County | Waste Plastics in MSW[1] (tons) | Waste Plastics in C&D[1] (tons) | Agricultural Plastics[2] (Ton/Year) | Industrial Plastics[3] (Ton/Year) | RHRF[4] (Ton/Year) | Total All Plastics (Ton/Year) | Accumulated Quantity (Ton/Year) | Tractor Trailer | Roll-off |
| Madison | 0.0 | 3,936 | 105 | 101 | 196 | 92 | 4,430 | 4,430 | $60.03 | $64.22 |
| Onondaga | 25.9 | 26,208 | 768 | 96 | 1,038 | 3,005 | 31,115 | 35,545 | $69.86 | $63.86 |
| Oneida | 32.3 | 13,147 | 445 | 81 | 5 | 2,468 | 16,146 | 51,691 | $50.98 | $40.88 |
| Cortland | 42.5 | 1,675 | 95 | 52 | 300 | 123 | 2,245 | 53,936 | $43.59 | $26.95 |
| Chenango | 44.3 | 2,535 | 14 | 61 | 0 | 2 | 2,612 | 56,548 | $41.35 | $23.55 |
| Oswego | 51.1 | 6,761 | 180 | 12 | 0 | 0 | 6,953 | 63,501 | $47.42 | $25.26 |
| Cayuga | 60.0 | 4,593 | 122 | 172 | 2 | 198 | 5,087 | 68,588 | $43.90 | $16.03 |
| Herkimer | 64.3 | 4,220 | 143 | 66 | 0 | 1 | 4,430 | 73,018 | $46.62 | $16.00 |
| Otsego | 66.4 | 4,039 | 103 | 53 | 0.4 | 0 | 4,195 | 77,213 | $45.33 | $13.37 |
| Broome | 68.4 | 16,599 | 226 | 25 | 426 | 515 | 17,791 | 95,004 | $25.06 | ($8.19) |
| Tompkins | 69.9 | 5,179 | 113 | 45 | 69 | 0 | 5,406 | 100,410 | $64.86 | $30.65 |
| Wayne | 72.4 | 5,612 | 139 | 41 | 45 | 0 | 5,837 | 106,247 | $42.21 | $6.39 |
| Lewis (DANC) | 74.7 | 1,927 | 98 | 136 | 0 | 8 | 2,169 | 108,416 | $25.20 | ($12.09) |
| Schoharie | 81.5 | 2,225 | 58 | 26 | 0 | 0 | 2,309 | 110,725 | $51.77 | $10.12 |
| Montgomery | 85.0 | 3,598 | 133 | 68 | 0 | 0 | 3,799 | 114,524 | $50.30 | $6.40 |
| Tioga | 86.0 | 5,750 | 125 | 32 | 0 | 714 | 6,621 | 121,145 | $40.35 | ($4.18) |
| Seneca | 87.1 | 2,042 | 54 | 43 | 0 | 0 | 2,139 | 123,284 | $40.20 | ($5.04) |
| Fulton | 87.9 | 2,144 | 101 | 8 | 726 | 77 | 3,056 | 126,340 | $32.40 | ($13.35) |
| Schuyler | 90.1 | 2,095 | 8 | 33 | 101 | 3 | 2,240 | 128,580 | $39.79 | ($7.37) |
| Delaware | 90.8 | 1,370 | 67 | 43 | 6 | 0 | 1,486 | 130,066 | $39.70 | ($7.92) |
| Hamilton | 91.4 | 619 | 0 | 0 | 0 | 11 | 630 | 130,696 | $39.61 | ($8.38) |
| Ontario | 91.8 | 6,544 | 197 | 98 | 8 | 3,765 | 10,612 | 141,308 | $39.56 | ($8.69) |
| Jefferson (DANC) | 93.8 | 7,446 | 380 | 142 | 0 | 68 | 8,036 | 149,344 | $22.60 | ($26.94) |
| Chemung | 98.3 | 935 | 10 | 10 | 47 | 230 | 1,232 | 150,576 | $19.98 | ($32.44) |
| Yates | 105.0 | 1,628 | 2 | 78 | 0 | 0 | 1,708 | 152,284 | $37.76 | ($18.96) |
| **Total** | | **132,827** | **3,686** | **1,522** | **2,969** | **11,280** | **152,284** | | | |

**Notes:**

1. Fraction of waste plastics in disposed MSW and C&D material calculated from waste characterization studies.
2. Theoretical quantity available.
3. Sources include plastic manufacturers, electronic waste recyclers, and privately owned C&D facilities.
4. RHRF - Recyclables Handling and Recovery Facility Annual Operating Reports.

TABLE 13 - PROJECTED BREAK-EVEN DISPOSAL FEE (REBATE) AT PLASTICS-TO-OIL FACILITY IN MADISON COUNTY FOR WASTE TIRES

| | | | | | | | Break-even Disposal Fee (Rebate = "()") | |
|---|---|---|---|---|---|---|---|---|
| County | One-way Mileage to Madison Co | Theoretical[1] (Ton/Year) | Planning Unit Tires[2] (Ton/Year) | Facility Tires[3] (Ton/Year) | Total Planning Unit and Facility Tires (Ton/Year) | Accumulated Quantity (Ton/Year) | Tractor Trailer | Milk Run |
| Madison | 0.0 | 808 | 236 | 182 | 418 | 418 | $98.15 | ($107.70) |
| Onondaga | 25.9 | 5,270 | 133 | 873 | 1,006 | 1,424 | $91.67 | ($85.37) |
| Oneida | 32.3 | 2,616 | 737 | 431 | 1,168 | 2,592 | $89.03 | ($85.37) |
| Cortland | 42.5 | 546 | 52 | 201 | 253 | 2,845 | $84.89 | ($44.73) |
| Chenango | 44.3 | 549 | 0 | 49 | 49 | 2,894 | $84.05 | ($44.73) |
| Oswego | 51.1 | 1,352 | 0 | 80 | 80 | 2,974 | $81.36 | ($81.46) |
| Cayuga | 60.0 | 881 | 0 | 27 | 27 | 3,001 | $77.77 | ($81.46) |
| Herkimer | 64.3 | 710 | 200 | 6 | 206 | 3,207 | $75.89 | ($123.85) |
| Otsego | 66.4 | 682 | 0 | 150 | 150 | 3,357 | $75.08 | ($20.23) |
| Broome | 68.4 | 2,211 | 63 | 270 | 333 | 3,690 | $74.33 | ($86.17) |
| Tompkins | 69.9 | 1,180 | 485 | 40 | 525 | 4,215 | $73.59 | ($107.70) |
| Wayne | 72.4 | 1,029 | 3 | 56 | 59 | 4,274 | $72.58 | ($61.05) |
| Lewis (DANC) | 74.7 | 303 | 137 | 29 | 166 | 4,440 | $71.53 | ($191.67) |
| Schoharie | 81.5 | 352 | 51 | 3,014 | 3,065 | 7,505 | $68.61 | ($142.69) |
| Montgomery | 85.0 | 558 | 105 | 4,019 | 4,124 | 11,629 | $67.46 | ($44.73) |
| Tioga | 86.0 | 556 | 238 | 0 | 238 | 11,867 | $66.91 | ($44.73) |
| Seneca | 87.1 | 392 | 0 | 105 | 105 | 11,972 | $66.62 | ($107.70) |
| Fulton | 87.9 | 607 | 15 | 10 | 25 | 11,997 | $66.16 | ($31.37) |
| Schuyler | 90.1 | 205 | 47 | 420 | 467 | 12,464 | $64.34 | ($78.64) |
| Delaware | 90.8 | 518 | 436 | 5 | 441 | 12,905 | $64.79 | ($61.05) |
| Hamilton | 91.4 | 53 | 50 | 0 | 50 | 12,955 | $61.30 | ($78.64) |
| Ontario | 91.8 | 1,233 | 0 | 44 | 44 | 12,999 | $64.66 | ($98.16) |
| Jefferson (DANC) | 93.8 | 1,323 | 598 | 499 | 1,097 | 14,096 | $63.96 | ($81.46) |
| Chemung | 98.3 | 980 | 0 | 330 | 330 | 14,426 | $62.03 | ($70.66) |
| Yates | 105.0 | 282 | 6 | 51 | 57 | 14,483 | $59.11 | ($191.67) |
| **TOTAL** | | **25,196** | **3,592** | **10,891** | **14,483** | | | |

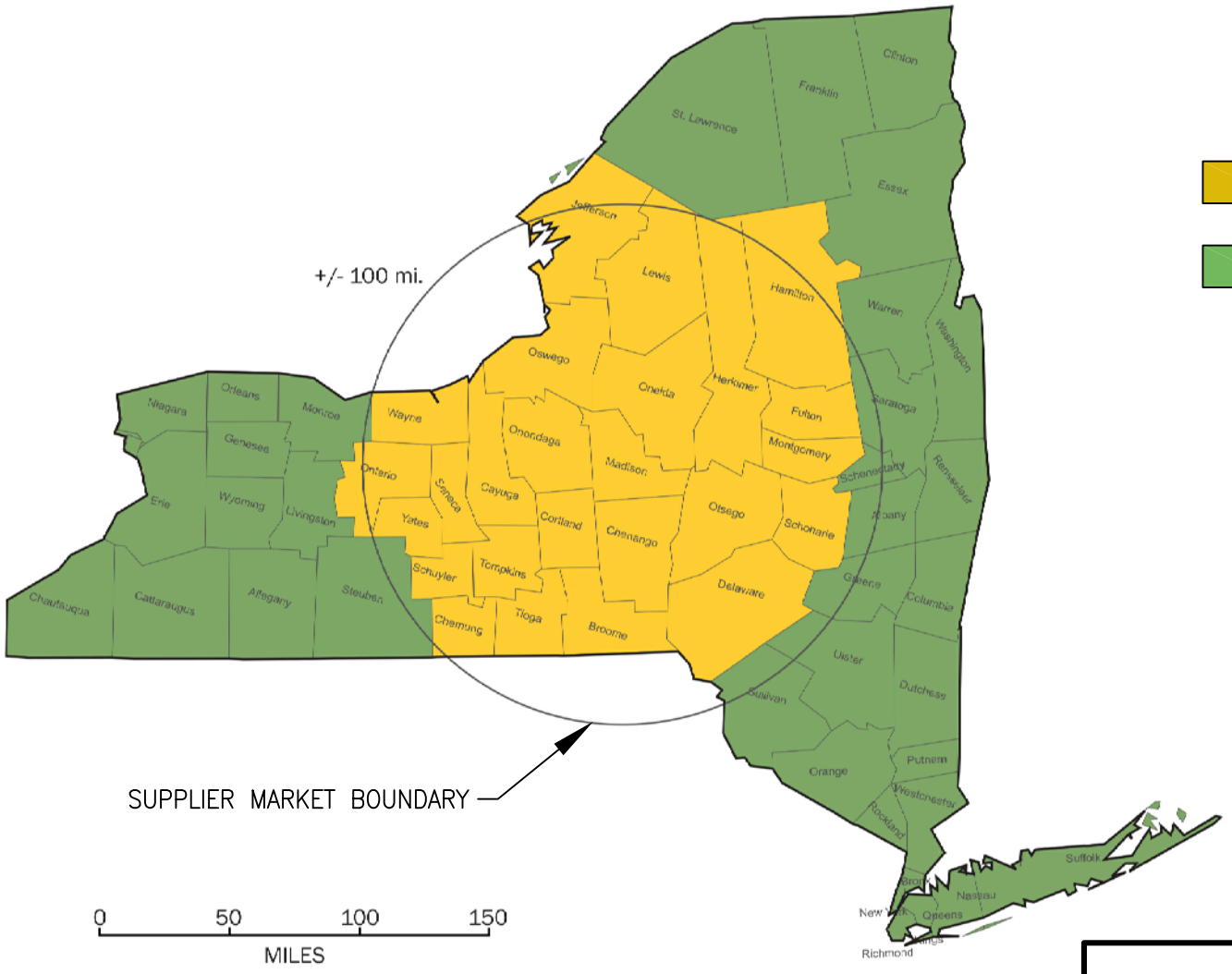
**Notes:**

1. Calculated quantity based on county population and Rubber Manufacturer's Association tire generation rate of 22.5 passenger tire equivalents per year per person.

2. Source from Planning Unit Annual Operating Reports for reporting facilities only.

3. Facility tires include tires from vehicle dismantling facilities, tire retreaders and waste tire storage facilities.

# FIGURES




# FIGURE 1

## SUPPLIER MARKET AREA

MIDATLANTIC SOLID WASTE CONSULTANTS

PARSONS
301 PLAINFIELD ROAD, SUITE 350, SYRACUSE, NY 13212 * 315-451-9560

FILE NAME: P:\CAD\449998\449998-SK001.DWG
PLOT DATE: 1/26/2017 9:06 AM PLOTTED BY: RUSSO, JILL

# APPENDIX A

# POINT-SOURCE SUPPLIERS/GENERATORS OF WASTE PLASTICS

NOTES FOR TABLES IN APPENDIX:

1. Contact and information provided in this Appendix shouldn't be construed as an attempt to negotiate on behalf of NYSDEC or Madison County.
2. Disposal costs were provided by some facilities and were included for informational purposes only. These costs were not considered as part of the economic analysis described in Section 3 of this report. Also, pricing may not be indicative of current or future pricing and should not be construed as negotiated costs on behalf of NYSDEC or Madison County.

