Houston County
Solid Waste Management Plan
2018 – 2028

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Comprehensive Solid Waste Management Plan

Executive Summary (Minn. Rule 9215.0550)

Houston County's solid waste management program has been developed to be consistent with the Minnesota Waste Management Act and related laws. Specifically the County's programs incorporate the goals and policy and purpose expressed in Chapter 115A.02:

Houston County provides public information, waste education, and significant opportunities to the public to manage waste in order to protect public health, the environment and conserve natural resources. Information is provided to the public in comprehensive annual mailings and has details promoting collection events for Household Hazardous Waste, Fluorescent Light Bulbs, and other problem materials. Within Houston County there is weekly curbside collection for both MSW and recyclables in all of the cities and La Crescent Township. There are five centrally located drop sites to accommodate self-haulers of MSW and recyclables and for all county residents to bring their problem materials. Houston County also operates a recycling center that processes aluminum, cardboard and electronic waste, etc.

Refuse generated by residential, commercial, and institutional generators are collected by contracted and licensed haulers. This MSW is then delivered to the French Island Waste-To-Energy facility or taken to the La Crosse County landfill. Generators in rural areas, if not collected by a licensed hauler, may self-haul refuse to one of Houston County's five Drop Sites. It is then transported to the French Island Waste-To-Energy facility. This facility is operated by Excel Energy for which La Crosse County has a long term contract. Houston County has contracted with La Crosse County to use the French Island facility as its preferred waste management site of process-able MSW and also directs non process-able MSW, processed residuals, ash, construction, and demolition waste to the La Crosse County landfill.

Houston County has a long term contract that runs through 2023 with La Crosse County for the proper management of solid waste. The County has negotiated with La Crosse County for a seven year extension of the current contract to go through to the year 2030. The contract gives Houston County access to the regional waste processing and disposal system. The primary facility for mixed municipal solid waste management is the Excel Energy French Island waste-to-energy facility.

A. 115A.02 LEGISLATIVE DECLARATION OF POLICY; PURPOSES.

(a) It is the goal of this chapter to protect the state's land, air, water, and other natural resources and the public health by improving waste management in the state to serve the following purposes:

(1) Reduction in the amount and toxicity of waste generated;
(2) Separation and recovery of materials and energy from waste;
(3) Reduction in indiscriminate dependence on disposal of waste;
(4) Coordination of solid waste management among political subdivisions; and
(5) Orderly and deliberate development and financial security of waste facilities including disposal facilities.

(b) The waste management goal of the state is to foster an integrated waste management system in a manner appropriate to the characteristics of the waste stream and thereby protect the state's land, air, water, and other natural resources and the public health. The following waste management practices are in order of preference:

(1)Waste reduction and reuse;
(2) Waste recycling;
(3) Composting of source-separated compostable materials, including but not limited to, yard waste and food waste;
(4) Resource recovery through mixed municipal solid waste composting or incineration;
(5) Land disposal which produces no measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on site or for sale; and
(6) Land disposal which produces measurable methane and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used on site or for sale.

Information regarding forecasts over the planning period (10 years) is included in Sections III and VI. The Houston County Estimated Solid Waste Budget outlines the anticipated cost and revenues of the system and Houston County Goal Volume Table outlines generation and recovery of recyclable materials from the county's various recycling programs. A list of Licensed Waste and recycling haulers is also attached as resource information. In June of 2018, Houston County approved a long term contract with La Crosse County that extends to the year 2030. Houston County will continue to be a member on the La Crosse County Policy Board that will continue to review any

anticipated system upgrades and price adjustments. At this time, there are no expected system changes.

Background Information

Houston County is located in the south east corner of the state of Minnesota. The area of the County is 569 square miles with the Mississippi River forming the eastern boarder of the county. The landscape of Houston County is characterized by high ridges with deep valleys, hardwood forests, and karst topography.

The bulk of the land use in the county is agricultural. Slopes in areas with greater relief are typically wooded. Floodplains and wetlands are generally limited to Mississippi and Root River bottoms and along our many creeks and streams. Residential, commercial and industrial land uses have been largely confined to the cities. It is foreseen that in the near future most of the county will not change much in demographics. Along the river depending upon the economy there may be an increase in tourism and retirement/vacation homes.

In 2016 the US Census estimated Houston County's population is 18,773 people. The Census also indicates that there are 8,674 households, with the combined apartments, trailers, and other housing units in Houston County. Over the next 10 years, according to the demographer, the projected population is to remain stable with only a slight increase.

Out of the County's 8674 households, 21.6% had children under the age of 18 living with them. The average household size is 2.35. The median income for a household in the County was $53,809 and the per capita income is $27,626. Over the next 10 years, salary increases are predicted to remain low, at 2.5% by the Gross Domestic Product.

As of April 2017 the unemployment rate for Houston County is 3.6% which is lower than the state rate of 3.8 and the national rate of 4.3%. Currently the unemployment rate is not expected to increase during the planning period.

Employment in Houston County has been growing at a rate of .55% from 9,741 employees in 2014 to 9,795 employees in 2015. The most common job groups are management, business, science & arts, sales & office and service. The County has seven cities, Brownsville, Caledonia, Eitzen, Hokah, Houston, La Crescent, and Spring Grove. The primary employment centers for Houston County's workforce are located in Winona, MN and La Crosse, WI.

As seen in Table 1, Houston County manages its waste to the highest and best use. Over the past five years, Houston County has recycled or composted 34.84 percent of its waste (45.97 percent in 2017), 48.65 percent of waste went to resource recovery, and only 15.41 percent was sent to a landfill.

Table 1. MMSW Management 2013-2017

	2013		2014		2015		2016		2017		Total	
Management Method	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Total	Total %
Recycling	3,209	25.58%	3,866	30.44%	3,780	27.92%	3,730	27.20%	3,945	38.02%	18,530	29.47%
Organics	0	0.00%	813	6.40%	820	6.06%	919	6.70%	825	7.95%	3,377	5.37%
Total Recycling	3,209	25.58%	4,679	36.84%	4,600	33.98%	4,649	33.90%	4,770	45.97%	21,907	34.84%
Resource Recovery	6,717	53.54%	5,815	45.79%	6,651	49.12%	7,030	51.27%	4,376	42.17%	30,589	48.65%
Landfill	2,452	19.54%	2,038	16.05%	2,120	15.66%	1,941	14.16%	1,138	10.97%	9,689	15.41%
On-site	168	1.34%	168	1.32%	168	1.24%	92	0.67%	92	0.89%	688	1.09%
Total MSW	9,337	74.42%	8,021	63.16%	8,939	66.02%	9,063	66.10%	5,606	54.03%	40,966	65.16%
Total MMSW	12,546	100.00%	12,700	100.00%	13,539	100.00%	13,712	100.00%	10,376	100.00%	62,873	100.00%
C&D Waste	1,428		1,131		1,443		1,427		1,111		6,540	

As seen in Table 2, Houston County provides the opportunity to dispose of problem materials properly. Automotive fluids and batteries are accepted at local retailers. Houston County accepts tires, electronics, fluorescent lamps, and major appliances at their 5 drop sites. Finally, Houston County holds 3 mobile collections for HHW annually.

Table 2. Problem Materials Management

Material	2013	2014	2015	2016	2017
Antifreeze	**0**	**0**	**0**	**0**	**0**
Electronics	**172**	**0**	**81**	**103**	**89**
Fluorescent lamps	**0**	**3**	**2**	**3**	**1**
HHW	**1**	**0**	**0**	**1**	**1**
Latex Paint	**0**	**2**	**2**	**1**	**5**
Major appliances	**113**	**47**	**62**	**66**	**58**
Used oil	**15**	**16**	**16**	**0**	**0**
Used oil filters	**9**	**0**	**0**	**0**	**0**

Vehicle batteries	**116**	**36**	**35**	**0**	**0**
Waste tires	**179**	**188**	**200**	**289**	**230**

All city residents in Houston County have curbside collection of MSW and recycling. It is estimated that roughly fifteen percent of rural residents have collection services. All remaining residents have access to the 5 rural drop sites. It is estimated that 85 percent of all rural residents utilize either collection services or self-haul to the drop sites in Houston County. Major generators of solid waste in Houston County would include: Caledonia School System, Spring Grove School System, La Crescent School System, Houston School System, as well as nursing homes throughout the County. At this time, estimating the amount of waste generated at these facilities is not feasible. The waste generated at these facilities would be consistent with residential waste generation. It is estimated that 15 percent of the waste generated in the County would be commercial/industrial/institutional waste.