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Geodis Global Solutions USA, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities | 1701 North Street, Endicott, NY 13760 | John Yesensky | (607)354-4376 | Personal Communication, 11/18/16 | Predominantly rigid plastics and films (shrink wrap); plasticized foam, and polystyrene foam. | Plastic separated from other waste materials. All plastics comingled. | 850,000 lb/year | 425.0 | Sent to Market | Getting paid market price which fluctuates between -$0.02 - +$0.02 per pound. | Yes | Maiden IBM facility. Expressed concern for having to run project through IBM. Interested in this as another option for disposal. |
| Primary Plastics Inc. | Manufacture plastics | Endicott, New York 13760 | Brendan Flannigan | (607)785-4865 | Personal Communication, 11/17/16 | PVC and CPVC and polypropylene - rigid plastics. | Clean | No more than 1 ton/year | 1.0 | Broome County Landfill | No price given. | Yes | |
| Empire Plastics | Manufacture plastics | 2011 East Main St. Endwell, NY 13760<br><br>Endwell, NY 13760 | | (607)754-9132 | Personal Communication, 11/17/16 | None | | No scrap plastic generated. | 0.0 | | | No | They have attempted to sort out plastics separately in the past and it did not work for them. |
| Plastic Techniques Inc. | Injection molding services | 10 Ballard Street Binghamton, NY 13904 | Linda Gregory | (607)772-6020 | Personal Communication, 11/17/16 | Small company - not much scrap material generated. Majority that is generated is ground and re-used. | | | 0.0 | | | No | |
| Southern Tier Plastics | Custom injection molding | P.O. Box 2015, 94 Industrial Park Drive Binghamton, New York 13902 | Emailed Christian: cgray@southerntierplastics.com | (607)723-2601 | Email sent 11/17/16 | | | | | | | | |
| ECK Plastic Arts | Injection molding and machining of plastic parts | Binghamton, New York 13901 | Emailed Will: whoward@eckplastics.com | (607)722-3227 | Email sent 11/17/16 | | | | | | | | |
| American Pipe and Plastics | Manufacturer of PVC (polyvinyl chloride) conduit for telecommunications, power ptility, cable TV (CATV) and fiber optic underground infrastructure markets | 958 Rte 11 South Kirkwood, New York 13795 | | (607)775-4340 | Not contacted | | | | | | | | |
| Clearwater Displays | Acrylic display cases | Binghamton, New York 13905 | | (607)798-7440 | Not contacted | | | | | | | | |
| **TOTAL** | | | | | | | | | **426.0** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Auburn Vacuum Forming Co., Inc. | Industrial vacuum formed and pressure formed plastic components | 40 York Street Auburn, NY 13021 | | (315)253-2440 | Personal communication, 11/17/16 | None | | No scrap plastic available. Send scraps back to extruder or sell to broker. | 0.0 | | | | |
| Bo-Mer Plastics | Plastic thermoforming and fabrication | 13 Pulaski Street, Auburn, NY 13021 | Tom Kennedy | (315)252-7216 | Personal communication, 11/17/16 | Vinyl dashboard type material. | Clean | 300 lb/month | 1.8 | Local hauler, possible disposal at Seneca Meadows Landfill (Seneca County) | | Interested, but has to be easy. Would require a dumpster on-site and pick-up to make it economical for them. | All other plastic material is being ground and reused or sold to market. |
| DeWitt Plastics | Plastic fabrication services offering custom injection molded plastic products and components. | 28 Aurelius Avenue, Auburn, New York 13021 | George Clancy | (315)255-1209 | Left Message, 11/17/16 | | | | | | | | |
| Currier Plastics | Custom molding for electronics, medical equipment, plastics packaging and instrumentation | 101 Columbus St. Auburn, NY 13201 | | | Email sent, 11/10/16 | | | | | | | | |
| Finger Lakes Metal Resources | NYSDEC List of Registered Electronic Waste Recycling Facilities | 359 Genesee Street, Auburn, NY 13021 | | (315)255-2500 (Number not in service) | Email sent, 11/18/16 | | | | | | | | |
| Autech Plastics | Manufacturer of custom molded urethane products | 31 ALLEN ST. 13021 Auburn NY | | (315)253-7311 | Number not in service. | | | | | | | | |
| Finger Lakes Extrusion Corporation | Tubing products | Union Springs, New York 13160 | | (315)889-7724 | Not Contacted | | | | | | | | |
| **TOTAL** | | | | | | | | | **1.8** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REACT E-Cycling, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities | 225 Colonial Drive, Horseheads, NY 14845 | Skip Starr | (607)739-8401 | Personal Communication, 11/18/16 | Mostly computer plastics and stretch plastic | Separated | 13,000 lb/year | 6.5 | Sent to Market | Gets $0.05/lb for the computer plastics and stretch plastic but has to separate it out into white plastic and black plastic. If Madison County could take plastics all together, it would save him time in labor and he may be able to let material go for less than $0.05/lb. | Yes. Would need at least $0.20/lb to dismantle the electronic waste currently being sent to Indiana and keep the associated plastic in Chemung County. Also need freight to be paid for any materials. Not able to provide a price for agricultural plastics at this time. | There are lots of electronics still in tact that this facility does not take the time to separate because it is cost prohibitive. If market was better, they would take the time to separate materials. This unseparated electronic waste goes to Indiana for separation and grinding then to market. If the market was better, or if Madison County met their price requirements, they would separate this additional plastic waste (quantity unknown). Also was going to collect agricultural plastics for recycling. This facility is interested in collecting this material again. |
| Southerntier Custom Fabricators | Not a manufacturer. Purchase material and make into ventilation system. | 1322 College Avenue, Elmira, NY 14901 | Ian Morrell | (607)732-0927 | Personal Communication, 11/17/16 | PVC, polypropylene, and lexane. Rigid material either as a flat sheet or tube that hasn't been ground. | Clean | One 20 YD roll-off/quarter. Perhaps 10 tons/roll off | 40.0 | C&D facility in Chemung. | $200 - 300 per pickup (transport and disposal). | Yes. They would set their plastic aside in a separate dumpster. We would need to pay for freight and pick up quarterly. | Currently not recycling this plastic material. Suggested we contact Rimco Plastics (Chemung County); Primary Plastics (Broome County); Reynolds Tech (Onondaga County); Curbell Plastics (Monroe County - outside project, this is their plastic supplier). |
| Rimco Plastics | Large injection molder | 316 Colonial Drive Horseheads, NY 14845 | Les Reimsneider III | (607)739-3864 | Sent email, 11/17/16 | | | | | | | | |
| **TOTAL** | | | | | | | | | **46.5** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | 0.0 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Chenango Valley Technology | Custom injection molder | 328 Route 12B Sherburne, NY 13460 | Sean | (607)674-4115 | Personal Communication, 11/17/16 | | | | 0.0 | | | | No scrap plastic available. Any scrap plastic generated is ground and reused or sold as scrap. Anything in dumpster is not feasible to reuse or separate. Suggested contacting K&B Plastics (Cortland County). |
| DK Recycling | NYSDEC List of Registered Electronic Waste Recycling Facilities | 3446 State Highway 8, South New Berlin, NY 13843 | | (607)859-9400 | Number not in service | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| K& B Plastics | Post industrial recycling | 1 Main St, Blodgett Mills, NY 13738 | Garry Fitts (Kris Larsen - owner) | (607)756-7732 | Personal Communication, 11/17/16 | Material comes in comingled or mixed, can't otherwise be re-used. Includes polypropylene, HDPE, UHMW, POM, and nylon as shavings or reground material. | Clean plastic stock. May have little sawdust. | 50,000 lbs per month | 300.0 | Currently, stored at facility. Trying to find a market. Interested in alternative disposal since it is hard to find a market. | No price provided | Reprocess some material received (grind and sell to molders, brokers, etc. depending on market). | Most material is in Supersaks (polypropylene bag with nylon straps). Can vacuum out from top or empty from bottom. Their supplier for this material comes from Pennsylvania. Facility indicated their competition is Adirondack Plastics (Argyle, NY, Washington County - outside project area). |
| OraLine, Inc. | Manufacturer of injection molded plastics | 4057 W Road Cortland, NY 13045 | | (888)296-6730 | Not Contacted | | | | | | | | |
| TOTAL | | | | | | | | | 300.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER COUNTY | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| New England Pellet | Wood pellet manufacturing | 1580 Airport Rd, Deposit, NY 13754 | Delaware | Matt Anderson | (607)651-0955 | Personal Communication, 11/9/16 | Material includes bag film. Some is clean and hasn't contacted product. Some bag film has contacted product - bag was outside and bag quality deteriorated, has to be repackaged. Bag film that contacted product may be damp, dirty from rainwater, or have small residue of dust. | | 0.5 ton/ month. Estimates they fill one 30 YD dumpster every two weeks (plastic film only). | 6.0 | Delaware County Landfill. Bag film is thrown loose into dumpster. Material is not densified or baled. Material is landfilled. | Tip fee for landfill | Yes | |
| Greene-Del Sanitation and Recycling | NYSDEC List for Permitted C&D Processing | 100 Green Del Lane Grand George, NY 12434 | Delaware | Linda Compton | (518)299-3839 | 2015 Annual Report not available. | | | | | | | | |
| **TOTAL** | | | | | | | | | | **6.0** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Evolution Recycling, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities also recycle other plastic materials | 309 W. Montgomery Street, Dock 4, Johnstown, NY 12095 | Gary Bishop | (518)774-3227 | Personal communication, 11/18/16 | Rubber from CRT television, keyboards, remote controls, etc. | Rubber is clean. | Rubber = 1,000 lb/month | 6.0 | Sent to market. | Rubber - paid between $0.03 - $0.07 (at door). | Yes | Rubber currently sent to a facility in Ohio for market. Rubber is put in boxes on skids. |
| Evolution Recycling, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities also recycle other plastic materials | 309 W. Montgomery Street, Dock 4, Johnstown, NY 12095 | Gary Bishop | (518)774-3227 | Personal communication, 11/18/16 | Plastics including mixed #1-7, HIPS, mixed plastics (misc rigid plastics from electronics, PPE, HIPS, ABS). | Plastics are separated. | Plastics = 120,000 lbs/month | 720.0 | Sent to market. | Plastics-all get recycled and go to market, price range varies by material ($0.07 - $0.17). | Yes | All plastic materials are baled. |
| TOTAL | | | | | | | | | 726.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None identified | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Acorn Products Corp. | Plastics manufacturing | 27 Pleasant Avenue Ilion, New York 13357 | Mike | (315)894-4868 | Personal communication, 11/17/16 | | | No scrap plastic generated. | 0.0 | | | No | Scrap plastic is being ground and reused. |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Northstar Auto and Salvage | Scrap metal, auto repair and parts | 28722 NYS Route 37 Evans Mills, NY 13637-3145 | Scott | (315)629-4824 | Personal Communication, 11/30/16. | None | | No scrap plastic generated. | 0.0 | | | | Suggested contacting the auto shredders in the project area regarding their "auto fluff". The auto fluff will contain plastics mixed with other non-metallic materials including glass, dirt and seat cushions. It is likely that the auto shredders are not currently separating the plastics out from the remainder of the auto fluff as it may require additional technology and labor to do so. |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None identified | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Gary's Auto Parts | Registered Electronic Waste Recycling Facility. NYSDEC List of Vehicle Dismantling Facility. Registration Type: Dismantler. | 651 Fitch Street, Oneida, NY 13421 | Jim Clark | (315)363-2240 | Personal Communication, 11/10/16 | Rigid plastics generated from electronic recycling efforts. No scrap plastic generated from vehicle dismantling. Vehicles are crushed on-site and then sent to shredder (Rochester, NY). | Approx. 25% may include small speakers, wires, metal brackets, etc., and 75% would be clean plastic. | 500 lb/month | 3.0 | Electronic plastics: Madison County Landfill | Standard tipping fee for MSW | Yes | Plastics from electronic recycling efforts are disposed with garbage and are sent to local landfill. Crushed vehicles usually go to a facility in Rochester, NY. |
| Oneida Molded Plastics | Custom injection molding, assembly, painting and hydrographic decorating | 104 S. Warner St. Oneida, NY 13421 | Rick Harrington and John Andrews | (315)363-7990 | Personal Communication, 11/04/16 | Left over resin, molded plastic parts varying in size (not ground). | Small percentage of threaded metal inserts or painted parts may be present. | Scrapped 143,500 pounds in 7 months. Conservative number. | 123.0 | Madison County Landfill | Madison County Landfill standard tip fee. | Very heavy emphasis on the fact that they are buying plastic to make plastic products. Their goal is to have no waste generated each year because they are paying for the raw materials and if they don't' use it, now they have to pay to dispose of it. | Supplier manufacturers firearms. Requires confirmation and a high level of assurance the scrap material accepted would be sent to Madison County and not mismanaged, for safety reasons. |
| Thermold | Plastic injection molding | 7059 Harp Road Canastota, New York 13032 | Pat Baldwin | (315)697-3924, pat.baldwin@thermold.com | Left message 11/4/16. Sent email 11/9/16 (no response). | | | | | | | | |
| Die Molding Corporation | Manufacturer of phenolic disk brake pistons for automobiles | 125 Rasbach St, Canastota, NY 13032 | | (315) 697-2221 | Not Contacted | | | | | | | | |
| Oneida Healthcare | Hospital | 321 Genesee Street Oneida, NY 13421 | Jennifer Mayer | (315)363-6000 | Madison County RFP, Appendix C. Left message, 10/24/2016 | | | | 70.0 | | | | Quantity shown here was included in a letter from Gene Morreale (Oneida Healthcare) to James Zecca, dated June 2, 2014. Attempted to contact Oneida Healthcare to confirm if this quantity was still valid. |
| | | | | | | | | **TOTAL** | **196.0** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tri-Valley Crop Center Inc. | Chemical Fertilizer Retailer | 337 State Highway 162 Sprakers, NY 12166 | Kelly Wilder | (518)673-5336 | Personal Communication, 11/10/16 | Collect plastic containers at this location | Containers are rinsed. | None | | Crushed/ processed on-site then recycled. | | No | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Computer Connection of CNY, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities | 11206 Cosby Manor Road, Utica, NY 13330 | Mike Buffa | (315)724-2209, ext. 232 | Personal Communication, 11/18/16 | Mostly rigid/bulky plastics from electronics. | Mixed plastic. | 200 lb/week | 5.2 | Sent to Market | No unit price provided for market. This facility is willing to provide plastics, they just don't want any charge to them. | Yes | This facility prefers on-site pickup and to fill gaylord boxes with material. They do not bale their materials. Don't separate rubber at this time. Rubber generation is minimal. |
| Nortic Inc. | Plastic mold manufacturer | Oriskany, New York 13424 | | (315)736-8755 | Personal Communication, 11/17/16 | None | | No scrap plastic generated. | 0.0 | | | | Grind and recycle on-site. |
| Mele Jewel Cases | Distributor, no manufacturing | 2007 Beechgrove Pl, Utica, NY 13501 | | (888)733-0631 | Personal Communication, 11/17/16 | None | | No scrap plastic generated. | 0.0 | | | | |
| C & H Plastics | Plastic manufacturing and injection molding | 145 Conger Avenue, Waterville, New York 13480 | Bill Clarke | (315)841-4101 ext. 26 | Left message 11/17/16 and 11/30/16. | | | | | | | | |
| Dacobe Enterprises | Plastic manufacturer | 325 Lafayette St, Utica, NY 13502 | | (315)368-0093 | Not Contacted | | | | | | | | |
| | | | | | | | | **TOTAL** | **5.2** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rid-O-Vit | Waste Management Service: commercial and residential debris removal, scrap tire recycling. Also, included on list of 2016 Scrap Tire and Rubber Users Directory provided by Rubber Manufacturer's Association. | P.O. Box 11574 1500 Jamesville Ave, Syracuse, NY 13218 | Joe Pollichemi | (315)475-6602 | Personal Communication, 11/7/16 - Plastics. | Scrap plastics not separated from other garbage. | | | 0.0 | | | | Take out metal and electronics from dumpsters. Don't separate out plastics by themselves. Just gets disposed of as garbage at transfer station. |
| Sunnking Syracuse | NYSDEC List of Registered Electronic Waste Recycling Facilities | 838 Erie Blvd. West, Syracuse, NY 13204 (Satellite transfer station). Headquarters: 203 Main Street, Brockport, NY 14420 (Monroe County) | Duane Beckett | (585)637-8365 | Personal Communication, 11/18/16 | Primarily ABS plastic. | Residual contamination with metal, brass, screws, paper, etc. | 35,000 lb/week | 910.0 | Sunnking Syracuse to Sunnking Brockport, NY to market. | They bale and send black and white (ABS) plastic to market. Getting between $0.08 - $0.12 /lb. | Yes - if price can be matched. They would bale material at the price specified. | Materials from the Syracuse satellite office are sent to Brockport facility for processing. There are other scrap plastic materials currently not being recovered. See below. |
| Sunnking Syracuse | NYSDEC List of Registered Electronic Waste Recycling Facilities | 838 Erie Blvd. West, Syracuse, NY 13204 (Satellite transfer station). Headquarters: 203 Main Street, Brockport, NY 14420 (Monroe County) | Duane Beckett | (585)637-8365 | Personal Communication, 11/18/16 | Plastics currently not being recovered. | Not specified. | Estimates 3,000 lb/week | 78.0 | Sunnking Syracuse to Sunnking Brockport, NY to market. | Would need additional compensation for these materials since there is still a cost to recover and process these materials. | Yes | If project proceeds, supplier would start to put mixed plastics into one big box. |
| Northeast Surplus & Materials | NYSDEC List of Registered Electronic Waste Recycling Facilities | 440 Shonnard St. Syracuse, NY 13204 | Jim | (315)476-4025 | Personal Communication, 11/18/16 and 12/15/16 | Most electronic scrap is ABS plastic. | Shredded material. | 18 tons per year | 18.0 | Sent to Market | Getting $0.14/lb, for shredded but has to separate white plastic from colored plastic. | Yes - Would rather keep material in local area. No landfilling. | Very knowledgeable on Madison County's proposed project. Very interested in technology and supporting plastics to oil project. Quantity generated would be more if the economy were better. |
| Tech Reworks, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities | 217 North Main St. North Syracuse, NY 13212 | | (315)214-4444 | No answer, 11/18/16 | | | | | | | | |
| Armstrong Mold Corporation | Plastic molding, thermoplastics, rubber plaster molding | 6910 Manlius Center Road East Syracuse, New York 13057-9597 | | (315)437-1517 | Personal Communication, 11/10/16 | None | | No scrap plastic generated. | 0.0 | | | No | Materials are being recycled. |
| Leigh-Dale Specialties | Acrylic fabricator | 113 Pulaski Street Syracuse, New York 13204 | | (315)471-5115 | Personal Communication, 11/17/16 | Mostly rigid acrylic, in sheet form, small pieces less than 8 inches in size. | Clean | 1,000 lbs/year | 0.5 | OCCRA facility in Onondaga County (Incinerated) | | Yes | Small operation: one man. |
| Curbell Plastics Inc. | Wholesale distributor | 6805 Crossbow Dr. East Syracuse, NY 13057 | | (315)437-8461 | Personal Communication, 11/10/16 | None | | No scrap plastic generated. | 0.0 | | | No | Materials are being recycled. The manufacturing facility is in Monroe County. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Reynolds Tech | Pressing | 6895 Kinne St. E. Syracuse, N.Y. 13057 | Todd Way | (315)437-0532 | Personal Communication, 11/17/16 | Polyethylene and polypropylene - rigid material, shavings from machining process, waste between products. Some PVC. | Clean | Average = 4 gaylords/week (cardboard box 40"x48"). 300 lb/gaylord. | 31.2 | OCCRA facility in Onondaga County (Incinerated) | Pay flat rate to hauler based on weight/vol. | Yes. Weekly collection would be required as storage space is limited. Material has to be picked up, they won't transport to Madison County. | Some goes to a place in Cortland County for recycling. Suggested contacting Glomac Plastics (Onondaga County) and Oneida Molded Plastics (Madison County). |
| Syracuse Plastics | Plastic injection molding | 7400 Morgan Road Liverpool, NY 13090 | Bill Chris | (315)637-9881 | Left Message 11/10/16 and 11/17/16 | | | | | | | | |
| Tessy Plastics | Manufacturers medical devices, consumer products, electronics, business equipment and packaging materials | 488 Route 5 West Elbridge, NY 13060 U.S.A. | Cindy Busch | (315)689-3924 | Left Message 11/10/16 and 11/17/16 | | | | | | | | |
| Berry Plastics | Flexible and rigid packaging manufacturing | 1500 Milton Avenue Solvay, NY 13209 | Tom | (315)484-4444 | Left Message 11/17/16 | | | | | | | | |
| Displays by Rioux, Inc. | Design, manufacture and distribute acrylic display cases | Syracuse, New York 13212 | | (315)458-3639 | Left Message 11/17/16 | | | | | | | | |
| Glomac Plastics | Plastic fabrication | 4003 Eastbourne Dr, Syracuse, NY 13206 | | (315)474-7564 | Number not in service | | | | | | | | |
| Chuck Haffner's | Greenhouse | 7265 Buckley Road North Syracuse, NY 13212 | Dan Metz | (315)458-2231 | Left Message 12/2/16 | | | | | | | | |
| TOTAL | | | | | | | | | 1037.7 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CCMI | Plastic Fabrication | 88 Middle Street, Geneva, NY 14456 | Anthony Lewis | (315)781-3270 | Personal communication, 11/10/16 | Chunks/sheets of plastic (acrylic, tyvek, PVC, UHMW) and plastic floor sweepings (plastic chips, scraps, and dust). | Debris from floor sweepings would include wood dust. | 750 lb/month are associated with plastic chunks/sheets. Number increases to 2,000 lb/month with floor sweepings (though 1/3 of this may be from wood dust). | 8.0 | Material is picked up, likely goes to Canandaigua Landfill | | | |
| CY Plastic Works Inc. | Injection molding and blow molding of custom plastic parts | 8601 Main St. P.O. Box 560 Honeoye, NY 14471 | | (585)229-2555 | Personal communication, 11/10/16 | None | | No scrap plastic generated. | 0.0 | | | No | Materials are being recycled. |
| EWASTE+ | NYSDEC List of Registered Electronic Waste Recycling Facilities | 7318 Victor Mendon Road, Victor, NY 14564 | Andrew Vermet | (585)924-3840 | Left Message, 11/18/16 | | | | | | | | |
| Terphane Inc. | Plastic Fabrication | Bloomfield, New York 14469 | | (585)657-5800 | Not Contacted | | | | | | | | |
| **TOTAL** | | | | | | | | | **8.0** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Oswego Industries, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities | 7 Morrill Place, Fulton, NY 13069 | Ahren | (315)598-3108 | Left Message, 11/18/16 | | | | | | | | |
| Interface Performance Materials Inc. | Rubber gasket manufacturer | Fulton, New York 13069 | Mike Nasky | (315)598-4271 | Left Message, 11/17/16 | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Edison Electronics, Inc. | NYSDEC List of Registered Electronic Waste Recycling Facilities | 5375 State Highway 7 (571 Main Street) Oneonta, NY 13820 | | (607)432-9311 | Personal communication, 11/18/16 | Disassembled electronic plastics. | Separated. | Disassembled plastics: 500 - 1,000 lb /year | 0.4 | Sunnking, Brockport, NY | Get paid $0.05 /lb. | | Send disassembled plastic and whole electronic products to Sunnking. It is not worth their time to separate material. No quantity available for whole electronic products. |
| MAMCO | Plastic injection molding | 147 River Street Oneonta, NY 13820 | Frank | (866)886-2626 | Left Message, 11/17/16 | | | | | | | | |
| KMS Plastics | Plastic mold manufacturer, rubber products | 207 River St Oneonta, (NY) 13820 | | (607)432-5777 | Number not in service | | | | | | | | |
| TOTAL | | | | | | | | | 0.4 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Kintz Plastics, Inc. | Thermoformed plastics | 165 Caverns Road, Howes Cave, New York 12092 | Linda | (518)296-8513 | Personal communication, 11/10/16 | None | | | 0.0 | | | | No scrap plastic available. Sent back to vendor. |
| Remco Plastics and Godfrey Corrosion Collars | Molding primary plastics | 119 Creamery Road Richmondville, NY 12149 | | (518)294-6595 | Left Message, 11/17/16 | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Swarthout Recycling | NYSDEC List for Registered C&D Processing. Also, NYSDEC List for Vehicle Dismantling Facilities. | 1514 County Road 19, Beaver Dams, NY 14812 | Brian Swarthout | (607)936-0013 | 2015 C&D Annual Report submitted to NYSDEC. 2015 Annual Report for Vehicle Dismantling Facilities not available. | Construction and Demolition Debris. Received from Steuben, Schuyler, Yates and Chemung Counties. | | C&D: 10,088 ton/year | 100.9 | Seneca and Steuben County Landfills | | | Personal communication with Triad Recycle and Energy (11/3/16): Based on their experience for materials handled and sold as bulky rigid in 2013 at their Erie County facility, they estimated approx. 1% of the C&D material they receive is plastic. Applied this percentage to qualitative quantity of C&D material to calculate normalized quantity of waste plastics in the C&D material. |
| TOTAL | | | | | | | | | 100.9 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None identified | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Upstate Shredding (Ben Weitsman) | Scrap metal company, vehicle shredder | 1 Recycle Drive, Tioga Industrial Park, Owego, NY 13827 | Steve Green | (607)687-7777 | Personal communication, 11/7/16. Sent follow up email requesting specific information 11/7/16. Spoke again 12/2/16 and sent follow up email 12/2/16 and 12/20/16. | Auto fluff | Auto fluff contains ground tires, plastic, dirt, glass, seat cushions, potential product residue from engine parts, etc. | No estimate provided. | | | | | Plastics not being separated at this time. |
| TOTAL | | | | | | | | | 0.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Superior Disposal Services | NYSDEC List for Permitted C&D Processing | 1180 Elmira Road Newfield, NY 14867 | Andrea Kuntz | (607)277-3000 | 2015 Annual Report submitted to NYSDEC | Construction and Demolition Debris. | Mixed | 6,919.80 ton/year were disposed of | 69.2 | Steuben County Landfill | | | C&D material received from Tompkins and Cortland Counties. Personal communication with Triad Recycle and Energy (11/3/16): Based on their experience for materials handled and sold as bulky rigid in 2013 at their Erie County facility, they estimated approx. 1% of the C&D material they receive is plastic. Applied this percentage to qualitative quantity of C&D material to calculate normalized quantity. |
| Incodema 3D | Injection molded plastic components | 330 Main St a, Freeville, NY 13068 | Gary Benjamin | (607)269-4390 ext. 115 | Left message 11/17/16 | | | | | | | | |
| **TOTAL** | | | | | | | | | **69.2** | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Alpco Recycling Facility | NYSDEC List for Permitted C&D Processing | 846 Macedon Center Road, Macedon, NY 14502 | Seth DePoint | (315)986-8900 | 2015 Annual Report submitted to NYSDEC, not available. | | | | | | | | |
| Jrlon Inc. | Plastic mold manufacturers | Palmyra, New York 14522 | | (315)597-4067 | Personal communication, 11/17/16 | None | | No scrap plastic generated. | | | | | |
| Harbec Plastics Inc. | Plastic mold manufacturers | Ontario, New York | John | (585)703-6736 | Personal communication, 11/17/16 | Purgings from plastic injection machines. Also TPU Resin (isoplast), hard to get rid of. | Clean. | TPU and Purgings between 80,000 - 100,000 lb/year | 45.0 | TPU goes to Buffalo, NY (Erie County). Not sure what this facility does with the material it receives. Purgings were going through Casella Waste but stopped contract due to excessive charges. | Pays tip fee on TPU sent to Buffalo along with other resin plastics but tipping price is subtracted off price he gets on other resin plastics. | Yes - does not need to be paid for material, but does not want the process to cost him money. | Harbec is an ISO 15001 certified platinum level company. Very focused on sustainability and finding a responsible end use for scrap plastic. Currently, grinds lots of scrap plastic into pellet form and loads into clear bags and sends to facility in Buffalo. Buffalo is buying the resin from Harbec, but has to be in gaylord quantity. Have some storage available near Harbec facility. |
| Pearl Technologies | Plastic manufacturer | Savannah, New York 13146 | | (315)365-3603 | Not contacted | | | | | | | | |
| TOTAL | | | | | | | | | 45.0 | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | TYPE GENERATED (e.g., resins, film, rigid, expanded, PIC Code etc.) | PURITY (% Contamination or Qualitative) | QUALITATIVE QUANTITY GENERATED | NORMALIZED QUANTITY (TON/YEAR) | CURRENT DISPOSAL LOCATION (CITY, STATE) | ANNUAL TIPPING FEE FOR CURRENT DISPOSAL ($/TON) | INTEREST IN ALTERNATIVE DISPOSAL | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| None identified | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | 0.0 | | | | |