II. Historical Summary

This report update will detail the solid waste management programs, policies, services and procedures that have been implemented since the original plan was developed and approved by the State of Minnesota in July 1991. Subsequent update to the original plan were submitted to and approved by the State in 1996, 2002 and 2008. Previous versions of this plan are available at the Houston County Environmental Services Office and the Minnesota Pollution Control Offices in Rochester or St. Paul.

Houston County, located in Southeastern Minnesota, is working along with its 7 cities and 17 townships to currently develop plans to upgrade solid waste management within its borders. The cities of La Crescent, Caledonia, Brownsville, Eitzen, Hokah, Houston, and Spring Grove; and the townships of Black Hammer, Brownsville, Caledonia Crooked Creek, Hokah, Houston, Jefferson, La Crescent, Mayville, Money Creek, Mound Prairie, Sheldon, Spring Grove, Union, Wilmington, Winnebago, and Yucatan have helped implement the Houston County plan. To assist Houston County in developing its plan, various solid waste management alternatives have been studied.

As stated in the 2001 update to the Solid Waste Management Plan, Houston County had approximately 15 years left on a 20-year contract that was first signed with La Crosse County in 1988, for the use of the XCEL RDF facility located on French Island and the La Crosse County Landfill. Both are located in La Crosse County, Wisconsin.

Houston County went through an extensive planning process to determine the benefits of participating in the La Crosse County programs. After an in depth study, Houston County and La Crosse County formed a solid waste policy committee that would provide a representative voice in the La Crosse County Solid Waste Disposal System. This enabled the County to have a higher degree of confidence in this system and sign a long-term disposal agreement with La Crosse County for disposal capacity through the year of 2023.

In 1983 Houston County put out a Request for Proposal to find a temporary solution for Houston County's Solid Waste because the County Landfill was closing at the end of 1983. From reviewing the proposals before the Houston County Board they selected to go with a private hauler building a transfer station and shipping waste to a landfill near Decorah, Iowa, as a temporary solution.

In view of the fact that the Iowa landfill was accepting all waste from the County, the County still proceeded to look for alternatives to sending its waste to a landfill for various reasons.

1. The number one reason for seeking alternatives to the Iowa landfill was concerns regarding environmental liability. Leaving the Iowa landfill was an expensive change for Houston County residents. Houston County's tipping fee went from approximately $15.00 per ton at the Iowa landfill to $48.00 per ton at the La Crosse incinerator (Houston County is currently paying $62.00 per ton at the incinerator). The Winneshiek County Landfill had no liners and or leachate collection systems in place. In addition, the topography of Winneshiek County is Karst Geology similar to Houston County which is associated with a high potential for groundwater impacts and serious environmental problems that may result from the use of a less than state of the art landfill.

2. Houston County did not have a long-term agreement for on-going use of this landfill and did not have any agreement other than the understanding that the landfill was operated in accordance with Iowa State law.

3. Another landfill liability issue of concern to Houston County was the lack of oversight in daily operations to ensure environmental impacts would be mitigated. As an out of state facility Houston County would have little recourse to negotiate potential environmental impacts.

4. Tipping fees paid at that time did not take into account financial assurance funding to pay for landfill closing costs, post-closure care and long term contingency issues. When Houston County first started utilizing the Iowa Landfill the tipping fee was $3.85 per cubic yard. The 1990 tipping fee was raised to $5.85 per cubic yard. So, as indicated above Houston County realized that these extremely low rates did not set aside these funding mechanisms for long-term care of the landfill and possible environmental impacts.

Because the Houston County's Board and staff had these environmental concerns coupled with a need for long term solutions for Houston County's solid waste, the staff recommended and the Board voted to explore alternatives that were environmentally sound and economically feasible when looking for an alternative to landfilling as the State of Minnesota has required counties to do. In 1987 the Houston County Recycling Task Force was formed (with the assistance of the Minnesota Project and Winona County) recommending to the County Board the implementation of a County wide recycling program.

Future siting of a landfill in Houston County is not a likely option due to the fractured limestone geology known as Karst geology. Houston County's disposal needs do not require the siting of any new landfills in the next decade due to the long-term contract, with La Crosse County. Recent modifications to the La Crosse County landfill have extended its estimated lifespan to the year 2056. Due to permitting requirements the Wisconsin Department of Natural Resources will only issue permits on a 15 year basis or until the year 2023.

Based on a the Board's review of potential alternatives and market surveys, (Warzyn Report 1983) there were several components that were necessary for implementing an Integrated Solid Waste Management System in Houston County.

- Recycling program to reduce volume sent out of County for disposal
- Waste reduction & education program implementation
- Use of Resource Recovery through Waste-to-Energy

In 1987/1988 the Houston County Solid Waste Task Force, with the assistance of Bob Pulford, a solid waste consultant hired by Houston County to assess solid waste requirements for the County, conducted a study to assess the total volume of solid waste generated in Houston County. This included looking at estimating the entire available

waste stream generated including both reported and non-reported tonnages to determine the types and amounts of waste available for processing, recycling, composting, resource recovery, and landfilling.

Recycling Program History

In July of 1989 the Houston County Board adopted a Mandatory Recycling Ordinance for Houston County. In 1990 the County bought an existing building, equipment and added a storage building. This center processed all of the recyclables collected in Houston County. Existing equipment was replaced with new equipment, as needed, or when changes in markets warranted doing so.

The collection system consisted of curbside collection offered to the seven municipalities and two townships. Supervised drop-off sites were available to accept rural household generated waste and recyclables. The material accepted includes aluminum, glass, cardboard, newsprint, "PET" (#1), and "HDPE" (#2) plastics, tin, metals, magazines, tires, and white goods. E-waste has been added to the list of acceptable materials at the rural supervised drop-sites.
At that time the materials study indicated a total market for aluminum with prices ranging from $0.20 to $0.60 per pound. The newsprint market price fluctuated greatly depending upon volume needed and available material for recycling. Often, the best potential to utilize newsprint was to sell shredded newsprint to area farmers for use as animal bedding. Currently commodity prices for all types of paper have increased significantly and the County's options are reviewed on an annual basis.

The 2004 statewide budget shortfall forced Houston County to eliminate the position of the Houston County Recycling Coordinator effective January 31, 2004. The Houston County Environmental Services Director assumed the duties of the Recycling Coordinator position. At that time the position and programs were examined and several changes were made and the position was revamped with the goal of cutting overhead costs and increasing the efficiency to provide more viable options. Among those changes was the elimination of selling shredded newspaper to area farmers. Effective January 1, 2004 the County signed a 3 yr contract with Waste Management of La Crosse for the processing of rigid and fiber recyclables collected in Houston County with the goal transitioning the processing of curbside collected recyclable materials to the private sector by January 1, 2005. Currently, the County continues to transport all of the rigid and fiber recyclable materials collected at the Houston County Supervised drop-sites to Harter's facility in La Crosse, WI.

In 2001 the market value for tin and ferrous bottomed out and Houston County made some administrative changes to the recycling program with respect to scrap metals. However by 2006 the hauling ferrous market started to rebound and commodity values rose to approximately $50.00 per ton Houston County elected to purchase containers and self-haul the ferrous to Alter Metal in La Crosse. In 2008 the ferrous market high reached $175.00 per ton.

In addition to the aluminum, glass, cardboard, newsprint, PET (#1) and HDPE (#2) plastics, tin metals magazines, tires and white goods. Houston County now collects for recycling paperback books and textiles (good clean used clothing, linens, etc.). In keeping with our leadership role in the communities of our County, Houston County diverts problem items from the waste stream by our sponsorship or support of the following programs: a one day annual collection of fluorescent/HID bulbs; provisions for the collection of eye glasses and hearing aids for the Lions clubs; beverage pull tabs for Ronald McDonald Homes; metal tricycles and wagons (repaired and donated to charitable organizations); greeting cards for St. Jude's Children's Ranch; hardcover or paperback books for the Houston County Historical Society annual fund raiser and textiles (good clean used clothing, linens, etc.) for the local Twice is Nice Store and Use Again containers. Houston County accepts used oil to burn in their used oil burning furnace (manufactured by Inov8) in addition to maintaining a listing of firms collecting used oil, oil filters and antifreeze.

In 2005, to comply with Minnesota State Mandates, Houston County began collecting electronic waste items at each of the five supervised drop-off sites. Also in 2005 Houston County Recycling participated in the Minnesota Electronics Recovery Project sponsored by the Minnesota Office of Environmental Assistance, Sony Electronics Inc. and the Waste Management Asset Recovery Group. A total of 11.6 tons of e-waste consisting of computers, computer accessories, etc. were collected under this pilot program. By late 2007, Houston County was successful in contracting with a licensed E-Waste recycler and is now being reimbursed at the rate of $0.02 cents per lb. for Covered Electronic Devices (CEDs).

Education Program History

As part of Houston County's ongoing commitment to public education and recycling, Houston County continues to work closely with Houston County Schools and businesses in setting up recycling programs. In 2007 the Houston County Environmental Services Department distributed via local newspapers, a detailed brochure covering Household Hazardous Waste, Household and Business Waste, Recycling, Alternative Recycling

Sources, Yard Waste & Composting and complete services offered at the Houston County Supervised Drop-off Sites.

Yard Waste Program History

The Houston County Environmental Services Department continues to work with each city in Houston County to also provide a program for yard waste. Cities have dedicated areas available to them for this use. Also, education material is available from the County to their citizens to start their own compost piles. This information is frequently distributed in newspaper articles; brochures, pamphlets and supplemental mailings (tax statements) and is available at the supervised drop-off sites.

Additional Waste Management Programs, History

The County has since added many other components to our recycling program such as, demolition debris recycling at the La Crosse County Landfill, mattress recycling, battery recycling, Ag Bag Plastics, and a HHW collection program which includes pharmaceuticals, unusable and unwanted residential and agricultural pesticides, to better manage the waste stream.

Overview of Existing Conditions

Each of the seven cities and two of the 17 townships, that comprise Houston County, has contracts with haulers for curbside collection of refuse and recyclable materials. Houston County residents that live in townships without organized waste collection and recyclable material curbside collection are able to bring their refuse and recyclable materials to one of five drop-off site locations in the county.

There are currently no landfills operating in the County. Waste generated in the County is disposed in one of four ways:

1. Recycled

2. Items are delivered to the XCEL Waste-To-Energy Plant, located in La Crosse County, La Crosse Wisconsin.

3. Items that cannot be recycled or incinerated are deposited at the La Crosse County landfill

4. A small amount of waste is illegally disposed of on-site.

Recyclable materials are collected in all cities and townships in Houston County. Licensed haulers take these curbside recyclables either to their own facilities or to be processed with contracted facilities. The County owns and operates a recycling center which opened in 1990. This facility has seen a significant volume of materials pulled from the waste stream and recycled every year since 1990. These volumes of recycling can be seen in the County's annual SCORE Reports.

County Background Information

County needed to cooperate with other adjoining counties to improve the existing waste management systems.

Even in view of these factors, the County has determined that landfills will continue as one component of an integrated waste management system. Houston County has determined, through past planning efforts that waste reduction, recycling, composting, waste-to-energy and landfilling combined in an integrated program offers the best long-term approach to solid waste management. Each of the waste management programs adopted by the County has advantages and disadvantages in terms of volumes managed, public acceptance and environmental effects. Further sections of this plan will primarily address waste volumes managed and methods to gain public acceptance and program participation. The environmental risks associated with various landfill abatement programs have been evaluated by the MPCA. Any additional risks assumed by Houston County because of its long-term contract with La Crosse County have been well researched by Houston County's Board staff and addressed in the included present contract. At that time Houston County felt confident that proceeding with the La Crosse option was Houston County's best choice.

A. Recommended Plan

Part of this section is an excerpt from the 1991 Update to the Houston County Solid Waste Management Plan.

The Minnesota Pollution Control Agency (MPCA) has indicated that all counties will be required to assess the feasibility of resource recovery when reviewing landfill permits. The MPCA requires any landfill expansion permit be contingent on the county developing "feasible and prudent" resource recovery alternatives. Environmental factors, as outlined in the ERD, should also be reviewed. The energy recovery alternatives in Houston County at this point would be best by using the La Crosse Waste-to-Energy XCEL Facility to implement. Due to the close proximity to an already

existing waste-to-energy facility the construction of a compost facility for Houston County garbage has been ruled out.

In developing "feasible and prudent" resource recovery alternatives, Houston County is taking into consideration the following components:

1. Source Separation – each city and two of the townships in Houston County have in place a program for the curbside collection of recyclables on a regular basis. Houston County also provides for the collection of recyclables at each of its five Counties operated supervised drop-off sites. All sites are open 8 a.m. to 3 p.m. on Saturdays. In addition to the Saturday hours, sites are open from 10:00 a.m. to 6:00 p.m. as follows: Houston on Monday; Hokah on Tuesday; Caledonia and Spring Grove on Wednesday and La Crescent on Thursday. With the extra days and times of operation that have been added since 2004, the county has seen an increase in refuse and recyclables collected, and a decrease in road side dumping.

2. Yard Waste Composting – is encouraged by Houston County Recycling, by providing education on self-composting through our public education programs. Houston County works with individual cities in providing areas designated for dropping off leaves, grass clippings, brush and other yard waste compost materials. The compost materials are then handled by each city.

3. Household Hazardous Waste – Houston County has negotiated a Household Hazardous Waste (HHW) Contract with Winona County which will expire on December 31, 2012. This contract will allow Houston County residents to use the Winona County Household Hazardous Waste Facility.

    a. As a second option Houston County has negotiated a HHW contract with La Crosse County. Because of Houston County's long term commitment and ties with La Crosse County Solid Waste Disposal programs, Houston County residents now have the ability to utilize the La Crosse County Household Hazardous Waste Facility. Houston County residents must call ahead to La Crosse County facility to make an appointment to drop-off HHW materials for disposal. There is a disposal fee for all items and Houston County residents are charged the same fee as La Crosse County residents are charged.

    b. Houston County has investigated the feasibility of holding a paint exchange at each of the five supervised drop-off sites, which are located in or near

the Cities of Caledonia, Hokah, Houston, Spring Grove and La Crescent. In lieu of holding a paint exchange Houston County residents are encouraged to donate good usable paints to local schools and groups who can use the paint in making stage settings, floats, etc. Starting in 1998 Houston County implemented a one-day HHW collection program. The collections, held during the summer months, rotate on a yearly basis between the five major cities.

c. The Houston County Environmental Service Staff are dedicated to educating the public in how to properly dispose of unwanted, unusable left over paints by drying out one layer at a time and then placing the dried materials in the trash for proper disposal.