# APPENDIX B

# POINT-SOURCE SUPPLIERS/GENERATORS OF WASTE TIRES

NOTES FOR TABLES IN APPENDIX:

1. Number of waste tires shipped off-site for recycling, disposal, or other during the facility's operating year as identified in the facility's 2015 annual operating report.
2. Calculated quantity using the Rubber Manufacturer's Association industry standard of 22.5 pounds per passenger and light truck tire.
3. Section 7 in the annual operating report asks the facility to indicate the name of facility(ies) accepting waste tires.
4. Contact and information provided in this appendix should not be construed as an attempt to negotiate on behalf of NYSDEC or Madison County.
5. Disposal costs were provided by some facilities and were included for informational purposes only. These costs were not considered as part of the economic analysis described in Section 3 of this report. Also, pricing may not be indicative of current or future pricing and should not be construed as negotiated costs on behalf of NYSDEC or Madison County.

Acronyms: ELV: End of Life Vehicle

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Don's Automotive Mall Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 216 Colesville Road Binghamton, NY 13904 | Randy Howard | (607)775-1542 | 2015 Annual Report Submitted to NYSDEC | 5,040 | 56.7 | Gary's U Pull It, Inc., 230 Colesville Road, Binghamton, NY 13904 (Broome County) | |
| Gary's U-Pull It Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 230 Colesville Road Binghamton, NY 13904 | Stephen Barkwell | (607)775-2934, cell: (607)343-8910 | 2015 Annual Report Submitted to NYSDEC and personal communication, 12/9/16 | 11,830 | 133.1 | Seneca Meadows Landfill (Waterloo, NY, Seneca County) | Quantity of waste tires was reported as tons in the Facility Annual Operating Report. The normalized quantity shown here is actual tons reported; it is not a calculated value. The number of waste tires is back calculated from the reported tons. |
| Ray Lantz Garage Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler/Dealer | 230 Tiona Road, PO Box 193 Maine, NY 13802 | Sherry Russell | (607)862-3350 | 2015 Annual Report Submitted to NYSDEC | 554 | 6.2 | Seneca Meadows Landfill (Waterloo, NY, Seneca County) | Quantity of waste tires was reported as tons in the Facility Annual Operating Report. The normalized quantity shown here is actual tons reported; it is not a calculated value. The number of waste tires is back calculated from the reported tons. |
| Ray's Auto Service | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Collector/ Itinerant Vehicle Collector. | 17 East Clinton Street Binghamton, NY 13904 | Ray Jungs | (607)722-3000 | 2015 Annual Report Submitted to NYSDEC and Personal Communication, 12/1/16 | 600 | 6.8 | Tires picked up by an unidentified company and taken to a facility in Pennsylvania. | Personal communication indicated 50 tires typically collected per month. Tires are passenger and light truck tires. Used this tire quantity for estimation purposes. Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Robert's Scrap Processing | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Processor. | 135 Hemlock Hill Rd Whitney Point, NY 13862 | Robert Womack | (607)692-7510 | 2015 Annual Report Submitted to NYSDEC | 6,000 | 67.5 | Upstate Shredding | |
| Chordas | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 7 Wayman Road Binghamton, NY 13901 | Christopher Chordas | (607)724-1346 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| Higgins Auto Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 507 Cloverdale Road Chenango Forks, NY 13746 | Brian Higgins | (607)656-9576 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| Weitsman Recycling, LLC Binghamton Div. | NYSDEC List for Vehicle Dismantling Facilities. | 10 Brandywine Street Binghamton, NY 13901 | Harold F. Weitsman | (607)724-3244 | 2015 Annual Report not available | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Frank's Garage | NYSDEC List for Vehicle Dismantling Facilities. | 1 Mill Street Deposit, NY 13754 | Frank Schamback | (607)467-2119 | 2015 Annual Report not available | | | | |
| Joe's Service | NYSDEC List for Vehicle Dismantling Facilities. | 220 Lower Stella Ireland Road Binghamton, NY 13905 | Joe Plestis | (607)797-3140 | 2015 Annual Report not available | | | | |
| TOTAL | | | | | | 24,024 | 270.3 | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Nucor Steel Auburn | NYSDEC Waste Tire Storage Facility. | 25 Quarry Road Auburn, NY 13021 | Gordon Elwell, Environmental Manager | (315)253-4561 | 2015 NYSDEC Waste Tire Storage Facility Annual Report, Personal communication, 1/13/17 | 0 | 0.0 | | This facility accepts waste tires for use as an alternative source of carbon in their steel making process, through an electric arc furnace. All tires brought on-site are consumed, no tires leave the facility. In 2015, 1,437 tons were used by this facility. Tires were received from facilities in Livingston County, Cayuga County, Niagara County, Yates County and Genesee County. Facility is selective with the tires they can accept (must be clean, prefer steel rims). As such, they are not always able to charge a tip fee up front. It is more important to them to get something on the back-end. They are able to charge a tip fee for some facilities but the cost varies depending on how the tires get to the facility, how many tires are available, if it's a dedicated and routine supplier, etc. They receive many tires from municipal tire collection events. |
| Baker's Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 12330 Upton Road Red Creek, NY 13143 | Robert M. Baker | (315)754-6309 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| CEMCO | NYSDEC List for Vehicle Dismantling Facilities. This is a metal salvage facility. | 130 York St. Auburn, NY 13021-8549 | Sharon Skibo | (315)253-2886 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | This Annual Report is titled, "Scrap Metal Processor, Metal Salvage Facilities, and Facilities that Recover Metal from Sludges." Waste tires were not mentioned in report. |
| Kubis Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 172 N. Division Street Auburn, NY 13201 | Craig S. Gallace | (315)253-4400 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Ace Trucking Company | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 2758 Route 34B Aurora, NY 13026 | Robert C. Vernon | (315)364-8841 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Dave Bell | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Collector. | 3097 Long Hill Road Venice Center, NY 13147 | David K. Bell | (315)364-5393 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Jones Auto Fred Jones | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 1406 Levanna Road Union Springs, NY 13160 | Fred Jones | (315)237-7093 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility did not process or store any ELVs during the year. |
| Pick N Pull Auto Parts LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler/ Scrap Processor. | 6983 North Street Auburn, NY 13021 | Wayne Hymers | (315)252-3006 | 2015 Annual Report Submitted to NYSDEC | 2,400 | 27.0 | Seneca Meadows and Upstate Shredding | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Raymundo Auto Sales | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Salvage Pool. | 307 Bartnick Road King Ferry, NY 13081 | Santos Raymundo | (315)729-6419 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Nash Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 8649 Pump Road Jordan, NY 13080 | Joseph Nash | (315)704-8052 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| Carrier Salvage & Recycling LLC | NYSDEC List for Vehicle Dismantling Facilities. | 14725 State Route 104 Martville, NY 13111 | Shelley Carrier | (315)564-6800 | 2015 Annual Report not available. | | | | |
| Skibos Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. | 361 State Street Auburn, NY 13021 | Andrew J. Leja | (315)253-5031 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **2,400** | **27.0** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| GCR Tires and Service/ also known as GCR Retread Shop | NYSDEC Waste Tire Storage Facility. Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 3160 Lake Road, Horseheads, NY 14845 | Site Location: Bill Evans. Environmental Coordinator, GCR Nashville Office: Ralph Cardona. | Site Location: (607)733-7044. R. Cardona: (563)262-5375 | 2015 NYSDEC Waste Tire Storage Facility Annual Report. Personal communication with R. Cardona, 12/22/16 | 1,733 | 104.0 | | This facility receives scrap tires (whole truck tires) from multiple customers in Chemung County. Approximately 18% go to Liberty Tire (Niagara County). The rest go to Eco Hauling (Louisa County, Virginia). The reported normalized quantity is based on the actual tons of waste tires the facility sent off-site as reported in the 2015 Annual Report. The number of waste tires is back calculated from the reported tons assuming 120 lb/truck tire. GCR is an entity of Bridgestone. GCR has this one retread shop in New York State and other service shops. |
| Parmenter, Inc. | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 81 Old Ithaca Road Horseheads, NY 14845 | Joyce (Schuyler County Location) | (607)594-7106 | Personal communication, 12/22/16 | 4,200 | 200.8 | | Have 6 locations throughout New York State (Batavia, Geneva, Odessa, Cortland, Horseheads, Montour Falls). Currently sending tires to HighTread (Buffalo, NY area). Have a range of tires from passenger tires to off-the-road tires. Each location fills a 53' van trailer/month. Approx. 75% of the tires are tractor trailer tires, the other 25% are passenger and light truck tires. Supplier is willing to load trucks with preferred tire type based on what Madison County is able to accept. Assume 1,000 passenger tires/trailer and 500 tractor trailer tires/load. Most loads are mixed. For quantity estimates, assumed 350 mixed tires/month. Number of waste tires and normalized quantity are for one location in Chemung County (Horseheads). Also See Cortland County and Schuyler Counties for other locations in project area. |
| Balmer Motor Company | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler | 2134 Route 14 South Broadway Pine City, NY 14871 | Edward D. Balmer | (607)734-5915 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. When tires are sent off site, they are sent to Chemung County Solid Waste (Elmira, NY) for $3.00 each. |
| Horseheads Automotive Recycling LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 1592 Sears Road Elmira, NY 14903 | Jeffrey A. Robbins | (607)739-3851 | 2015 Annual Report Submitted to NYSDEC | 2,250 | 25.3 | | |
| Rubin Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 36 Christian Hollow Road Pine City, NY 14871 | Larry Berman | (607)733-5558 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | Penn Recycling | No waste tires sent off-site for recycling disposal or other. |
| Shulman Company Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 197 East Washington Ave. Elmira, NY 14901 | Stephen Shulman | (607)733-7111 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Keller's Salvage Yard | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Collector/Processor. | 45 Keller Drive Erin, NY 14838 | Jeremy Kellen | (607)739-8151 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| **TOTAL** | | | | | | **8,183** | **330.1** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Bill's Trucks & Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | Rd #1 Box 55, Edmeston, NY 13485 | Bill Cummings | (607)847-8025 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. Report indicates used tires are used for used vehicles. |
| Golden's Body Shop LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 414 Turner Street Oxford, NY 13830 | Timothy S Golden | (607)843-6412 | 2015 Annual Report Submitted to NYSDEC | 828 | 9.3 | Leo Lawrence Lyon | |
| Menard's Garage LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 285 Wackford Road Oxford, NY 13830 | Dale & Daniel Menard | (607)843-9392 | 2015 Annual Report Submitted to NYSDEC | 500 | 5.6 | EFW Hauling (315-761-8299) | |
| Otsego Auto Crushers LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Collector. | 5057 State Highway 12 Norwich, NY 13815 | Pete Mason | (607)373-3487 | 2015 Annual Report Submitted to NYSDEC | 3,046 | 34.3 | Seneca Meadows and Upstate Shredding | |
| P & M Auto Parts & Wrecker Service & Used Cars | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 6612 State Highway 12 Norwich, NY 13815 | Michael Donnelly | (607)334-7625 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Wilkinson Salvage | NYSDEC List for Vehicle Dismantling Facilities. | 1557 County Road 33 South New Berlin, NY 13843 | Clifford E. Wilkinson | (607)764-8285 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **4,374** | **49.2** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Parmenter, Inc. | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 1804 Route 13 Cortland, NY 13045 | Joyce (Schuyler County Location) | (607)594-7106 | Personal communication, 12/22/16 | 4,200 | 200.8 | | Have 6 locations throughout New York State (Batavia, Geneva, Odessa, Cortland, Horseheads, Montour Falls). Currently sending tires to HighTread (Buffalo, NY area). Have a range of tires from passenger tires to off-the-road tires. Each location fills a 53' van trailer/month. Approx. 75% of the tires are tractor trailer tires, the other 25% are passenger and light truck tires. Supplier is willing to load trucks based on what Madison County is able to accept. Assume 1,000 passenger tires/trailer and 500 tractor trailer tires/load. Most loads are mixed. For quantity estimates, assumed 350 mixed tires/month. Number of waste tires and normalized quantity are for one location in Cortland County (Cortland). Also See Schuyler County and Chemung Counties for other locations in project area. |
| Louie's Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 364 Tompkins Street Cortland, NY 13045 | David N. Rosen | (607)591-9040 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Michael G. Hatch Trucking | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Collector. | 1919 State Route 41 Cincinnatus, NY 13040 | Michael Hatch | (607)863-4371 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| **TOTAL** | | | | | | **4,200** | **200.8** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Wheeler's Collision Service, Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 32 Oak Street Deposit, NY 13754 | Randall Hartz, Sr. | (607)467-3101 | 2015 Annual Report Submitted to NYSDEC | 395 | 4.4 | Delaware County Landfill (Rt. 10, Delhi, NY) | Tires are picked up and transported to Delaware County Landfill by Ed Katon and Son (2920, County Highway 19, Deposit, NY, Delaware County) |
| Mikes Rt. 23 Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 19079 State Highway 23, Davenport, NY 13750 | Mike Oliver | (607)278-6016 | 2015 Annual Report Submitted to NYSDEC | 50 | 0.6 | Delaware County Landfill (Rt. 10, Delhi, NY) | |
| **TOTAL** | | | | | | **445** | **5.0** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Maple Ave Yard, Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 250 County Highway 122 Johnstown, NY 12095 | David Cook | (518)762-7614 | 2015 Annual Report Submitted to NYSDEC | 279 | 3.1 | Worldwide Tire Company (Montgomery County) | |
| Harry's Auto Sales | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 182 County Highway 107 Johnstown, NY 12095 | Bob VanAernam | (518)762-4941 | 2015 Annual Report Submitted to NYSDEC | 600 | 6.8 | Bob's Tire Co., Mattapoisett, MA | |
| Dudkas Garage, Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 4436 State Highway 30 Amsterdam, NY 12010 | Gary Dudka | (518)842-2301 | 2015 Annual Report not available | | | | |
| **TOTAL** | | | | | | **879** | **9.9** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| None Identified | | | | | | | | | |
| TOTAL | | | | | | 0 | 0.0 | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Auto Salvage Technologies | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 3107 State Route 28 Herkimer, NY 13350 | John Doolen | (315)866-7278 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Givo's Auto Parts & Sales | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 2295 Broad Street Frankfort, NY 13340 | Robert Giovinazzo | (315)725-4716 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| Hart's Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 282 Harvey Bridge Rd. Ohio, NY 13324 | Bill Hart | (315)826-7027 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility did not process or store any ELVs during the year. |
| R & S Auto Parts of Frankfort Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 2211 Broad Street, PO Box 4371 Utica, NY 13504 | Ronald Leonard | (315)733-4614 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| American Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 2374 Albany Road Frankfort, NY 13340 | David Sykes | (315)733-6405 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Fake's Auto Enterprise Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1131 Barker Road Dolgeville, NY 13329 | Edward Fake | (315)429-8069 | 2015 Annual Report Submitted to NYSDEC | 520 | 5.9 | Deer Run Farms. Permit # 5A-758 | |
| Greiner Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 681 State Route 8 Cold Brook, NY 13324 | Daniel Greiner | (315)826-3707 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Sims Metal Management | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 167 West River Road Frankfort, NY 13340 | Ralph Giovinazzo | (315)735-4451 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | Hoosick Truck Tires (Route 7, Hoosick, NY 12089) | No waste tires sent off-site for recycling, disposal or other. |
| **TOTAL** | | | | | | **520** | **5.9** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Long-Park Tire, Inc. | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 23751 St. Rt. 342 Watertown, NY 13601-5162 | John Parks | (315)782-6000 | Personal Communication, 12/22/16. | 3,714 | 222.8 | Personal communication indicated tires are being sent to HTI Recycling (Lockport, NY, Niagara County) | Facility fills a 53' van trailer. Once full its taken away and an empty trailer left in its place. Fill trailer once every 3 weeks (summer) - 4 weeks (winter). Each trailer load holds approx. 250 tractor trailer tires (120 lb tires). Facility indicated they do not need a walking floor trailer; a simple van trailer is fine. Need to maintain quick turn around once trailer is full because they don't have a place to store tires. Tires go directly in trailer. Long Park Tire would provide the tires at no cost to Madison County and is willing to coordinate transportation with Madison County. Long Park Tire currently pays $1,400/trailer for pick-up ($16,800/year). |
| Beutel Metal Recyclers | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Processor/Collector/ Crusher. | 17950 County Route 63 Watertown, NY 13601 | Ann Beutel | (315)788-4080 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Altmire's Used Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 31178 NYS Route 3 Felts Mills, NY 13638 | Donald Altmire | (315)773-5727 | 2015 Annual Report Submitted to NYSDEC | 400 | 4.5 | Kimco Steel and Ben Weitsman of Syracuse (Onondaga County) | Report makes note of 4 tires per car when scrapping. |
| Empire Recycling Watertown | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Processor/Collector. | 511 Pearl Street Watertown, NY 13601 | Michael Miner | (315)788-1400 | 2015 Annual Report Submitted to NYSDEC | 9,020 | 101.5 | Upstate Shredding (Weitsman) in Owego, NY (Tioga County) | Report specifies tires and rims. |
| Baker's Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Military Scrap and Junk. | 40131 Hyde Lake Rd. Theresa, NY 13691 | Edgar Baker | (315)482-3788 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| David Arnold | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle Collector. | 24481 Arca Street Herrings, NY 13619 | David Arnold | (315)921-4200 | 2015 Annual Report Submitted to NYSDEC | 5 | 0.1 | Gave to a farmer, location unspecified. | |
| Eiss Brothers Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler/ Dealer. | 28250 State Route 37 Watertown, NY 13601 | John Eiss | (315)629-4370 | 2015 Annual Report Submitted to NYSDEC | 3,450 | 38.8 | Triple M Used Tire & Casings LLC (Lockport, NY - Niagara County) | |
| Eric Farr & Sons | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 18791 Game Farm Road Dexter, NY 13634 | Eric C. Farr | (315)782-1176 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Gill's Auto Repair | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 43968 Route 3, PO Box 52 Natural Bridge, NY 13665 | Bartlett Gill | (315)644-4066 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Paige's Recycling, LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 19151 Star School House Road Dexter, NY 13634 | James Paige | (315)782-0368 | 2015 Annual Report Submitted to NYSDEC | 35 | 0.4 | Jefferson County Recycling | |
| R. C. Dorr Farm | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 33775 Sam Adams Rd Clayton, NY 13624 | Tom Giles | (315)649-5470 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Wills' Wrecker | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 24913 Allen Road Lafargeville, NY 13656 | Thomas P. Wills | (315)482-2084 | 2015 Annual Report Submitted to NYSDEC | 1,615 | 18.2 | Northstar Auto and Salvage (Rt. 37 Evans Mills, NY) and Rae's Tire Recycling (38486 Rt. 37, Theresa, NY). Both are in Jefferson County. | These were the facilities listed as accepting waste tires on the 2015 Annual Operating Report; however, personal communication with Northstar Auto and Salvage indicated they do not receive tires from Will's Wrecker. Northstar only receives tires that are on vehicles and being scrapped. |
| Northstar Auto and Salvage | Scrap metal, auto repair and parts | 28722 NYS Route 37 Evans Mills, NY 13637-3145 | Scott | (315)629-4824 | Personal Communication, 11/30/16. | 10,000 | 112.5 | Facility not identified. Located in Buffalo, NY area. | Tires are mostly passenger and light truck (whole tires). The company from Buffalo, NY comes to their facility to pick-up tires using walking floor trailer. Depending on the quantity of tires picked-up, Northstar Auto pays for the company in Buffalo, NY to pick them up, or if the quantity is great enough, Northstar Auto will receive payment for the tires. Northstar Auto did not specify a need to be paid for their tire supply. They are more concerned that the facility accepting the tires has an appropriate permit from DEC. Also, indicated they do not accept tires as a general drop-off from individuals. Only take tires from vehicles being scrapped or tires associated with towing operations and roadside assistance. This company is also associated with Harts Towing. |