4. Pesticide Collection – in April 1991, Houston, Fillmore and Winona Counties, in cooperation with the Minnesota Department of Agriculture, held a Tri-County Waste Pesticide Collection Program at the Tri-County Groundwater Ag-Stravaganza. Under this program, 42 Houston County participants (households, farmers and businesses) disposed of over 4,300 lbs. of banned pesticides. A second pesticide collection was held in August of 1995. 26 Houston County participants brought in 2,486 lbs. of pesticides. Disposal was free for up to 100 lbs. of pesticides. Houston County and the Department of Agriculture have continued to sponsor the program biannually. Today Houston County has three Household Hazardous Waste collection days a year. At theses collection days Houston County has a manned mobile unit collecting paints, solvents, medication, agricultural pesticides, and chemical waste at a cost sharing fee. Paints and Solvents are $0.50 per pound, medication waste $3.00 per pound, and other hazardous waste is $1.50 per pound. These collections have been a great success in decreasing improper disposal of hazardous waste. In 2016 Houston County collected 2,871.20 pounds of Paints and Solvents, 2,691 pounds of Other HHW, 898 pounds of Medication waste, and 428 pounds of Agriculture Waste.

a. As a result of 2008 legislation, the Minnesota Department of Agriculture (MDA) has a new Waste Pesticide Collection Program which mandates that the MDA conduct agricultural waste pesticide collections in every Minnesota County every other year. In addition, the MDA must also conduct periodic collection of residential waste pesticides each year in each county. Houston County will collect the residential waste during the annual Household Waste Collections. Houston County will also hold an annual agricultural waste pesticide collection. Funding for the agricultural

waste pesticide collection will come from a special waste pesticide stipend through Winona County.

5. Problem Materials – Houston County has a great concern for proper disposal of those materials in the waste stream which cannot be disposed of by normal curbside collection and has therefore expanded the Supervised Drop-off Site Program to cover problem materials such as appliances, tires, E-Waste and large household items.

    a. In 1991 Houston County implemented a unique program for the collection of plastic pesticide/herbicide containers. After application of the pesticides, farmers triple rinse the containers, remove the caps, split the bottoms and return them to the dealer. The recycling center then transports the containers back to the center where the containers are baled. The recycled bales are sold to a dealer who makes them into new containers making a full circle of recycling pesticide containers. In 2004 budget cuts eliminated the pickup portion of the program. Two days of each season were designated where the dealers deliver the containers to the recycling center for recycling. As of today each business that sells pesticide containers takes them back for recycling.

6. Supervised Drop-off Collection Centers – Because of our topography, curbside collection of refuse and recyclables is not feasible in all rural areas of the County. Houston County therefore set up five Supervised Drop-off Collection Centers (sites are strategically located in or near cities). These sites not only serve as refuse collection sites for townships residents without organized curbside service, they also serve as drop-off sites for the collection of recyclables.

    a. In addition to collection of refuse and recyclables at these sites, all Houston County households can dispose of problem materials such as appliances, tires, lead acid batteries e-waste, mattresses and large household items. Each household is assessed a $3.50 per month fee. This prepaid fee (which is paid quarterly to the County by each city and township) covers the disposal cost of problem materials, generated by the households. There is no additional fee charged when most items are taken to the sites for disposal). Demolition materials, i.e. sheetrock, etc., can also be disposed of at each site for a minimal fee ($18.00 per cubic yard). Containers are also provided for the free disposal of ferrous and non-ferrous metals. Aluminum cans may also be redeemed at each site.

b. Items deposited at the sites for disposal are the property of Houston County. Pursuant to the Houston County Code of Ethics employees shall not take or use County property for the employee's private benefit. Therefore, Drop-Site employees shall not salvage or scavenge any tires, metals, lumber, clothing appliances, furniture, miscellaneous household items etc. or any other items for personal use.

Non-recyclable items, such as household goods, wood and tools that are deemed to have a remaining useful life are to be set aside in an area viewable and accessible to the general public. The public may take these items during normal Drop-Site hours of operation. Items may not be set aside by an employee for his/her later salvage during Drop-Site operation hours. Notwithstanding above, at the end of each work day any items that are left in this public area may be removed for personal use by a County employee and must be removed during non-work time. Houston County employees who remove property pursuant to this paragraph do so at his on her, own risk and shall sign and date the Drop Site waiver and release of liability each item they remove property as required of member of the public.

c. Businesses are encouraged and allowed to use the facilities by paying a set fee for each item disposed of.

7. Incineration – a portion of the following are excerpts carried forward from the 1991 Update of the Houston County Solid Waste Management Plan. Houston County currently has 5 years remaining on the long-term contract with La Crosse County to incinerate waste and use of its state of the art landfill.

a. Houston County has signed a long-term agreement with La Crosse County for the use of the XCEL RDF French Island Facility. In 1991 Houston County adopted a Solid Waste Ordinance and revised its Haulers Licenses/Contracts which directs that all solid waste generated in Houston County be delivered to the XCEL Facility for disposal. Houston County has negotiated to extend the current contract with La Crosse County to the year 2030.

b. The Houston County Environmental Service Director is currently holding meetings with each city to review and update solid waste hauler contracts,

licenses and application forms. Bid proposals will continue to include a clause stating that all refuse collected is to be taken to the XCEL Plant at La Crosse, WI. The signed contract between the city and the hauler also contains the XCEL delivery clause.

8. Fluorescent/HID bulbs – in 1995, Houston County in conjunction with Northern States Power, Tri County Electric and the cities of Eitzen, Spring Grove and Caledonia began a special one-day collection program for the disposal of fluorescent/HID bulbs. Residents served by the above electrical supply source were allowed to bring in up to 10 fluorescent tubes for free disposal. At this time, Veolia, who has the state bid, provides the proper disposal of the tubes and Certificates of Conversion. Houston County has made this an annual spring event held in April.

9. Textiles – In 1992 Houston County, using a Source Reduction Grant from the Minnesota Office of Waste Management (MN OWM), supplemented by County funds, established a resale clothing store to reduce the amount of textiles in the waste stream. The store, staffed by volunteers assisted by adult handicapped workers, offers an alternative source of clothing for Houston County residents.

    a. The store also accepts good quality toys, paperback books and jewelry for resale. The covers are removed from the paperback books not sold and the pages are then recycled by the recycling center.

10. Aluminum – Houston County Recycling pays competitive prices on aluminum cans and offers aluminum redemption service at each of our five supervised drop-off sites and at the Houston County Recycling Center. In 2015 Houston County processed and recycled 59 tons of aluminum cans.

11. Ag Bag Plastic – Started in June of 2017. Farmers had the opportunity to get a container to put their Ag plastic in and Revolutionary Plastics will come around and empty the container free of charge.

12. Paint Care Program – In the spring of 2017 Houston County in collaboration with Minnesota Paint Care, offered to collect architectural paints, stains, primers, varnishes at no cost to its residence. Through this program we work closely with La Crosse County for collection and Winona County for disposal. All associated cost to implement the collection; transportation and disposal are reimbursed to Houston County by the Paint Care Program.

PAST PLAN IMPLEMENTATION

A portion of this section is an excerpt from our 1991 Update to the Houston County Solid Waste Management Plan.

Because of the Karst geology of Houston County, it was not feasible to consider siting a new landfill within the County; therefore in 1987, Houston County joined the Southeast Minnesota Landfill Joint Powers board, for the purpose of planning, constructing, operating and maintaining a landfill. In 1995, the Joint Powers Board reorganized and changed their strategy because siting a landfill was no longer a high priority item. The Joint Powers Board changed their title to the Southeast Minnesota Solid Waste Management Powers Board and formed a new cooperative for the four County memberships. It is their intention to share with and assist member Counties in the planning, management and implementation of methods to deal with solid waste issues.

This plan implementation section includes discussion of implementation considerations, such as institutional arrangements and financing, public participation, and a proposed implementation schedule. Institutional arrangements include inter-governmental agreements, ownership and operation decisions, site acquisition, market commitments, waste flow control, program management, and coordination with the private solid waste industry. Capital improvements, financing options and methods of generating revenue (property taxes and user charges) are discussed. An expanded public participation program is recommended.

In the event La Crosse County should be unable to fulfill their portion of the long-term agreement with Houston County to the extent that Houston County did not have access to the XCEL Incinerator or the La Crosse landfill, Houston County would begin discussion with the Houston County Solid Waste Management Task Force to investigate other methods of solid waste disposal. Some of the methods that Houston County would look at for solid waste disposal are:

1. The Houston County Solid Waste Office and the Houston County Task Force would investigate alternative financing options such as matching grants to enhance existing solid waste programs and would review existing programs to see if they could be improved on or what if any phase could be eliminated.

2. The Houston County Solid Waste Task Force and Staff would investigate ways of implementing short-term agreements with the haulers in an effort to control the cost of garbage disposal on a short-term basis until another long-term alternative is found.

PAST RESOURCE RECOVERY AND DISPOSAL SYSTEM ANALYSIS

Overview of the Houston County System and Drop-off Collection Centers

From June 1989 to July of 1990 the Solid Waste and Recycling department held a series of meeting with city and township representatives. Through that process it was decided that multiple drop-off collection centers should be developed. It was agreed that those centers should provide more than MSW collection service. The primary reason for development of the centers was to minimize or eliminate roadside dumping of a broad variety of materials. In addition, the system appears to have prevented a monopoly of one hauler in the County.

The description below briefly describes the recycling services offered at the drop-off centers and curbside collection of recyclables in the County. Costs and revenues for these services are also included.

During the August 2007 flooding in Southeastern Minnesota, the drop-off sites served as centers for disposal of flood damaged materials. The Environmental Services Director and extra staff manned three of the sites an additional 4 days per week for approximately 12 weeks.
In addition to the extra hours open, the county provided additional disposal containers at each site. Free disposal, for Houston County households, of flood damaged items that would normally have been charged for was offered until October 31, 2007

Houston County also provided for three collections of HHW materials to aid in flood cleanup. These three collections were held in Houston, Caledonia and La Crescent. A total of 8.13 tons of HHW were collected at no charge.

1. Description of Drop-Off Centers

Houston County has five supervised Drop-off Collection centers. Each center is strategically located in the County in or near cities. The services provided at these centers include:

a. Collection of MSW
b. Recyclables (newspaper, corrugated cardboard, glass, tin and plastic containers)
c. Problem materials (tires, appliances, lead acid batteries, E-Waste and large Household items)
d. Demolition material (sheet rock, untreated structural wood, etc.)
e. Ferrous materials
f. Aluminum can buy-back

g. Rechargeable battery and cell phone redemption boxes

Each center is fenced and gated to restrict access when the center attendants are not present. Employees are part-time. There are two employees for each center. Responsibilities of the center attendants include determining acceptable and unacceptable materials, disposal of materials in proper container, charging for certain materials, purchase of aluminum cans and site cleanup. The land for each center is owned or leased by the County.

2. Equipment at drop-off sites.

Four of the five centers have an MSW compactor for refuse. The remaining center has a 6 yard refuse container for rural residents to drop-off their refuse.
All five sites have either one or two 30 yard containers for household items and four of the five sites have one 20 yard container for demolition. In addition each site has a container for ferrous metals, mattresses, E-waste and bins for recycling aluminum, mixed fiber recyclables and rigid recyclables. Three of the five sites have semi-trailers for tires. The remaining two sites have cages for collecting tires.

3. Hours of Operation

Each drop site is open fifteen hours per week. All five sites are open on Saturday's from 8:00 AM to 3:00 PM and one week day from 10:00 AM to 6:00 PM.
The temporary part-time employees are allowed to work up to 14 hours per week. The week day staff consists of 3 fulltime employees and contracted staff from ABC (adult client with disabilities). The Saturday and weekday staff collect payment for MSW and demolition materials; purchase aluminum and accept recyclables and problem materials for disposal. In addition to performing the same functions as the Saturday staff, the weekday site attendants are responsible for cleaning out the sites, loading and transporting the aluminum and the E-waste to the recycling center. The truck driver and the client load, process and transport appliances, E-waste, tires, ridges and mixed fiber recyclables, ferrous metals, and corrugated cardboard. Full containers are then transported to proper contracted business for recycling.

4. Charges

Each household in the County is being charged a monthly fee to help pay for a portion of the cost of operating the five centers. The cities collect the annual fee through their utility bills and the townships collect this fee through either property taxes or bag fees

then remit the funds to the County. As of 2018 the fee is $3.50/household per month ($42/year). The current fee helps to cover the operational, disposal and transportation costs. This fee may be increased by the County Board during the budgeting process.

For curbside systems, collection and disposal of MSW and collection of recyclables is established by each city or township. For example;

a. City of La Crescent, uses a bag system, a 30-gallon bag cost $2.85 per bag. This cost covers the household fee that the city remits to Houston County. If a city bag is not use for refuse, the hauler will not pick up the bag. The hauler bills the city; where by the city can verify the count of bags sold. Recyclables are collected, source-separated at the curb by a contracted hauler.
b. In the City of Caledonia the cost of collection and transportation of recyclables and MSW is put on residents' utility bill along with the household fee. Residents pay a per bag fee of $1.45 for the disposal only of MSW.

Residents who need to purchase garbage bags to pay for disposal for curbside collection may obtain them from the city, township or other local outlets (grocery stores, hardware store). The charge for the bag covers the cost of disposal of MSW at the French Island waste-to-energy facility in La Crosse Wisconsin.

5. Drop-Off Site Charges

No special bags are required at the drop sites for disposal. Rural residents and businesses that delivered MSW to the drop sites are charged a fee of;

- $2.00 per 30 gallon bag,
- $2.50 per 45 gallon bag,
- $1.50 minimum for other bags.

Materials unacceptable for disposal at the French Island waste-to-energy facility are determined by the County's contract with La Crosse County. See La Crosse County Contract.

There are additional charges for selected problem materials that are collected at each site. Those charges are:

- $18.00 per cubic yard for demolition material
- $20.00 per standard size appliance from businesses (residents are pre-paid through monthly fee assessment)
- $20.00 for gas ammonia refrigerators from recreational vehicles

- $1.00 per cubic foot (length x width x height) for commercial appliances
- $3.00 fee for any locking door not removed or disabled from any appliance from household or business
- $50.00 fee for any food left in appliance from a business or household

Tires: (Households are prepaid through monthly fee assessments and businesses, commercial, and farm vehicle tires will be charged as follows.)

- $1.75 per car tire
- $7.00 per implement tire
- $10.00 per semi-truck tire
- $20.00 per tractor tire
- $65.00 per oversize tractor tire

All prices listed above are subject to change.

Solid Waste Policies and Programs

Solid waste reduction programs (MN Stat. □ 115A.552 and MN Rule 9215.0580, subp. 2)

It is the policy of Houston County that waste reduction and reuse are the most preferred waste management methods. The County's goal is to continue to expand on the results of its reduction and re-use programs.

Houston County supports reduction and reuse through three of its solid waste programs. First, waste education and public information provided by the County. These programs encompass information about waste reduction and re-use. Second, the County's drop sites offer opportunities for recovery, refurbishing, and re-using various items. Third, the County's Household Hazardous Waste (HHW) program is coordinated with HHW facilities in Winona County, MN and La Crosse County, WI that re-use various HHW items through their product exchange facilities.

Houston County will continue these efforts and budget funds to support these programs. Budget details are shown in the Houston County Estimated Solid Waste Budget.

Solid waste education programs (MN Rule 9215.0590, MN Stat. □ 115.A552, supb.3)

It is the policy of Houston County to keep County residents informed about waste issues and the County's goal to motivate people to use their best waste management practices.