| J and E Enterprises LLC | NYSDEC List for Vehicle Dismantling Facilities. | 15155 NYS. Rte. 193 Pierrepont Manor, NY 13674 | Jewel Gilbert | (315)465-3323 | 2015 Annual Report not available. | | | | |
| Watertown Main Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 620 West Main Street Watertown, NY 13601 | James O'Connor | (315)788-1170 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **28,239** | **498.8** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Bob J's Auto | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Auto. | 7284 Wildcat Rd. Port Leyden, NY 13433 | Robert Kraeger | (315)348-4000 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Csizmars Junk Yard | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Lewis County Junkyard. | 6192 Greig Road Glenfield, NY 13343 | Joseph Csizmar | (315)346-1663 | 2015 Annual Report Submitted to NYSDEC | 120 | 1.4 | Farmer - name and address not specified. | |
| Dave's Auto Recycling | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle Collector. | 6940 Denley Rd. Booneville, NY 13309 | David Mehl | (315)942-3459 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| George Hall Junkyard | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: NA. | 10790 Limburg Forks Rd. Carthage, NY 13619 | George & Judy Hall | (315)493-2932 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| Kafline's Used Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 6731 Snell Rd. Lowville, NY 13367 | Paul Kafline | (315)376-2885 | 2015 Annual Report Submitted to NYSDEC | 2,200 | 24.8 | Kimko (Kingston, Ontario, CA) and K&S Tires. | |
| Pat's Used Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 7734 #4 Rd. Lowville, NY 13367 | Pat Patterson | (315)376-1912 | 2015 Annual Report Submitted to NYSDEC | 250 | 2.8 | Upstate Shredding | |
| **TOTAL** | | | | | | **2,570** | **29.0** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Gary's Auto Parts | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Dismantler. Also, Registered Electronic Waste Recycling Facility. | 651 Fitch Street, Oneida, NY 13421 | Jim Clark | (315)363-2240 | Personal Communication, 11/10/16 and 2015 Annual Operating Report submitted to NYSDEC | 815 | 9.2 | Casings, Inc. (Catskill, NY - Greene County) and K&S Tire (Williamstown, NY - Oswego County) | Facility has passenger tires up to 20" in size. Disposal costs not provided but did indicate they would bring tires to Madison County if they were accepted at no cost. Facility also has rigid plastics available from electronic recycling efforts. |
| Newton Salvage | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Itinerant Vehicle Collector. | 1638 Wilcox Road, Georgetown, NY 13072 | Zachary Newton | (315)662-3006 (o), (315)399-8734 (c) | 2015 Annual Report Submitted to NYSDEC | 50 | 0.6 | | Facility gave waste tires to a local farmer to be used to cover an area of a bunk for cows. Also, the recycling center where scrap is sold to is now accepting cars with tires. |
| Price Scrap and Salvage | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Not specified. | NYS Rt. 8, PO Box 38, West Edmeston, NY 13485 | Thomas Price | (315)855-4452 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Scully's | NYSDEC List of Vehicle Dismantling Facility. | 11146 Skaneateles Turnpike, Brookfield, NY 13485 | Kevin Scully | (315)899-8995 | Personal Communication, 11/08/16. 2015 Annual Report not available. | 0 | 0.0 | Madison County Landfill | Intermittent generation of tires. No steady tire supply. Any tires collected throughout year are taken to Madison County. Pay standard tip fees at Landfill. |
| Tower Mountain Salvage | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Dismantler. | 2243 Fire Tower Road, Erieville, NY | John Miner | (315)662-7432 | Personal Communication, 11/04/16 and 2015 Annual Operating Report Submitted to NYSDEC | 0 | 0.0 | Madison County, location unspecified | Personal communication indicated facility handles between 0 and 200 passenger cars per year (4 to 5 tires per car). This number is higher when market prices are up. Pay $1.50/tire to dispose. 2015 Annual Operating Report indicated 0 waste tires were sent off site for recycling, disposal or other. |
| Vanderwal's Salvage & Motor Vehicle Dealer | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Dismantler. | 2205 Crumb Hill Road, DeRuyter, NY 13052 | Ray Vanderwhall | (315)852-9640 | Personal Communication, 11/04/16 and 2015 Annual Operating Report Submitted to NYSDEC | 120 | 1.4 | Madison County Department of Solid Waste and Sanitation, Landfill | Personal communication indicated facility handles between 300 and 400 cars per year (4 to 5 tires per car). Pays $100/ton to dispose. Quantities shown in table were taken from 2015 Annual Operating Report. |
| John T. Pritchard | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Not specified. | 2874 Seneca Turnpike, Canastota, NY 13032 | John Pritchard | (315)697-9366 | Personal Communication, 11/04/16 and 2015 Annual Operating Report Submitted to NYSDEC. | 0 | 0.0 | | 2015 Annual Operating Report indicates facility did not operate in 2015. Personal communication: Suggests contacting auto repair shops that sell tires such as Silver City Tire (Madison County). Said Dutcher's (Madison County) has a great operation that has an outside company come into crush vehicles. Don't separate out plastic but have lots of tires. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Silver City Tire | Stocking tire dealer and full automotive service and repair center. | 201 Genesee Street, Oneida, NY 13421 | David and Cricket Labrecque | (315)363-8220 | Personal Communication, 11/07/16 | 12,000 | 135.0 | | Tires are mostly passenger cars and light truck. Tires are not mounted. Personal communication indicated 1,000 tires are generated per month. Currently, a registered vendor from Tonawanda, NY (Erie County) picks up tires whenever needed. Approximately 1,000 tires fit on tractor trailer. Facility pays $1,000 for pickup of a load ($1.00/tire). |
| Dutcher's Inc. | NYSDEC List of Vehicle Dismantling Facility. Registration Type: Dismantler. | 4495 Cramer Road, Morrisville, NY | Jim / Gregory Dutcher | (315)684-9212 | Personal Communication, 11/10/16 and 2015 Annual Operating Report submitted to NYSDEC | 750 | 8.4 | | 2015 Annual Operating Report indicated "local farms used all our scrap tires to cover bunks." Personal communication indicated a trucking company comes to pick tires up with walking floor trailer and take them to Seneca Meadows Landfill. Pay tip fees at Seneca Meadows and cost for local trucking company to haul. This disposal method may have applied at other times. |
| Don's Auto Barn | NYSDEC List of Vehicle Dismantling Facility. | 2462 Route 13, New Woodstock, NY 13122 | Don Burdin | (315)662-3879 | Personal Communication, 11/04/16 and 2015 Annual Operating Report not available. | 2,472 | 27.8 | Madison County Landfill | Handle tires that fit up to a 1 ton truck. Has about 550 tires on wheels. Used to have a truck service pick up tires at his facility for $2/tire. Now paying $125/ton at landfill. Also has mounted tires. Fills a box truck with tires (20' x 8' bed). Took 5 loads to landfill in spring/early summer. Has 2 more box trucks full. Tire quantity shown here is an estimate based on box truck size. Facility did not provide an estimated tire quantity. Assume 20" tire diameter, 8" width. Volume of 1 tire is 1.45 $ft^3$. Assume truck is 7' high. Truck volume is 1,120 $ft^3$. Assume 20% of truck volume is not used, each truck can carry 618 tires. Assume 4 box trucks filled per year. |
| Don's Affordable Cars | NYSDEC List of Vehicle Dismantling Facility. | 925 Borden Road, Earlville, NY 13332 | Don Briggs | (607)316-0361 | Personal Communication, 11/04/16. 2015 Annual Report not available | 0 | 0.0 | | Just sells used cars. No tires available. |
| Crouse Construction | NYSDEC List of Vehicle Dismantling Facility: Registration Type: Itinerant Vehicle Collector. | 142 Rte. 173, Brinkerhoff Hill Road, Chittenango, NY 13037 | Carrie Montroy | (315)687-6560 | Personal Communication, 11/04/16 and 2015 Annual Operating Report Submitted to NYSDEC. | 0 | 0.0 | | Facility did not operate in 2015. |
| **TOTAL** | | | | | | **16,207** | **182.4** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| **OUTSIDE PROJECT AREA** | | | | | | | | | |
| Casings Inc. | NYSDEC Waste Tire Storage Facility. Scrap tire collection and recycling. Included on list of 2016 Scrap Tire and Rubber Users Directory provided by Rubber Manufacturer's Association. | Catskill, NY (Greene County) | Jimmy Fabrizio | (518)943.9404 | Personal Communication, 11/8/16 and 2015 NYSDEC Annual Report Form - Waste Tire Storage | | 51,679.0 | Casings receives tires from Worldwide Tire Distribution. | Facility is a NYSDEC permitted tire recycler and can provide tires as whole tires or shredded. On-site stockpiles are DEC permitted. 90% of tires received at facility are whole passenger tires. Tires are inspected visually. 20% are resold within U.S. and/or exported to other countries. 80% are shredded. Typical shred size is 2", 4" and 6-10." The 2" shredded tires can be ordered with the steel band removed or with it left in place. The other shredded sizes are too big to remove the steel band. Have walking floor trailers of shredded material. Prices are what Casings would require for them to shred tires and deliver material to Madison County facility. Prices are based on current market conditions: 2" shredded with steel band present - $30-$50/ton. 2" shredded with steel band removed - $50-$70/ton. 4" with steel band - $20 - $40/ton. 6-10" shredded with steel band, $15-30/ton. Casings is aware of the Madison County RFP for the Plastics to Oil Facility. Normalized quantity is from Annual Operating Report. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Worldwide Tire Distribution Inc. | NYSDEC Waste Tire Storage Facility. Pick-up scrap tires at many locations in the project area. Hazardous waste transporter (part 364) and tire transfer station (part 360). | 141 W. Main St, Amsterdam, NY 12010. Service 100-mile radius around Amsterdam, NY. West to Auburn, NY, south to Binghamton, NY, north to Carthage, NY, East into Massachusetts and Connecticut. | Tayler French | (518)708-5802 | Personal Communication, 11/7/16 and 2015 NYSDEC Waste Tire Storage Facility Annual Report | 356,000 | 4,005.0 | Casings, Inc. (169 Maple Ave., Catskill, NY 12414, Greene County) | The normalized quantity shown here is actual tons reported; it is not a calculated value. The number of waste tires is back calculated from the reported tons. Annual Report shows 94% of tires received by facility were passenger cars and 6% were light truck (whole, not shredded, not mounted). No waste tires are stored at this facility. Waste tires are trucked out daily. Competition for Worldwide Tire Distribution includes Rid-of-It (Syracuse, NY - Onondaga County), Casings, Inc. (Greene County) and Seneca Meadows Landfill (Seneca County). The tip fee is driven by market price for oil. With oil price around $30-$50/barrel, Worldwide Tire Distribution would provide the scrap tires for free. Madison County would need to arrange transportation for the tires or pay freight for Worldwide Tire Distribution to deliver. If market price of oil increases to $100/barrel Madison County would need to pay $50/ton for the scrap tires (includes shipping). |
| Beckers Auto Salvage Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler and Dealer. | 796 McKinley Road Palatine Bridge, NY 13428 | Richard Becker | (518)673-3238 | 2015 Annual Report Submitted to NYSDEC | 75 | 0.8 | Bob's Tire Service | |
| Kacz's Auto Recycling | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 770 Cranes Hollow Road Amsterdam, NY 12010 | David Skaczkowiski | (518)842-7810 | 2015 Annual Report Submitted to NYSDEC | 260 | 2.9 | Bob's Tire Co., Mattapoisette, MA and T. A. Predel & CO | T. A. Predel & Co. is now crushing cars with tires still on (Schenectady County). |
| Altieri's Auto Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler, Repair, Dealer. | 1 Erie Street Amsterdam, NY 12010 | Anthony Altieri | (518)843-4874 | 2015 Annual Report Submitted to NYSDEC | 400 | 4.5 | Bob's Tire, New Bedford, MA | |
| Bill's Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 522 Route 67 Amsterdam, NY 12010 | Steven Miller | (518)842-6050 | 2015 Annual Report Submitted to NYSDEC | 500 | 5.6 | Bob's Tires, location not specified. | |
| Manny's Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 465 Truax Road Amsterdam, NY 12010 | Pat Madej | (518)843-2271 | 2015 Annual Report Submitted to NYSDEC | 50 | 0.6 | Bob's Tire Recycling, location not specified. | |
| **TOTAL** | | | | | | **357,285** | **4,019.4** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Eggers, Caryl & Corrigan, Inc. | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 227 Oriskany St. W Utica, NY 13503 | Peter | (315)797-2630 | Personal Communication, 12/22/2016 | 4,200 | 222.8 | Personal communication indicated tires are currently being sent to a facility in Buffalo, NY (Erie County). | Facility fills a 53' van trailer. Use a licensed carrier to take tires off-site when full. Leave empty trailer in its place. Fill one van trailer per month (approx. 300 tractor trailer tires at 120 lb/tire). They also have passenger tires and light truck tires (approx. 50 tires/month). Some other incidental sizes as well. If Madison County accepts tires for free this supplier is willing to take care of transportation. If Madison County charges for tires, transportation negotiations would be required. |
| Pat's Tire Service, Inc. | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 501 Erie Blvd. W Rome, NY 13440 | Susan | (315)337-4100 | Personal Communication, 12/22/2016 | 4,200 | 68.3 | | Supplier would provide tires to Madison County at no cost. Tractor trailer (one filled/month). Trailer filled with mixed tires (passenger, light truck and tractor trailer). Unclear on quantity in trailer or tire ratio. Assume 350 tires/load. Use Rubber Manufacturer's Association tire weight of 32.5 lb/tire for unknown loads. |
| Abe's Auto | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 777 Route 8 Bridgewater, NY 13313 | Kevin Cornucchia | (315)822-3068 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | Deere Run Farms, St. Johnsville, NY (Montgomery County) | No waste tires sent off-site for recycling, disposal or other. |
| Bill Herrig's Auto Parts & Repair | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 5118 Heel Path Road Rome, NY 13440 | William J Herrig | (315)336-9246 | 2015 Annual Report Submitted to NYSDEC | 400 | 4.5 | Lyen Decker | |
| Boot's Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 7142 Trenton Road Barneveld, NY 13304 | Virginia Santa Maria | (315)527-6109 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Erie Vo-Vo Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 125 Mohawk Street Whitesboro, NY 13492 | Jack Johnson | (315)736-8215 | 2015 Annual Report Submitted to NYSDEC | 378 | 4.3 | Worldwide Tire Distribution (86 Norman Ave, Amityville, NY, Suffolk County) | 2015 Annual Operating Report also indicated they use tires to ship engines and transmissions for protection. |
| Rubicon Recycling Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Auto Recycling. | 7895 Tannery Road Rome, NY 13440 | Richard A. Destito | (315)337-2233 | 2015 Annual Report Submitted to NYSDEC | 2,683 | 30.2 | Union Scrap Processing | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Still Works Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 9751 Route 20 Bridgewater, NY 13313 | Charles J. Ostrosky | (315)822-6793 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not operate in 2015. |
| Tolpa's Automotive Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 10729 French Road Remsen, NY 13438 | William Tolpa | (315)831-3886 | 2015 Annual Report Submitted to NYSDEC | 2,000 | 22.5 | Choice tires | |
| Village Motors Auto Sales LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 8240 State Route 69 Oriskany, NY 13424 | Matthew Shannon | (315)736-5400 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | Bob's Tire (Mattapoisett, MA 02739), Seneca Meadows (Waterloo, NY, Seneca County) and Oneida-Herkimer Solid Waste (Utica, NY, Oneida County) | No waste tires sent off-site for recycling, disposal or other. |
| Vince's U-pull-It | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 8659 Old River Road Marcy, NY 13403 | Vincent R. Surace | (315)768-9265 | 2015 Annual Report Submitted to NYSDEC | 7,000 | 78.8 | Bob's Tire (PO Box 1090 Mattapoisett, MA) | |
| **TOTAL** | | | | | | **20,861** | **431.4** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Rid-O-Vit | NYSDEC Waste Tire Storage Facility. Scrap Tire pickup and recycling. Included on list of 2016 Scrap Tire and Rubber Users Directory provided by Rubber Manufacturer's Association. | P.O. Box 11574 1500 Jamesville Ave, Syracuse, NY 13218 | Joe Pollichemi | (315)475-6602 | Personal Communication, 11/7/16 - Plastics. Tires per 2015 Waste Tire Storage Facility Annual Report | 47,613 passenger tires and 754 truck tires | 582.1 | Approximately 73% of passenger and truck tires go to Seneca Meadows Landfill (Seneca County) and 27% go to Earth First Recycling (Northhampton, PA). Trace amounts (0.2%) off-the road tires go to Liberty Tire (Niagara County). | Operate under NYS DEC Permit #7A-603. Whole tires: 92% are passenger tires (535.64 tons) and 8% are truck (45.21 tons) and off-the road tires (1.28 tons). During personal communication, facility did not disclose tipping fee. Indicated they load their trailers and deliver tires to Seneca Meadows. Interested in an alternative to Seneca Meadows. Would prefer terms with no cost to drop off tires so their costs are limited to transportation. Normalized quantity is the reported tonnage in 2015 Annual Report. Tire quantity was back calculated from this number. Rubber Manufacturer's Association uses 120 pounds/truck tire. Not able to back calculate approximate tire quantity for off the road tires as there is no standard weight used for these tires. |
| Industrial Tire of CNY | NYSDEC Waste Tire Storage Facility | 6500 New Venture Gear Dr., Syracuse, NY 13057 | Martin Beaudette | (315)256-1959 | 2015 Waste Tire Storage Facility Annual Report | 380 passenger tires and 528 truck tires | 38.0 | Armour Environmental (Seneca County) | Whole tires: Approximately 11% are passenger tires (4.27 tons) and 83% are truck tires (31.68 tons). The remainder are off the road tires (2 tons). Normalized quantity is the reported tonnage in 2015 Annual Report. Tire quantity was back calculated from this number. Rubber Manufacturer's Association uses 120 pounds/truck tire. Not able to back calculate approximate tire quantity for off the road tires as there is no standard weight used for these tires. |
| McCarthy (Commercial Truck Tire Retreaders, Inc.) | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 7255 Northern Blvd. East Syracuse, NY 13057-9734 | Dan | (315)452-1818 | Personal communication, 12/22/16 | 9,000 | 146.3 | | McCarthy acquired Commercial Truck Tire Retreaders Inc. Tires are picked up monthly in a 48' or 52' van trailer. Trailer fits approx. 700-800 tires. Tires are a mixture of passenger, light truck and medium truck tires. DG Heavy hauling tows the trailer off-site. Not sure where the tires are sent. Normalized quantity calculated using 32.5 lbs/tire since the ratio of tires is unknown (weight provided by Rubber Manufacturer's Association). |
| Metalico Aluminum Recovery Inc. | Scrap Metal Recycler. Also, NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler | 6225 Thompson Road, Syracuse, NY 13206 | Andy Clemet | (315)414-6493 | Personal Communication, 11/7/16 and 2015 Annual Report Submitted to NYSDEC | 863 | 9.7 | Seneca Meadows Landfill (Seneca County) | Personal communication: Upstate Shredding is one of the largest vehicle shredders in area. Also could try Union Processing in Rochester, NY. That's about it for the area. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| A & P Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler | 8572 Brewerton Road Cicero, NY 13039 | William M. Abold | (315)699-4000 | 2015 Annual Report Submitted to NYSDEC | | | We Care (Weedsport, NY, Cayuga County) transports tires from Syracuse to Seneca Meadows Landfill (Seneca County) | Report does not specify a quantity of tires shipped off-site, but rather indicates "ALL" tires sent off-site. |
| Battle's Garage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler | 7443 Thompson Road Syracuse, NY 13212 | David Battle | (315)452-0253 | 2015 Annual Report Submitted to NYSDEC | 225 | 2.5 | Rid-O-Vit (Onondaga County) | |
| Ben Weitsman and Son of Syracuse LLC (Upstate Shredding) | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 333 Bridge Street Solvay, NY 13209 | James Rothenburg | (315)488-3171 | 2015 Annual Report Submitted to NYSDEC. Personal communication with Missy, 12/2/16. | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. Personal communication confirmed there are no tires available. |
| Benwood Auto Parts Inc | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 7574 Van Buren Road Baldwinsville, NY 13027 | David Fink | (315)638-2556 | 2015 Annual Report Submitted to NYSDEC | 800 | 9.0 | Seneca Meadows, Waterloo, NY (Seneca County) | |
| Bud's Garage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 2805 State Route 174 Marietta, NY 13110 | Albert E. Brantis Jr. | (315)636-7734 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Central Auto Recycling Inc | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1807 Erie Blvd. West Syracuse, NY 13204 | Joseph F. Simon | (315)468-3454 | 2015 Annual Report Submitted to NYSDEC | 784 | 8.8 | Rid-O-Vit (Onondaga County) | |
| D. Meyer's Assoc. Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle Collector. | 3314 Cessna Drive Warners, NY 13164 | Daniel B. Meyer | (315)487-1102 | 2015 Annual Report Submitted to NYSDEC | 500 | 5.6 | Seneca Meadows, Waterloo, NY (Seneca County) | |
| F & B Recycling | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 2138 Casehill Road Lafayette, NY 13084 | Frederick D. Powers III | (315)382-7781 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Hiawatha Used Cars Inc & Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1006 North State Street Syracuse, NY 13208 | Mike Mauro Sr. | (315)471-4542 | 2015 Annual Report Submitted to NYSDEC | 86 | 1.0 | Upstate Shredding (Onondaga County) | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Horner's Automotive New & Used Parts & Repair | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1562 Lamson Road Phoenix, NY 13135 | James Horner | (315)447-3249 | 2015 Annual Report Submitted to NYSDEC | 200 | 2.3 | Armour Environmental, Waterloo, NY (Seneca County) | |