The County will continue to use waste education and public information programs to keep people informed. A waste management instructional flier is distributed every other year and gives the public the most update information on waste issues and specific instructions on how to participate in County sponsored programs and related source separation methods. Highlights will include Drop-Site information, collection events for problem materials, and the positive results from the public support of integrated waste management. In addition to the flier, Houston County provides newspaper articles, advertisements, presentations to cities, school and civic organizations related to the County's integrated waste management system. These published information pieces appear at least quarterly in newspapers serving the county. This practice of informing the community has been very successful and there are no plans to discontinue them. If a new method of communication is developed, it will be tested and if successful, then implemented for use in Houston County. Every year funds are put into the budget under publications, brochures and newsletters to cover any expenses. See the Houston County Estimated Solid Waste Budget that show's levying of funds to provide continual educational information to the public.

Recycling programs (MN 9215.0600, MN Stat. □ 115A. subp. 2)

Houston County will continue their efforts and budgeting to support these existing programs that are currently in place. As technology and other options become available and cost effective Houston County Board and Staff, will review and discuss these options. Budget details are shown in the Houston County Estimated Solid Waste Budget.

It is the policy of Houston County to promote source separation and recycling of a wide variety of marketable secondary materials from waste. The County's goal is to increase source separation and recycling through its support of current programs and municipal recycling programs.
Houston County has worked with each city to expand residential MSW and recycling pick up. Each city operates household curbside recycling through organized collection and contracts with a hauler to do a pick up on a weekly basis. Residents are provided with recycling containers which enable the homeowner to presort the items for recycling. These recyclables include, glass, plastic PET and HDPE containers, tin and steel cans, aluminum, cardboard, mattresses, rechargeable batteries, newsprint, magazines and high grade paper.

Commercial generators of recyclable material may either contract with a hauler of their choosing or self-haul to one of the five drop sites located in the County. Houston County offers a collection for fluorescent bulbs for commercial generators annually. Electronics may be hauled to the five drop sites year-around. Houston County encourages commercial generators to recycle as much waste as possible. Houston County is aware that some commercial generators are marketing their recyclables directly without utilizing hauler services or the drop sites. Houston County will continue to make every effort to document that material.

Public entities within Houston County are currently meeting the statutory requirement to recycle at least three materials at their facilities. All facilities recycle paper, cardboard, plastics, and metals. Fluorescent bulbs and electronics are also recycled.

Recyclables are collected at all five drop sites in Houston County so they can be properly recycled. Bi-annually a new "*Recycler*" is published with updated information pertaining to changes in recycling, how to recycle, what is recyclable, how to compost, where the drop sites are located and their hours of operation. Each year Houston County levies funds for the Recycling programs.

Yard solid waste management programs (MN Rules 9215.0610)

It is the policy of Houston County to support a ban on disposal of yard waste in MMSW and assist municipalities in the County with successful yard waste sites. Each city uses its own land, equipment, staff, and public information to operate their own composting site. The County does not require reporting of types, quantities and cost from the cities on their composting sites. They are contacted each year to get estimates of tonnage that was placed on site for composting. Houston County has added this tonnage to the score report.

Each of the seven cities in Houston County has a yard waste site open for the recovery of yard waste generated within its boundaries. The County offers information about diverting yard waste in its public information and educational materials. No problems or issues related to municipal yard waste management, compost distribution, fires, odors, leachate, or pollution has been reported.

Houston County will continue its efforts and budget funds to support these programs. Budget details are shown in the Houston County Estimated Solid Waste Budget.

Source Separated Organic Materials

Currently, Houston County is not separating organic materials because it is not cost effective before they go into the WTE stream. However, Winona County has received a grant from the Minnesota Pollution Control Agency to complete a feasibility study for an organics processing facility. If such a facility is built during the planning period, Houston County will explore opportunities for organics diversion.

MSW composting facilities (MN Rules 9215.0620)

Due to the close proximity to an already existing waste-to-energy facility the construction of a compost facility for Houston County refuse has been ruled out. For that reason, Houston County does not utilize MSW composting.

Solid Waste Incineration and Energy Recovery (MN Rules 9215.0630)

It is the policy of Houston County that any MMSW and/or other MSW that is not recovered for recycling or re-use be processed at the Excel Energy French Island facility to recover materials and energy. If items are not able to be processed they are to be delivered to the La Crosse County Landfill. This policy has been established in order to comply with Minnesota State law and regulations related to planning and implementing integrated waste management.

Houston County has contracted with La Crosse County to deliver MSW to the French Island facility and the La Crosse County landfill as part of a multi-County partnership agreement.

The WTE Facility is located in the City of La Crosse, WI and began operation in 1987. The facility is owned and operated by Excel Energy and has the ability to process up to 103,000 ton/year of fuel. The fuel for the facility is a 50 percent mixture of wood waste and RDF mix. La Crosse County's contract guarantees the delivery of 74,500 tons of MSW to Excel Energy annually.

In 2003, Excel Energy needed to upgrade the emission control equipment to meet large burner standards as ordered by the United State Environmental Protection Agency. The Excel Energy Facility installed an electrostatic precipitator and also needed to upgrade to a bag house scrubber system. Total cost of the upgrades being approximately 10.9 million dollars. Houston County agreed to pay a portion of the needed environmental upgrade as outlined in our contract agreement with La Crosse County. Houston County

agreed to pay La Crosse County 20 equal payments of $19,204.39 toward this upgrade. The payments will be completed in June of 2023.

As previously stated, the Excel Energy facility accepts waste generated within the region and produces energy (electricity). Details of plant operation, environmental and pollution controls, operational history, monitoring, maintenance, and other details are outlined in the La Crosse County Solid Waste Plan (attached and incorporated by reference).

Houston County, has implemented programs and funding to pull out problem materials, and has negotiated with La Crosse County in providing its citizens with residential and commercial hazardous waste collection and disposal. Details regarding program costs are found in the Houston County Estimated Solid Waste Budget.

MSW land disposal facilities (MN Rules 9215.0620)

It is the policy of Houston County that MMSW and other MSW that is not recovered for recycling, composting, or re-use be processed at the Excel Energy French Island facility to recover materials and energy, MMSW that is not process-able is to be delivered to the La Crosse County Landfill. This policy has been established in order to comply with Minnesota State law and regulations related to planning and implementing integrated waste management.

In 1983 Houston County closed its existing landfill because of ground water contamination. Houston County found a temporary solution for disposing of all MSW in an Iowa landfill. Realizing this was to be short term; Houston County researched and reviewed other options.

Houston County then contracted with La Crosse County to deliver non-processible wastes such as oversized and bulky waste, construction debris, and demolition materials to the La Crosse County Landfill as part of a long standing contract agreement.

As previously stated, the Excel Energy facility accepts waste from Houston County generated within the borders and produces recyclable materials such as, energy (electricity), and residuals, including ash and non-process able waste for secure land disposal. Details of the La Crosse County landfill facilities, operation, environmental and pollution controls, operational history, monitoring, maintenance, and other details are outlined in the La Crosse County Master Land Use Plan (attached and incorporated by reference).

Houston County's problem materials management programs and its public communications together have a goal to segregate and properly manage waste for disposal. This waste poses environmental risks when processed for materials, and energy recovery or managed at a landfill. These are the primary mitigated measures that Houston County can implement to reduce environmental risks. Another mitigated measure is to reduce the amount of MMSW and other non-process able waste streams through the County's and City's sponsored reduction, re-use, yard waste, and recycling programs.

In addition to the County's problem materials programs, Houston County believes that the public health and environmental risks associated with land disposal in La Crosse County is significantly reduced by reducing the total volume of waste requiring disposal via source separation and processing.

La Crosse County has taken significant steps to reduce the potential risks of land disposal at its facilities. It is these efforts and others outlined in the La Crosse County Waste Management Plan that has built the partnership between Houston County and La Crosse County. La Crosse County has demonstrated their commitment to exceed the permitting and operational requirements according to State and Federal law. La Crosse County has acted preemptively to reduce the risk to groundwater resources in the area of the regional landfill. Houston County believes that these actions will reduce the long term financial liabilities that may be incurred by the County, haulers, and waste generators.

Houston County will continue to use the La Crosse County Landfill facilities as its preferred outlet for non-process able waste, residuals and ash. The County has developed and implemented waste assurance strategies that contract appropriate non-processible waste to La Crosse County's Landfill. In 2015 and 2016 Houston County programs diverted approximately 77 % of its waste stream from land disposal. See *The 2018-2019 Recycler.* See the Houston County Estimated Solid Waste Budget for cost details.

Solid waste tire management programs (MN Rule 9215.0650, MN Stat. □ 115A.914, subd. 3)

It is the policy of Houston County that tires be managed separately and properly as per state law and regulations. The County is aware of the particular public health and safety risks associated with improper storage and disposal of waste tires.

Houston County has made extensive efforts in the past to reduce the number of waste tires that are stored throughout the County. A waste tire amnesty program yielded thousands of tires that had escaped proper disposal. Currently residential generators of waste tires can dispose of 4 car tires free and pay a low fee for additional tires. Presently the price charged for tire disposal is determined by tire size.

Tire retailers and service stations have been informed of State rules and regulations regarding waste tires and have their own programs and procedures in place to properly manage waste tires. The MPCA and County Staff have not identified any present illicit tire disposal problems in Houston County.

The County transports waste tires to Auburndale Tire Recycling Co., Auburndale, WI to be processed. Auburndale is a full-service scrap tire recycling facility where rubberized materials are manufactured and used in playgrounds, horse arenas, and landscaping materials or they are processed for fuel. Houston County funds this program through the Solid Waste Household fee charged to each household in the county.

Tire disposal remains a potential problem in rural settings even with proper management in place. The risk of waste tires becoming infested with mosquitoes that can transmit blood borne diseases remains a concern.

Houston County will continue to fund this program as seen in the Houston County Estimated Solid Waste Budget.

Major appliance and electronic devise management (MN Rule 9215.0660)

It is the policy of Houston County to support the State ban on disposal of major appliances and certain electronic devises in MMSW and assist waste generators to manage these items properly.

All of the County's Drop sites are able to accept major appliances and banned electronic devices for proper disposal. In addition, there are disposal outlets, free of charge, located in Houston, Winona, Fillmore, and La Crosse Counties. Most often these outlets are operated by waste haulers or scrap metal recyclers who properly manage items and recover secondary materials from the appliances and electronics. Reported volumes of appliances and electronics come only from County Drop sites since no requirements are in place for others to report the origin, types and quantities of waste that may be managed by retailers, scrap metal recyclers, or waste haulers. Houston County plans to continue to evaluate and implement its problem materials programs including collecting

major appliances and electronics. Houston County will continue to fund this program as seen in the Houston County Estimated Solid Waste Budget.

Used oil and lead-acid and dry cell battery (MN Rule 9215.0670)

It is the policy of Houston County to support the State ban on disposal of used motor oil and certain dry cell battery devises in MMSW and assists waste generators to manage these items properly.

Each of the County's Drop-Off sites accepts dry cell batteries for proper management. The County's HHW event collection program accepts waste oil. Some retailers of batteries and motor oil, service stations and car dealers supplement the County's drop off services by offering disposal services to their customers. In addition, for batteries, there are disposal outlets and redemption fees or credits paid to generators for batteries, located in Houston, Winona, Fillmore, and La Crosse Counties. Most often these outlets are operated by retailers or scrap metal recyclers who properly manage items and recover secondary materials from the batteries. Reported volumes of used oil and batteries come only from County Drop off sites and the Houston County HHW program since no requirements are in place for others to report the origin, types and quantities of waste that may be managed by retailers, scrap metal recyclers, or service stations.

As of August of 2016 Houston County has implemented a recycling program for rechargeable batteries. All five drop sites and the recycling center have labeled boxes for proper battery disposal. This partnership is with Call2Recycle, this organization promotes environmental sustainability by providing a no-cost battery and cellphone collection and recycling program across North America. The Call2Recycle program operates in compliance with the U.S. DOT processes to ensure the safe collection, transport and recycling of all batteries collected.

Houston County plans to continue to implement its problem materials programs including collecting batteries and waste motor oil. See the Houston County Estimated Solid Waste Budget for funding details.

Household hazardous solid waste (HHW) management (MN Rule 9215.0680)

It is the policy of Houston County to give the public accurate information about what HHW is and to provide convenient and cost effective opportunities to dispose of HHW including fluorescent tubes and compact florescent lights.

Houston County conducts three household hazardous waste (HHW) event collections each year in cooperation with La Crosse County. In addition, the County has contracts with La Crosse and Winona County that allow the use of those facilities by Houston County residents for a fee. In this way people have options and information about how to participate. Although the participation rate in Houston County is not as high as similar Counties with permanent drop off HHW facilities, service and participation are adequate in meeting MPCA requirements.

In addition to HHW events in Houston County and drop off options in La Crosse and Winona, Houston County offers special collections for fluorescent tubes and compact fluorescent lights. This event has a goal to remove materials that contain mercury that is extremely toxic and is a hazardous environmental pollutant. Participation in these events is very strong as shown in the summary of problem materials managed by Houston County. This event each year collects anywhere from 8,000 to 10,000 bulbs. Non-residential generators of commercial quantities of florescent lights and waste agricultural pesticides and insecticides are required by state law to segregate and properly manage these wastes. However, only those HHW and fluorescent light materials managed by Houston County are measured because no reporting requirements are in place to measure private activities that divert these wastes.

Houston County's goal is to increase the capture of HHW and fluorescent lights though it's programs and partnerships with Winona and La Crosse Counties. Houston County plans to continue its HHW and fluorescent light collection activities in the next ten years. Houston County will continue to fund these programs as seen in the Houston County Estimated Solid Waste Budget.

Demolition debris management (MN Rule 9215.0690)

Houston County's policy is that mixed Construction and Demolition debris be separated and separately managed from other solid waste, recyclables, and items with toxic and hazardous constituents such as asbestos and liquids. It is also the policy of Houston County that the remaining waste is delivered to the La Crosse landfill facilities in a fashion to allow further sorting and recovery of roofing and wood. Currently, there are no construction and demolition debris landfills in Houston County.

Houston County does allow the disposal of C&D onsite on a case by case basis in accordance with the Houston County Solid Waste Ordinance, State rule, and State statute. In some cases, it may not be necessary to transport large quantities of inert and homogeneous waste materials such as clean brick, mortar, or cement to La Crosse. In

such cases, waste is often re-used in some safe and constructive fashion such as manufacturing of aggregate materials, paving, or in another construction application. Large quantities of inert or homogeneous waste materials are often stock piled in existing permitted rock quarries where is it mixed with existing limestone rock for aggregate materials that meet township and county road specification.

La Crosse County's C&D recovery and disposal system is superior to alternatives that are available to Houston County for three reasons:

1. High standards for environmental controls, exceeding requirements of state and federal law are in place at La Crosse County's facilities. These standards reduce the potential for long term financial liabilities.
2. La Crosse County recovers materials from C&D waste that is properly sorted. These programs reduce public health and environmental risks. At the same time the recovery of these items reduces GHG emissions, energy consumption, and pollution on a life cycle basis.
3. La Crosse County uses revenues from the recovery and disposal of C&D to help finance its overall system, including the direct charges to Houston County to participate in the La Crosse regional system. Therefore it is in the County's financial interest to increase the use of the La Crosse C&D management system.

Notwithstanding the benefits of the La Crosse C&D system, Houston County accepts C&D at the Drop off Sites and subsequently transports C&D to La Crosse. However, generators of C&D are free to choose other alternatives offered by construction firms, waste haulers, and transfer facilities. Disposal is regulated by Houston County at this time; all C&D must go to the La Crosse landfill.

Houston County will continue to send C&D delivered waste brought to the Drop Sites to La Crosse. Houston County contracts with haulers to use the La Crosse system to ensure appropriate waste disposal mechanisms are properly in place.