| Pascarella's Towing Service LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle Collector. | 1504 Burnet Avenue Syracuse, NY 13206 | Gaspare Pascarella | (315)478-7770 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. Tires go with car. Decommissioned end of life vehicles were sent to Weitsman and Sons and Metallico. |
| R G Hence & Sons Garage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 5491 N. Manlius Street Fayetteville, NY 13066 | David & Gary Hence | (315)637-1544 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Reginald Palmer | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle Collector. | 3215 Ruby Road Warners, NY 13164 | Reginald Palmer | (315)484-3331 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| U-Pull U-Save Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 7030 Myers Road East Syracuse, NY 13057 | Dan Abold | (315)656-7533 | 2015 Annual Report Submitted to NYSDEC | 6,000 | 67.5 | We Care waste removal - dumpster by the ton | |
| TNT Towing Service | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle | 200 East Florence Avenue Syracuse, NY 13205 | Roger D Henson | (315)469-0800 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| Valley Towing | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle | 715 Valley Drive Syracuse, NY 13207 | Martin Ellis | (315)254-3838 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| W. D. Henson Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 210 E Florence Avenue Syracuse, NY 13205 | Waymon D Henson | (315)492-9200 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| Big D's Auto | NYSDEC List for Vehicle Dismantling Facilities. | 321 Leavenworth Ave Syracuse, NY 13204 | Dave Ibrahim | (315)374-1620 | 2015 Annual Report not available. | | | | |
| George Mageean Used Cars | NYSDEC List for Vehicle Dismantling Facilities. | 7858 Northern Blvd. East Syracuse, NY 13057 | George Mageean | (315)458-3116 | 2015 Annual Report not available. | | | | |
| Paddock's - Coast Transportation & Recycling | NYSDEC List for Vehicle Dismantling Facilities. | 15 Dippold Avenue Syracuse, NY 13208 | Mike Jones | (315)299-7765 | 2015 Annual Report not available. | | | | |
| Roth Steel Corp | NYSDEC List for Vehicle Dismantling Facilities. | 800 W. Hiawatha Blvd., P O Box 1354 Syracuse, NY 13201 | James M. Hunihan | (315)475-8431 | 2015 Annual Report not available. | | | | This facility is closed. |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Timothy D Thorpe | NYSDEC List for Vehicle Dismantling Facilities. | 2021 Route 11 Lafayette, NY 13084 | Timothy D. Thorpe | (315)569-3824 | 2015 Annual Report not available. | | | | |
| TOTAL | | | | | | 67,733 | 872.8 | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| #1 Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 2130 Route 14N Geneva, NY 14456 | John P. Sebastian | (800)247-9253 | 2015 Annual Report Submitted to NYSDEC | 2,600 | 29.3 | Seneca Meadows Landfill (Waterloo, NY, Seneca County) | |
| Canadice Automotive Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 8982 Richmond Mills Road Livonia, NY 14487 | John G. O'Connor | (585)229-5301 | 2015 Annual Report Submitted to NYSDEC | 60 | 0.7 | Seneca Meadows Landfill (Waterloo, NY, Seneca County) | |
| Davis Auto Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 7534 Tilton Road Bloomfield, NY 14469 | Robert Davis | (585)657-3202 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| J & J Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1317 Country Road 7 Clifton Springs, NY 14432 | Joe Sebastian | (585)289-9803 | 2015 Annual Report Submitted to NYSDEC | 1,200 | 13.5 | Seneca Meadows Landfill (Waterloo, NY, Seneca County) | |
| A & L Scrap Processor | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 7601 Tilton Road Bloomfield, NY 14469 | Stanley Sutton | (585)229-2081 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015 |
| Chappell's Auto Recycling | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Processor. | 4630 County Road 46 Canandaigua, NY 14424 | Martin Chappell | (585)764-7811 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015 |
| Feltz Sales & Service | NYSDEC List for Vehicle Dismantling Facilities. | 2402 Route 245 Stanley, NY 14561 | Carey M. VanGelder | (585)526-6346 | 2015 Annual Report not available. | | | | |
| Fox Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 4462 County Road 1 Canandaigua, NY 14424 | Thomas Fox | (585)394-2910 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **3,860** | **43.5** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| A & D Auto Recycling and Sales LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 40 US Route 11 Central Square, NY 13036 | Aimen Wady | (315)676-4445 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Copart Inc., Syracuse Yard | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler, Dealer, Salvage Parts. | 46 Zuk-Pierce Rd Central Square, NY 13036 | Anthony Apicello | (315)676-7153 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | Facility did not process or store any end of life vehicles during 2015. |
| DT Auto 2 | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 1362 US Route 11 Hastings, NY 13076 | Mark Tyrell | (315)676-7367 | 2015 Annual Report Submitted to NYSDEC | 4,500 | 50.6 | Oswego County Solid Waste | |
| Fulton Auto Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 277 Honey Hill Road Fulton, NY 13069 | Steve Woodworth | (315)592-5559 | 2015 Annual Report Submitted to NYSDEC | 912 | 10.3 | Oswego County Solid Waste | |
| Goldwing Saab Parts, Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | P O Box 315, 2008 Route 11 Hastings, NY 13076 | Eric Stooks | (315)374-7761 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Hardy's Auto Parts LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1159 County Route 17 Bernhards Bay, NY 13028 | Jay Isabelle | (315)675-3006 | 2015 Annual Report Submitted to NYSDEC | 1,256 | 14.1 | Oswego County Landfill | |
| PM Mobile Service Co Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 944 U S Route 11 Central Square, NY 13036 | Mark Hamm | (315)668-7565 | 2015 Annual Report Submitted to NYSDEC | 400 | 4.5 | Oswego County Hastings Transfer Station and Tire Recyclers Inc. (2112 Erie Blvd East) | |
| R F Koskowski Automotive Sales | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 857 Hannibal Street Fulton, NY 13069 | Ronald F. Koskowski | (315)593-6310 | 2015 Annual Report Submitted to NYSDEC | 60 | 0.7 | Oswego County Energy Recovery (2801 State Route 481 Fulton, NY 13069) | |
| Parker's Towing | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 4749 Salina Street Pulaski, NY 13142 | Craig Parker | (315)298-6765 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| Tylers LLC | NYSDEC List for Vehicle Dismantling Facilities. | 30 North Street Cleveland, NY 13042 | Richard Tyler | (315)675-8833 | 2015 Annual Report not available. | | | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Burton's Junkyard/ Burton Truck & Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. | 645 County Route 35 Fulton, NY 13069 | Valentine Burton | (315)447-5634 | 2015 Annual Report not available. | | | | |
| Central City Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 100 Breckheimer Road Central Square, NY 13036 | Patrick Marra | (315)668-3533 | 2015 Annual Report not available. | | | | |
| Crosby Hill Auto Recycling | NYSDEC List for Vehicle Dismantling Facilities. | 180 Flood Drive Fulton, NY 13069 | Gail Murtaugh | (315)592-4251 | 2015 Annual Report not available. | | | | |
| Flood Drive Properties | NYSDEC List for Vehicle Dismantling Facilities. | 174 Flood Drive Fulton, NY 13069 | Rich Murtaugh | (315)592-4807 | 2015 Annual Report not available. | | | | |
| Fred's Used Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. | 2541 County Route 7 Oswego, NY 13126 | Frederick E. Knopp Jr. | (315)343-2064 | 2015 Annual Report not available. | | | | |
| Phillip Gordon & Sons Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 89 East 12th Street Oswego, NY 13126 | Phillip Gordon | (315)343-2120 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **7,128** | **80.2** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Otsego Auto Crushers, LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler - Mobile Crusher. Scrap Collector/Dealer - Itinerant Vehicle Collector. | 6071 State Highway 23, Oneonta, NY 13820 (Annual Report indicates Delaware County) | Wayne Hymers | (607)432-2375 | Personal communication, 12/2/16. 2015 Annual Report Submitted to NYSDEC. | 11,430 | 128.6 | Seneca Meadows (Seneca County) and Upstate Shredding (location not specified) | |
| Roadway of Oneonta, LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 139 Timer Road Oneonta, NY 13820 | Gwen Stage | (607)432-0014 | 2015 Annual Report Submitted to NYSDEC | 372 | 4.2 | Bob's Tire Co., Mattapoisette, MA | |
| Wahl To Wahl Auto | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 568 State Highway 166, Cooperstown, NY 13326 | Anthony Wahl | (607)286-7322 | 2015 Annual Report Submitted to NYSDEC | 1,000 | 11.3 | Otsego Auto Crushers (Otsego County) | |
| Bancroft Enterprises | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Processor. | 2647 Co Hwy 16 Burlington Flats, NY 13315 | Jason Bancroft | (607)965-8158 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| French's Garage & Used Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 762 County Highway 1 Mount Upton, NY 13809 | Harry French | (607)563-1387 | 2015 Annual Report Submitted to NYSDEC | 550 | 6.2 | Barn's Farm (neighbor farmer uses for farm, Mt. Upton, NY) | |
| **TOTAL** | | | | | | **13,352** | **150.3** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| McCarthy Tire | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 942 Main Street Cobleskill, NY 12043 | Paul | (518)234-3586 | Personal Communication, 12/22/16 | 31,460 | 3,003.0 | | Accept all tire varieties from wheel barrow sized to large off-the-road (OTR) quarry tires. Approx. 90% of tires managed are tractor trailer tires. The facility fills two 53' van trailers per week. Each trailer holds approx. 250 to 300 tires (mostly tractor trailer tires). Assume 120 lb/tire. The other 10% of tires managed at this facility are OTR tires (typically between 500-1,300 lbs/tire). The OTR Tires are sent out separately on a flat bed and taken by a different company than the tractor trailer tires. Madison County would have to provide a trailer the facility can fill. The facility would provide the tires at no cost. |
| Philip R. Skowfoe Jr. & Sons | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 126 Chapman Road Fultonham, NY 12071 | Phil Skowfoe | (518)827-4896 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Coach Workes of Schoharie County | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | Schoharie, NY 12157 | George Hoffman | (518)390.1181 | 2015 Annual Report Submitted to NYSDEC | 1,000 | 11.3 | World Wide Tire | |
| Bill's Auto & Commercial Towing Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 1448 State Route 145 Middleburgh, NY 12122 | William M Smith Jr. | (518)827-8007 | 2015 Annual Report Submitted to NYSDEC | | | | Did not operate in 2015. Inactive facility. |
| A & S Garage | NYSDEC List for Vehicle Dismantling Facilities. | 4894 State Route 30 Schoharie, NY 12157 | William Armlin IV | (518)295-8823 | 2015 Annual Report not available. | | | | |
| Hollenbeck Bros Auto Salvage | NYSDEC List for Vehicle Dismantling Facilities. | PO Box 16 Route 30A Sloanville, NY 12160 | Not available | Not available | 2015 Annual Report not available. | | | | |
| The Parts Department | NYSDEC List for Vehicle Dismantling Facilities. | 242 Leroy Road, PO Box 248 Gilboa, NY 12076 | George Kelmetis | (607)588-8802 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **32,460** | **3,014.3** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Parmenter, Inc. | Listed in the NY Retreaders Directory provided by the Tire Retread & Repair Information Bureau (Dec. 2016) | 103 Railroad Street Odessa, NY 14869 | Joyce | (607)594-7106 | Personal communication, 12/22/16 | 8,400 | 401.6 | | Have 6 locations throughout New York State (Batavia, Geneva, Odessa, Cortland, Horseheads, Montour Falls). Currently sending tires to HighTread (Buffalo, NY area). Have a range of tires from passenger tires to off-the-road tires. Each location fills a 53' van trailer/month. Approx. 75% of the tires are tractor trailer tires, the other 25% are passenger and light truck tires. Supplier is willing to load trucks based on what Madison County is able to accept. Assume 1,000 passenger tires/trailer and 500 tractor trailer tires/load. Most loads are mixed. For quantities used here, assumed 350 mixed tires/month. Number of waste tires and normalized quantity are for two locations in Schuyler County (Odessa and Montour Falls). Also See Cortland County and Chemung Counties. |
| D & L Auto Sales | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1804 County Road 19 Beaver Dams, NY 14812 | Douglas Bierwiler | (607)962-0488 | 2015 Annual Report Submitted to NYSDEC | NA | NA | Pick-A-Part (Horseheads, NY, Chemung County) | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Druker Auto Sales | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1282 Glenn Road Dundee (mailing), NY 14837 | Robert Druker | (607)243-8433 | 2015 Annual Report Submitted to NYSDEC | 400 | 4.5 | Cardinal Disposal (635 Shannon Corners Rd, Dundee, NY 14837, Yates County) | Annual report indicates this facility cuts up the tires to be sent off-site and puts them in a dumpster. |
| Jaynes Used Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 4111 Rte 14A Reading Center, NY 14876 | John N. Payne | (607)535-2883 | 2015 Annual Report Submitted to NYSDEC | 343 | 3.9 | Clayride Trucking (tire disposal). | |
| Southern Tier Auto Recycling | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 1225 Coon Hollow Road Beaver Dams, NY 14812 | James Clark | (607)962-7995 | 2015 Annual Report Submitted to NYSDEC | 855 | 9.6 | Upstate Shredding (1 Circle Dr., Owego, NY 13827, Tioga County) and Seneca Meadows Landfill (Seneca County) | |
| Swarthout Recycling | NYSDEC List for Registered C&D Processing. Also, NYSDEC List for Vehicle Dismantling Facilities. | 1514 County Road 19, Beaver Dams, NY 14812 | Brian Swarthout | (607)936-0013 | 2015 C&D Annual Report submitted to NYSDEC. 2015 Annual Report for Vehicle Dismantling Facilities not available. | | | | |
| **TOTAL** | | | | | | **9,998** | **419.6** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Seneca Meadows Landfill | Included on list of 2016 Scrap Tire and Rubber Users Directory provided by Rubber Manufacturer's Association. | 1786 Salcman Road, Waterloo, NY 13165 | Brendan Pilawski | (585)261-8913 | Personal communication, 11/7/16 and 12/13/16 | 1,500 | 90.0 | | Receive large volumes of tires from surrounding area. Passenger and light truck tires are shred on-site (4" minus and 2" minus pieces) and used as interlay in landfill. They also receive commercial truck tires (120 pounds/tire) and are not able to beneficially reuse them. Looking for an alternative disposal for these tires. Number of tires listed is an estimate of commercial truck tires. Madison County would have to arrange for transportation of these tires to their facility. |
| Champion's Scrap Metals | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Mobile Crusher. | 2081 County Road 137 Hector, NY 14841 | Ralph Champion Sr. | (607)582-6485 | 2015 Annual Report Submitted to NYSDEC | 1,333 | 15.0 | Seneca Meadows Landfill (Waterloo, NY) | Normalized quantity is the reported tonnage in 2015 Annual Report. Tire quantity was back calculated from this number. |
| Mitchell Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Vehicle Dismantler. | 4288 Route 96 South Waterloo, NY 13165 | Walter A. Mitchell | (315)585-2200 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| S & S Cycle | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 2172 Route 5 & 20 Seneca Falls, NY 13148 | John Studwell | (315)952-7632 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| Trout Enterprises Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 2410 Edwards Rd Waterloo, NY 13165 | Joshua Trout | (315)789-5742 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **2,833** | **105.0** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Upstate Shredding (Ben Weitsman) | Scrap metal company, Vehicle Shredder | 1 Recycle Drive, Tioga Industrial Park, Owego, NY 13827 | Steve Green | (607)687-7777 | Personal communication, 11/7/16. Sent follow up email requesting specific information 11/7/16 (no response received). Spoke again 12/2/16 and sent follow up email 12/2/16 (no resonse received). | 0 | 0.0 | | Whole tires are not available. Tires would exist as auto fluff and include ground tires, plastic, dirt, glass, seat cushions, etc. |
| Middendorf Auto Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 770 Spaulding Hill Road Owego, NY 13827 | Anthony Middendorf | (607)222-5472 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Richard J Cassidy Inc/DBA Interstate Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. | 3158 Route 17C, P O Box 245 Tioga Center, NY 13845 | George Swansbrough | (607)687-4100 | 2015 Annual Report not available. | | | | |
| Weitsman Recycling LLC - Owego Division | NYSDEC List for Vehicle Dismantling Facilities. | 15 West Main Street, P O Box 420 Owego, NY 13827 | Bill Dizer | (607)687-2780 | 2015 Annual Report not available. | | | | |
| Williams Auto Salvage | NYSDEC List for Vehicle Dismantling Facilities. | 161 Tinkham Road Waverly, NY 14892 | Edward Williams Jr. | (607)565-4432 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **0** | **0.0** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| Auto Salvage of Ithaca Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 129 Hornbrook Road Ithaca, NY 14850 | Joseph Petricola | (607)272-8061 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Ben Weitsman of Ithaca | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 105 Cherry Street Ithaca, NY 14850 | Zachary Meislohn | (607)273-1222 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Danby Motors | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1675 Danby Road Ithaca, NY 14850 | Rick Dobson | (607)273-8049 | 2015 Annual Report Submitted to NYSDEC | NA | NA | Weitsman | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Perry City Automotive | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler, Repair, U/C Dealer. | 6211 Brook Road Trumansburg, NY 14886 | Joseph J Allen | (607)387-5892 | 2015 Annual Report Submitted to NYSDEC | 0 | 0.0 | | No waste tires sent off-site for recycling, disposal or other. |
| Summer Hill Auto Salvage | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | RD2 956 Salt Road Groton, NY 13073 | Floyd Kyes | (607)898-5292 | 2015 Annual Report Submitted to NYSDEC | NA | NA | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Teets & Sons Scrap Metal Recycling - Groton | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 954 Salt Rd Groton, NY 13073 | Rich Teeter Jr. | (607)893-3800 | 2015 Annual Report Submitted to NYSDEC | 3,000 | 33.8 | | |
| Teets & Sons Scrap Metal Recycling - Newfield | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap Processor. | 738 Black Oak Road Newfield, NY 14867 | Richard Teeter Jr. | (607)272-1908 | 2015 Annual Report Submitted to NYSDEC | 560 | 6.3 | Seneca Meadows, (Waterloo, NY, Seneca County) | |
| CAS Salvage (formerly Country Auto Sales) | NYSDEC List for Vehicle Dismantling Facilities. | 1031 Cobb Street Groton, NY 13073 | Susan Harrison/Sean O'Connor | (607)898-3517 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **3,560** | **40.1** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| A & P Auto Parts of Rochester | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 2384 Creek Road Palmyra, NY 14522 | William Abold | (315)598-9800 | 2015 Annual Report Submitted to NYSDEC | | | We Care (Cayuga County). | Report states "ALL" tires were shipped off-site for recycling, disposal or other. |
| Featherly's Garage LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Itinerant Vehicle Collector. | 8333 Ridge Road Sodus, NY 14551 | Alan Young | (315)483-9627 | 2015 Annual Report Submitted to NYSDEC | | | | Facility not required to complete the "Waste Tires Collected" Section on the 2015 Annual Report because facility received 25 or fewer ELVs during the year and did not have 50 or more ELVs on-site at any one time. |
| Mack's Body Shop Inc. | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 37 Forgham Street Lyons, NY 14489 | Gary Shumway | (315)946-4691 | 2015 Annual Report Submitted to NYSDEC | 70 | 0.8 | K&D Disposal | 2015 Annual Report indicated 60-80 tires were shipped off-site for recycling, disposal or other. Normalized quantity calculated assuming 70 tires. |
| Ontario Truck Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler and Dealer. | 1075 Route 104 Ontario, NY 14519 | Stephen Ross | (585)454-1800 | 2015 Annual Report Submitted to NYSDEC | 500 | 8.1 | Modern Tire (Buffalo, NY, Erie County) | 2015 Annual Report indicated a truckload was shipped off-site for recycling, disposal or other. Normalized quantity calculated assuming each load contains mixed tires (32.5 lb/tire) and truck can haul 500 tires. |
| Wilbert's Lakeside DBA Andy's Auto Parts | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 6333 Lakeside Road Ontario, NY 14519 | Richard Wilbert | (315)524-8800 | 2015 Annual Report Submitted to NYSDEC | 2,200 | 24.8 | Empire Wrecking and Modern Corporation (Model City, NY 14107, Niagara County) | |
| Wilbert's U-Pull-It | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 4936 Route 104 East Williamson, NY 14519 | Ronald Wilbert | (315)589-2222 | 2015 Annual Report Submitted to NYSDEC | 2,000 | 22.5 | Empire Wrecking and Seneca Meadows | |
| Plain Truck and Auto Parts LLC | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Not specified. | 6138 Boyd Road Sodus, NY 14551 | John Plain | (315)483-1680 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| Juliano's Auto Parts Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 4735 Route 14 Sodus, NY 14551 | Philip S. Juliano Sr. | (315)483-4607 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **4,770** | **56.2** | | |

| SUPPLIER NAME | BUSINESS SCOPE | SUPPLIER ADDRESS | SUPPLIER CONTACT NAME | SUPPLIER PHONE NUMBER | SOURCE | NUMBER OF WASTE TIRES [1] | NORMALIZED QUANTITY (TONS/YEAR) [2] | FACILITY ACCEPTING WASTE TIRES [3] | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| B&B Recycling | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Scrap processor/collector. | 3898 Tinney Road Penn Yan, NY 14527 | Richard Igram | (315)536-6855 | 2015 Annual Report Submitted to NYSDEC | 4,500 | 50.6 | Seneca Meadows Landfill, Upstate Shredding, Union Processing, and Nucor Steel. | Note: The 2015 Annual Operating Report for Nucor Steel Auburn (Cayuga County) indicated they received 48 tons from B&B Recycling. So the normalized quantity shown here (calculated from B&B Recycling's Annual Operating Report) is consistent with the Nucor Steel quantity received. |
| Daryl's Garage & Body Shop | NYSDEC List for Vehicle Dismantling Facilities. Registration Type: Dismantler. | 1026 Hopeton Road Torrey, NY 14441 | Daryl A. Daggett | (315)536-9313 | 2015 Annual Report Submitted to NYSDEC | | | | Facility did not operate in 2015. |
| Carrier Salvage & Recycling Inc. | NYSDEC List for Vehicle Dismantling Facilities. | 2440 Wetmore Road Branchport, NY 14418 | Shelley Carrier | (315)564-6800 | 2015 Annual Report not available. | | | | |
| Metal Recovery LLC | NYSDEC List for Vehicle Dismantling Facilities. | 1680 Flat Street Penn Yan, NY 14527 | Ross Newcomb | (315)536-6194 | 2015 Annual Report not available. | | | | |
| **TOTAL** | | | | | | **4,500** | **50.6** | | |

# APPENDIX C

# COUNTY FACT SHEETS

Notes for County Fact Sheets:

1. Quantity of tires is calculated from estimated/reported tire tonnages. Tire quantities are approximate and vary slightly due to rounding in the equations.

Acronyms:

MSW: Municipal Solid Waste

C&D: Construction and Demolition

PTO: Plastics-to-oil

RHRF: Recyclables Handling Recovery Facility

# Broome County

## County Overview

| | | |
|---|---|---|
| Population (2015): | 196,567 | |
| Households (2015): | 89,640 | |
| One-way Distance to Madison Co. | 68.4 | miles |
| Disposed MSW | 158,081 | tons |
| *Local MSW Tip Fee* | *$45.00* | *per ton* |
| Disposed C&D | 18,871 | tons |
| *Local C&D Tip Fee* | *$45.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 2,211 | tons |
| | 196,567 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$155.00* | *per ton* |

## Targeted Materials

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 16,599 | N/A |
| Waste Plastics in C&D | 226 | N/A |
| Waste Plastics - Industrial Sources | 426 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 25 | N/A |
| Waste Plastics - RHRF Residuals | 515 | N/A |
| **Subtotal Waste Plastics** | **17,791** | **N/A** |
| Waste Tires Reported by Planning Units | 63.3 | 5,627 |
| Waste Tires Reported by Facilities | 270.3 | 24,024 |

## Handling and Transportation Cost

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $19.94 |
| Plastics | Roll-off | $53.19 |
| Whole Tires | Trailer | $27.89 |
| Whole Tires | Box Truck | $188.39 |

## Projected Disposal Fee at PTO Plant

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $25.06 |
| Plastics | Roll-off | ($8.19) |
| Whole Tires | Trailer | $74.33 |
| Whole Tires | Milk Run | ($86.17) |

# Cayuga County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 78,288 | |
| Households (2015): | 36,451 | |
| One-way Distance to Madison Co. | 60.0 | miles |
| Disposed MSW | 43,741 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 10,206 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 881 | tons |
| | 78,288 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 4,593 | N/A |
| Waste Plastics in C&D | 122 | N/A |
| Waste Plastics - Industrial Sources | 2 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 172 | N/A |
| Waste Plastics - RHRF Residuals | 198 | N/A |
| **Subtotal Waste Plastics** | **5,087** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 27.0 | 2,400 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $18.79 |
| Plastics | Roll-off | $46.66 |
| Whole Tires | Trailer | $24.45 |
| Whole Tires | Box Truck | $183.68 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $43.90 |
| Plastics | Roll-off | $16.03 |
| Whole Tires | Trailer | $77.77 |
| Whole Tires | Milk Run | ($81.46) |

# Chemung County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 87,071 | |
| Households (2015): | 38,340 | |
| One-way Distance to Madison Co. | 98.3 | miles |
| Disposed MSW | 8,902 | tons |
| *Local MSW Tip Fee* | *$44.00* | *per ton* |
| Disposed C&D | 870 | tons |
| *Local C&D Tip Fee* | *$52.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 980 | tons |
| | 87,071 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$250.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 935 | N/A |
| Waste Plastics in C&D | 10 | N/A |
| Waste Plastics - Industrial Sources | 47 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 10 | N/A |
| Waste Plastics - RHRF Residuals | 230 | N/A |
| **Subtotal Waste Plastics** | **1,232** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 330.1 | 8,183 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $24.02 |
| Plastics | Roll-off | $76.44 |
| Whole Tires | Trailer | $40.19 |
| Whole Tires | Box Truck | $172.88 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $19.98 |
| Plastics | Roll-off | ($32.44) |
| Whole Tires | Trailer | $62.03 |
| Whole Tires | Milk Run | ($70.66) |

# Chenango County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 48,844 | |
| Households (2015): | 24,905 | |
| One-way Distance to Madison Co. | 44.3 | miles |
| Disposed MSW | 24,145 | tons |
| *Local MSW Tip Fee* | *$58.00* | *per ton* |
| Disposed C&D | 1,189 | tons |
| *Local C&D Tip Fee* | *$58.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 549 | tons |
| | 48,844 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 2,535 | N/A |
| Waste Plastics in C&D | 14 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 61 | N/A |
| Waste Plastics - RHRF Residuals | 2 | N/A |
| **Subtotal Waste Plastics** | **2,612** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 49.2 | 4,374 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $16.65 |
| Plastics | Roll-off | $34.45 |
| Whole Tires | Trailer | $18.17 |
| Whole Tires | Box Truck | $146.95 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $41.35 |
| Plastics | Roll-off | $23.55 |
| Whole Tires | Trailer | $84.05 |
| Whole Tires | Milk Run | ($44.73) |

# Cortland County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 48,494 | |
| Households (2015): | 20,503 | |
| One-way Distance to Madison Co. | 42.5 | miles |
| Disposed MSW | 15,948 | tons |
| *Local MSW Tip Fee* | *$60.00* | *per ton* |
| Disposed C&D | 7,916 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 546 | tons |
| | 48,494 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 1,675 | N/A |
| Waste Plastics in C&D | 95 | N/A |
| Waste Plastics - Industrial Sources | 300 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 52 | N/A |
| Waste Plastics - RHRF Residuals | 123 | N/A |
| **Subtotal Waste Plastics** | **2,245** | **N/A** |
| Waste Tires Reported by Planning Units | 52.0 | 4,622 |
| Waste Tires Reported by Facilities | 200.8 | 4,200 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $16.41 |
| Plastics | Roll-off | $33.05 |
| Whole Tires | Trailer | $17.33 |
| Whole Tires | Box Truck | $146.95 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $43.59 |
| Plastics | Roll-off | $26.95 |
| Whole Tires | Trailer | $84.89 |
| Whole Tires | Milk Run | ($44.73) |

# Delaware County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 46,053 | |
| Households (2015): | 31,178 | |
| One-way Distance to Madison Co. | 90.8 | miles |
| Disposed MSW | 13,048 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 5,542 | tons |
| *Local C&D Tip Fee* | *$87.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 518 | tons |
| | 46,053 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$0.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 1,370 | N/A |
| Waste Plastics in C&D | 67 | N/A |
| Waste Plastics - Industrial Sources | 6 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 43 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **1,486** | **N/A** |
| Waste Tires Reported by Planning Units | 436.4 | 38,791 |
| Waste Tires Reported by Facilities | 5.0 | 445 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $22.99 |
| Plastics | Roll-off | $70.61 |
| Whole Tires | Trailer | $37.43 |
| Whole Tires | Box Truck | $163.27 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $39.70 |
| Plastics | Roll-off | ($7.92) |
| Whole Tires | Trailer | $64.79 |
| Whole Tires | Milk Run | ($61.05) |

# Fulton County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 53,992 | |
| Households (2015): | 28,656 | |
| One-way Distance to Madison Co. | 87.9 | miles |
| Disposed MSW | 20,418 | tons |
| *Local MSW Tip Fee* | *$55.00* | *per ton* |
| Disposed C&D | 8,411 | tons |
| *Local C&D Tip Fee* | *$55.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 607 | tons |
| | 53,992 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$250.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 2,144 | N/A |
| Waste Plastics in C&D | 101 | N/A |
| Waste Plastics - Industrial Sources | 726 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 8 | N/A |
| Waste Plastics - RHRF Residuals | 77 | N/A |
| **Subtotal Waste Plastics** | **3,056** | **N/A** |
| Waste Tires Reported by Planning Units | 15.0 | 1,333 |
| Waste Tires Reported by Facilities | 9.9 | 879 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $22.60 |
| Plastics | Roll-off | $68.35 |
| Whole Tires | Trailer | $36.06 |
| Whole Tires | Box Truck | $133.59 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $32.40 |
| Plastics | Roll-off | ($13.35) |
| Whole Tires | Trailer | $66.16 |
| Whole Tires | Milk Run | ($31.37) |

# Hamilton County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 4,712 | |
| Households (2015): | 8,777 | |
| One-way Distance to Madison Co. | 91.4 | miles |
| Disposed MSW | 5,891 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D (Included in Disposed MSW) | 0 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 53 | tons |
| | 4,712 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 619 | N/A |
| Waste Plastics in C&D | 0 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 0 | N/A |
| Waste Plastics - RHRF Residuals | 11 | N/A |
| **Subtotal Waste Plastics** | **630** | **N/A** |
| Waste Tires Reported by Planning Units | 50.0 | 4,444 |
| Waste Tires Reported by Facilities | 0 | 0 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $23.08 |
| Plastics | Roll-off | $71.07 |
| Whole Tires | Trailer | $40.92 |
| Whole Tires | Box Truck | $180.86 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $39.61 |
| Plastics | Roll-off | ($8.38) |
| Whole Tires | Trailer | $61.30 |
| Whole Tires | Milk Run | ($78.64) |

# Herkimer County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 63,100 | |
| Households (2015): | 33,323 | |
| One-way Distance to Madison Co. | 64.3 | miles |
| Disposed MSW | 40,192 | tons |
| *Local MSW Tip Fee* | *$66.00* | *per ton* |
| Disposed C&D | 11,910 | tons |
| *Local C&D Tip Fee* | *$58.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 710 | tons |
| | 63,100 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$190.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 4,220 | N/A |
| Waste Plastics in C&D | 143 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 66 | N/A |
| Waste Plastics - RHRF Residuals | 1 | N/A |
| **Subtotal Waste Plastics** | **4,430** | **N/A** |
| Waste Tires Reported by Planning Units | 199.6 | 17,742 |
| Waste Tires Reported by Facilities | 5.9 | 520 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $19.38 |
| Plastics | Roll-off | $50.00 |
| Whole Tires | Trailer | $26.33 |
| Whole Tires | Box Truck | $226.07 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $46.62 |
| Plastics | Roll-off | $16.00 |
| Whole Tires | Trailer | $75.89 |
| Whole Tires | Milk Run | ($123.85) |

# Jefferson County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 117,635 | |
| Households (2015): | 59,123 | |
| One-way Distance to Madison Co. | 93.8 | miles |
| Disposed MSW | 70,918 | tons |
| *Local MSW Tip Fee* | *$46.00* | *per ton* |
| Disposed C&D | 31,626 | tons |
| *Local C&D Tip Fee* | *$46.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 1,323 | tons |
| | 117,635 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 7,446 | N/A |
| Waste Plastics in C&D | 380 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 142 | N/A |
| Waste Plastics - RHRF Residuals | 68 | N/A |
| **Subtotal Waste Plastics** | **8,036** | **N/A** |
| Waste Tires Reported by Planning Units | 598.4 | 53,191 |
| Waste Tires Reported by Facilities | 498.8 | 28,239 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $23.40 |
| Plastics | Roll-off | $72.94 |
| Whole Tires | Trailer | $38.26 |
| Whole Tires | Box Truck | $183.68 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $22.60 |
| Plastics | Roll-off | ($26.94) |
| Whole Tires | Trailer | $63.96 |
| Whole Tires | Milk Run | ($81.46) |

# Lewis County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 26,957 | |
| Households (2015): | 15,314 | |
| One-way Distance to Madison Co. | 74.7 | miles |
| Disposed MSW | 18,355 | tons |
| *Local MSW Tip Fee* | *$46.00* | *per ton* |
| Disposed C&D | 8,186 | tons |
| *Local C&D Tip Fee* | *$46.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 303 | tons |
| | 26,957 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 1,927 | N/A |
| Waste Plastics in C&D | 98 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 136 | N/A |
| Waste Plastics - RHRF Residuals | 8 | N/A |
| **Subtotal Waste Plastics** | **2,169** | **N/A** |
| Waste Tires Reported by Planning Units | 137.2 | 12,196 |
| Waste Tires Reported by Facilities | 29.0 | 2,570 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $20.80 |
| Plastics | Roll-off | $58.09 |
| Whole Tires | Trailer | $30.69 |
| Whole Tires | Box Truck | $293.89 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $25.20 |
| Plastics | Roll-off | ($12.09) |
| Whole Tires | Trailer | $71.53 |
| Whole Tires | Milk Run | ($191.67) |

# Madison County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 71,849 | |
| Households (2015): | 31,761 | |
| One-way Distance to Madison Co. | 0.0 | miles |
| Disposed MSW | 37,490 | tons |
| *Local MSW Tip Fee* | *$72.00* | *per ton* |
| Disposed C&D | 8,753 | tons |
| *Local C&D Tip Fee* | *$72.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 808 | tons |
| | 71,849 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$125.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 3,936 | N/A |
| Waste Plastics in C&D | 105 | N/A |
| Waste Plastics - Industrial Sources | 196 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 101 | N/A |
| Waste Plastics - RHRF Residuals | 92 | N/A |
| **Subtotal Waste Plastics** | **4,430** | **N/A** |
| Waste Tires Reported by Planning Units | 236.2 | 20,996 |
| Waste Tires Reported by Facilities | 182.4 | 16,207 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $11.97 |
| Plastics | Roll-off | $7.78 |
| Whole Tires | Trailer | $4.07 |
| Whole Tires | Box Truck | $209.92 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $60.03 |
| Plastics | Roll-off | $64.22 |
| Whole Tires | Trailer | $98.15 |
| Whole Tires | Milk Run | ($107.70) |

# Montgomery County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 49,642 | |
| Households (2015): | 23,188 | |
| One-way Distance to Madison Co. | 85.0 | miles |
| Disposed MSW | 34,270 | tons |
| *Local MSW Tip Fee* | *$72.50* | *per ton* |
| Disposed C&D | 11,104 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 558 | tons |
| | 49,642 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$250.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 3,598 | N/A |
| Waste Plastics in C&D | 133 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 68 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **3,799** | **N/A** |
| Waste Tires Reported by Planning Units | 105.0 | 9,333 |
| Waste Tires Reported by Facilities | 4,019.4 | 357,285 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $22.20 |
| Plastics | Roll-off | $66.10 |
| Whole Tires | Trailer | $34.76 |
| Whole Tires | Box Truck | $146.95 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $50.30 |
| Plastics | Roll-off | $6.40 |
| Whole Tires | Trailer | $67.46 |
| Whole Tires | Milk Run | ($44.73) |

# Oneida County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 232,500 | |
| Households (2015): | 103,861 | |
| One-way Distance to Madison Co. | 32.3 | miles |
| Disposed MSW | 125,206 | tons |
| *Local MSW Tip Fee* | *$66.00* | *per ton* |
| Disposed C&D | 37,104 | tons |
| *Local C&D Tip Fee* | *$58.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 2,616 | tons |
| | 232,500 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$190.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 13,147 | N/A |
| Waste Plastics in C&D | 445 | N/A |
| Waste Plastics - Industrial Sources | 5 | N/A |
| Waste Plastics – Agricultural (theoretical est.) | 81 | N/A |
| Waste Plastics - RHRF Residuals | 2,468 | N/A |
| **Subtotal Waste Plastics** | **16,146** | **N/A** |
| Waste Tires Reported by Planning Units | 737.4 | 65,547 |
| Waste Tires Reported by Facilities | 431.4 | 20,861 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $15.02 |
| Plastics | Roll-off | $25.12 |
| Whole Tires | Trailer | $13.19 |
| Whole Tires | Box Truck | $187.59 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $50.98 |
| Plastics | Roll-off | $40.88 |
| Whole Tires | Trailer | $89.03 |
| Whole Tires | Milk Run | ($85.37) |

# Onondaga County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 468,463 | |
| Households (2015): | 204,970 | |
| One-way Distance to Madison Co. | 25.9 | miles |
| Disposed MSW | 249,596 | tons |
| *Local MSW Tip Fee* | *$84.00* | *per ton* |
| Disposed C&D | 64,015 | tons |
| *Local C&D Tip Fee* | *$46.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 5,270 | tons |
| | 468,463 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$444.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 26,208 | N/A |
| Waste Plastics in C&D | 768 | N/A |
| Waste Plastics - Industrial Sources | 1,038 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 96 | N/A |
| Waste Plastics - RHRF Residuals | 3,005 | N/A |
| **Subtotal Waste Plastics** | **31,115** | **N/A** |
| Waste Tires Reported by Planning Units | 133.0 | 11,822 |
| Waste Tires Reported by Facilities | 872.8 | 67,733 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $14.14 |
| Plastics | Roll-off | $20.14 |
| Whole Tires | Trailer | $10.55 |
| Whole Tires | Box Truck | $187.59 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $69.86 |
| Plastics | Roll-off | $63.86 |
| Whole Tires | Trailer | $91.67 |
| Whole Tires | Milk Run | ($85.37) |

# Ontario County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 109,561 | |
| Households (2015): | 49,903 | |
| One-way Distance to Madison Co. | 91.8 | miles |
| Disposed MSW | 62,321 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 16,416 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 1,233 | tons |
| | 109,561 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 6,544 | N/A |
| Waste Plastics in C&D | 197 | N/A |
| Waste Plastics - Industrial Sources | 8 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 98 | N/A |
| Waste Plastics - RHRF Residuals | 3,765 | N/A |
| **Subtotal Waste Plastics** | **10,612** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 43.5 | 3,860 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $23.13 |
| Plastics | Roll-off | $71.38 |
| Whole Tires | Trailer | $37.56 |
| Whole Tires | Box Truck | $200.38 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $39.56 |
| Plastics | Roll-off | ($8.69) |
| Whole Tires | Trailer | $64.66 |
| Whole Tires | Milk Run | ($98.16) |

# Oswego County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 120,146 | |
| Households (2015): | 53,661 | |
| One-way Distance to Madison Co. | 51.1 | miles |
| Disposed MSW | 64,393 | tons |
| *Local MSW Tip Fee* | *$65.00* | *per ton* |
| Disposed C&D | 15,025 | tons |
| *Local C&D Tip Fee* | *$50.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 1,352 | tons |
| | 120,146 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$125.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 6,761 | N/A |
| Waste Plastics in C&D | 180 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 12 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **6,953** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 80.2 | 7,128 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $17.58 |
| Plastics | Roll-off | $39.74 |
| Whole Tires | Trailer | $20.86 |
| Whole Tires | Box Truck | $183.68 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $47.42 |
| Plastics | Roll-off | $25.26 |
| Whole Tires | Trailer | $81.36 |
| Whole Tires | Milk Run | ($81.46) |

# Otsego County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 60,636 | |
| Households (2015): | 30,692 | |
| One-way Distance to Madison Co. | 66.4 | miles |
| Disposed MSW | 38,463 | tons |
| *Local MSW Tip Fee* | *$65.00* | *per ton* |
| Disposed C&D | 8,594 | tons |
| *Local C&D Tip Fee* | *$65.00* | *per ton* |
| Waste Tire Generation (theoretical est.) | 682 | tons |
| | 60,636 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$444.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 4,039 | N/A |
| Waste Plastics in C&D | 103 | N/A |
| Waste Plastics - Industrial Sources | 0.4 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 53 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **4,195** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 150.3 | 13,352 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $19.67 |
| Plastics | Roll-off | $51.63 |
| Whole Tires | Trailer | $27.14 |
| Whole Tires | Box Truck | $122.45 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $45.33 |
| Plastics | Roll-off | $13.37 |
| Whole Tires | Trailer | $75.08 |
| Whole Tires | Milk Run | ($20.23) |

# Schoharie County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 31,330 | |
| Households (2015): | 17,217 | |
| One-way Distance to Madison Co. | 81.5 | miles |
| Disposed MSW | 21,188 | tons |
| *Local MSW Tip Fee* | *$73.50* | *per ton* |
| Disposed C&D | 4,821 | tons |
| *Local C&D Tip Fee* | *$73.50* | *per ton* |
| Waste Tire Generation (theoretical est.) | 352 | tons |
| | 31,330 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$140.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 2,225 | N/A |
| Waste Plastics in C&D | 58 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 26 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **2,309** | **N/A** |
| Waste Tires Reported by Planning Units | 51.3 | 4,560 |
| Waste Tires Reported by Facilities | 3,014.3 | 32,460 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $21.73 |
| Plastics | Roll-off | $63.38 |
| Whole Tires | Trailer | $33.61 |
| Whole Tires | Box Truck | $244.91 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $51.77 |
| Plastics | Roll-off | $10.12 |
| Whole Tires | Trailer | $68.61 |
| Whole Tires | Milk Run | ($142.69) |

# Schuyler County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 18,186 | |
| Households (2015): | 9,577 | |
| One-way Distance to Madison Co. | 90.1 | miles |
| Disposed MSW | 19,951 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 666 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 205 | tons |
| | 18,186 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 2,095 | N/A |
| Waste Plastics in C&D | 8 | N/A |
| Waste Plastics - Industrial Sources | 101 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 33 | N/A |
| Waste Plastics - RHRF Residuals | 3 | N/A |
| **Subtotal Waste Plastics** | **2,240** | **N/A** |
| Waste Tires Reported by Planning Units | 47.2 | 4,196 |
| Waste Tires Reported by Facilities | 419.6 | 9,998 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $22.90 |
| Plastics | Roll-off | $70.06 |
| Whole Tires | Trailer | $37.88 |
| Whole Tires | Box Truck | $180.86 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $39.79 |
| Plastics | Roll-off | ($7.37) |
| Whole Tires | Trailer | $64.34 |
| Whole Tires | Milk Run | ($78.64) |

# Seneca County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 34,833 | |
| Households (2015): | 16,210 | |
| One-way Distance to Madison Co. | 87.1 | miles |
| Disposed MSW | 19,452 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 4,539 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 392 | tons |
| | 34,833 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 2,042 | N/A |
| Waste Plastics in C&D | 54 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 43 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **2,139** | **N/A** |
| Waste Tires Reported by Planning Units | 0 | 0 |
| Waste Tires Reported by Facilities | 105.0 | 2,833 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $22.49 |
| Plastics | Roll-off | $67.73 |
| Whole Tires | Trailer | $35.60 |
| Whole Tires | Box Truck | $209.92 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $40.20 |
| Plastics | Roll-off | ($5.04) |
| Whole Tires | Trailer | $66.62 |
| Whole Tires | Milk Run | ($107.70) |

# Tioga County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 49,453 | |
| Households (2015): | 22,162 | |
| One-way Distance to Madison Co. | 86.0 | miles |
| Disposed MSW | 54,762 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 10,398 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 556 | tons |
| | 49,453 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 5,750 | N/A |
| Waste Plastics in C&D | 125 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 32 | N/A |
| Waste Plastics - RHRF Residuals | 714 | N/A |
| **Subtotal Waste Plastics** | **6,621** | **N/A** |
| Waste Tires Reported by Planning Units | 238.2 | 21,173 |
| Waste Tires Reported by Facilities | 0 | 0 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $22.34 |
| Plastics | Roll-off | $66.87 |
| Whole Tires | Trailer | $35.31 |
| Whole Tires | Box Truck | $146.95 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $40.35 |
| Plastics | Roll-off | ($4.18) |
| Whole Tires | Trailer | $66.91 |
| Whole Tires | Milk Run | ($44.73) |

# Tompkins County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 104,926 | |
| Households (2015): | 42,272 | |
| One-way Distance to Madison Co. | 69.9 | miles |
| Disposed MSW | 49,321 | tons |
| *Local MSW Tip Fee* | *$85.00* | *per ton* |
| Disposed C&D | 9,407 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 1,180 | tons |
| | 104,926 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$150.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 5,179 | N/A |
| Waste Plastics in C&D | 113 | N/A |
| Waste Plastics - Industrial Sources | 69 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 45 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **5,406** | **N/A** |
| Waste Tires Reported by Planning Units | 484.5 | 43,067 |
| Waste Tires Reported by Facilities | 40.1 | 3,560 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $20.14 |
| Plastics | Roll-off | $54.35 |
| Whole Tires | Trailer | $28.63 |
| Whole Tires | Box Truck | $209.92 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $64.86 |
| Plastics | Roll-off | $30.65 |
| Whole Tires | Trailer | $73.59 |
| Whole Tires | Milk Run | ($107.70) |

# Wayne County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 91,446 | |
| Households (2015): | 41,447 | |
| One-way Distance to Madison Co. | 72.4 | miles |
| Disposed MSW | 53,445 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 11,605 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 1,029 | tons |
| | 91,446 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 5,612 | N/A |
| Waste Plastics in C&D | 139 | N/A |
| Waste Plastics - Industrial Sources | 45 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 41 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **5,837** | **N/A** |
| Waste Tires Reported by Planning Units | 2.7 | 240 |
| Waste Tires Reported by Facilities | 56.2 | 4,770 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $20.48 |
| Plastics | Roll-off | $56.30 |
| Whole Tires | Trailer | $29.64 |
| Whole Tires | Box Truck | $163.27 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $42.21 |
| Plastics | Roll-off | $6.39 |
| Whole Tires | Trailer | $72.58 |
| Whole Tires | Milk Run | ($61.05) |

# Yates County

**County Overview**

| | | |
|---|---|---|
| Population (2015): | 25,048 | |
| Households (2015): | 13,743 | |
| One-way Distance to Madison Co. | 105.0 | miles |
| Disposed MSW | 15,505 | tons |
| *Local MSW Tip Fee* | *$62.69* | *per ton* |
| Disposed C&D | 170 | tons |
| *Local C&D Tip Fee* | *$57.96* | *per ton* |
| Waste Tire Generation (theoretical est.) | 282 | tons |
| | 25,048 | tires |
| Local Tire Disposal Cost at Disposal Facility | *$178.00* | *per ton* |

**Targeted Materials**

| Material and Source | Tons | # of Tires |
|---|---|---|
| Waste Plastics in MSW | 1,628 | N/A |
| Waste Plastics in C&D | 2 | N/A |
| Waste Plastics - Industrial Sources | 0 | N/A |
| Waste Plastics - Agricultural (theoretical est.) | 78 | N/A |
| Waste Plastics - RHRF Residuals | 0 | N/A |
| **Subtotal Waste Plastics** | **1,708** | **N/A** |
| Waste Tires Reported by Planning Units | 5.5 | 489 |
| Waste Tires Reported by Facilities | 50.6 | 4,500 |

**Handling and Transportation Cost**

| Material | Transport Type | $/ton (incl. handling) |
|---|---|---|
| Plastics | Trailer | $24.93 |
| Plastics | Roll-off | $81.65 |
| Whole Tires | Trailer | $43.11 |
| Whole Tires | Box Truck | $293.89 |

**Projected Disposal Fee at PTO Plant**

| Material | Transport Type | PTO Break-even Disposal Fee (Rebate) |
|---|---|---|
| Plastics | Trailer | $37.76 |
| Plastics | Roll-off | ($18.96) |
| Whole Tires | Trailer | $59.11 |
| Whole Tires | Milk Run | ($191.67) |