In addition, Houston County has contracts with the following haulers:

a) Richards Sanitation
b) Two Guys and a Dumpster
c) Harter's Trash
d) Midwest Roll-off
e) Hilltopper
f) Waste Management

These contracts help assist Houston County's Solid Waste Management Ordinance, and keep Houston County current with C&D regulations. Funding details are found in the Houston County Estimated Solid Waste Budget.

Ordinance & licensing (MN Rule 9215.0700)

It is the policy of Houston County to regulate solid waste through its Solid Waste Ordinance. Licensing of waste haulers, waste facilities, and waste generators is in the public's best interest and protects the public's health and the environment.

In December 2010 the Houston County Board of Commissioners after a public hearing adopted the Houston County Solid Waste Ordinance as presented. All cities have developed and adopted their own ordinance to coincide with Houston County's. More information can be found in the attached Solid Waste Ordinance. See also attached the city ordinance, licensed haulers contract and license application.

Houston County believes the Ordinance will increase access to essential information about waste management, clarify licensing and contract requirements, increase recycling, increase materials and energy recovery, and reduce illegal disposal that poses financial liabilities, public health and environmental risks.

Solid waste staffing (MN Rule 9215.0710)

The Houston County Solid Waste program is governed by the County Commissioners in consultation with the public, City officials, Township Officials, and waste management stakeholders. The County board has assigned the Solid Waste Director to be the Department Head for this County activity and to perform the duties of a solid waste administrator/officer. Those duties include Ordinance administration, financial administration, direction of Staff, administration of contracts, publicity, public education, reporting, coordination with other political subdivisions including Cities, Counties, Townships, and States, and all other administrative functions for implementing the County's Solid Waste Program. This position is a full time job.

Assisting the Solid Waste Director are four other full time Staff and several part time staff:

- Office Administrator – clerical, record keeping, public communication, accounting
- Recycling and Drop Off Site Operators – all duties related to site operations
- Part-time Drop Off Site Operators – assistance duties related to site operations

It is anticipated that these staffing arrangements will remain in effect.

Solid waste program funding (MN Rule 9215.0720)

It is the policy of Houston County to use fees, grants, and program revenues as the primary sources of funding its solid waste programs. In this way the costs are allocated equitably to participants. However, in light of the benefits to the public, public health, benefits to the environment including land, water, and air and the potentially high cost to participants the County funds a portion of the cost through other methods. A portion is funded via Houston County's general fund, payments through rebates from La Crosse County, and with grants from the State of Minnesota.

In 2016: Solid Waste & Recycling Budget

Solid Waste Budget	
Solid Waste Revenue	$ 533.869.00
Solid Waste Expenditures	$ 683,399.00
Net Solid Waste Budget	(149,830.00)
Recycling Center Budget	
Grants - SCORE	$ 68,710.00
Revenue	$ 72,150.00
Expenditures	$ 255,674.00
Net County Subsidy	$(114,814.00)

The total County subsidy of the Solid Waste and Recycling programs includes administration and labor at the drop-sites. General revenue funds pay for employee wage and benefits because the employee duties include other tasks unrelated to the centers. The household fee covers the disposal of the problem materials, the operations and maintenance (O&M) of the drop sites; this does not cover the cost of labor.

More information and a detailed breakdown of costs and revenues are outlined in the Houston County Estimated Solid Waste Budget.

Contingency Solid Waste Management System

A key aspect of the plan update is to provide alternative waste management activities to be implemented if the recommended system does not function as planned. In the event of a short-term emergency that requires bypassing the La Crosse resource recovery facilities, the first course of action that Houston County would do is to implement the MSW to landfills associated with the above resource recovery facilities until full service

can be restored. In the event of a major emergency, this could cause serious problems for the County. It is advisable that Houston County looks for and develops a backup system to prevent this or look into the development of County owned facilities to eliminate potential problems.

Local and Regional Planning

Houston County recognizes the need to evaluate and consider solid waste management alternatives including regional solutions for landfill abatement. The County is concerned about the rising cost of waste management, the environmental impacts of land disposal, long-term waste abatement solutions, and achieving waste reduction and recycling goals set by the state. Currently, Houston County is participating in Regional Household Hazardous Waste Program based in Winona County for the proper collection and disposal of HHW. Part of the agreement with La Crosse County is the use of their mobile unit to assist Houston County in their 3 annual HHW collections. Additionally, Houston County is involved in the interstate (Wisconsin) La Crosse County Solid Waste Policy Board which meets to develop cooperative strategies for optimizing integrated solid waste management between the partners involved in the La Crosse County Disposal System.

Houston County believes that the proposed waste management system described in this plan is the most feasible and prudent system available to the County at this time. The County will continue its solid waste management planning. If changes are needed Houston County will submit an amendment to this plan to address proposed substantial changes and improvements to its overall solid waste management system, including regional planning, initiation of greater resources recovery and landfill abatement. Significant changes to the current system will be addressed as needed within the plan amendment following as per 9215.0830.

Houston County plans to update its Comprehensive Solid Waste Management Plan (CSWMP) whenever it is necessary or when it is required by MPCA rules and State Statute. At this time Houston County believes that it is well positioned to make whatever changes to improve operations of its solid waste programs consistent with this plan.

In 2010 Houston County staff with the directive of the Houston County Board set out to update the Houston County Solid Waste Ordinance. With the help of legal counsel, the present ordinance that was adopted requires all haulers doing business in Houston County have a current contract and an up to date license with the county. The contract

requires each hauler to deliver all refuse to the Excel French Island waste-to-energy facility, and all other materials to the La Crosse County landfill.

Plan Review and 10 year update

The Solid Waste Director will lead the process for updating the County Solid Waste Management Plan. The process starts with all updates submitted to the County Board for their preliminary approval. The updated plan will then be presented to City Officials, Township Officials, Stakeholders, and MPCA for their input. Upon completion of review by these various public officials, and Stakeholders the plan goes back to Houston County Board for final consideration and approval.

Development of Numeric Goal/Volume Table (MN Rule 9215.0740)

The Houston County "Goal-Volume Table" is attached to the CSWMP.

Alternatives to Proposed System (MN Rule 9215.0760)

Houston County would consult with the participants in the La Crosse regional solid waste management system to determine what to do next if circumstances were to force a new direction. Houston County would also contact MPCA and neighboring Counties as primary external resources for dealing with contingencies. Prior to entering any new long term commitments, the formulation of a new CSWMP, and consultation with stakeholders within the County would also be critical.

Mitigation of environmental risks (MN Rule 9215.0770)

Previous sections of the CSWMP have covered the Houston Counties effort to reduce the risks related to solid waste management. The Houston County Solid Waste Ordinance can be updated to better deal with burn barrels, illicit disposal, and other potential risks.

Solid waste Facility Siting Program (if needed) (MN Rule 9215.0780)

Houston County has no plans to site new solid waste facilities at this time.

Public participation program (MN Rule 9215.0800)

Houston County's Solid Waste programs have been developed to meet state mandates and contractual agreements with La Crosse County. Also in response to input provided by the public, City officials, Township Officials, County stakeholders, other Counties,

and state Officials. It is outlined in detail in the Historical Summary section of this CSWMP.

The Solid Waste Director is at the center of the ongoing process to optimize the County's Solid Waste programs and planning.

LA CROSSE County Disposal System, Facility Description

1. Background
La Crosse County has a contract with Xcel Energy to supply 74,500 tons of waste per year to the French Island RDF WTE facility. La Crosse County has expressed an interest in extending the current contract to Houston County. The La Crosse County Disposal System offers Counties access to its landfills, which include a MSW, ash monofill, and demolition. In addition to the landfills, La Crosse County operates a petroleum impacted soils remediation program, a yard waste compost site, pallet and clean wood processing, carpet disposal, tire recycling, asbestos disposal, and an asphalt shingle-recycling program.

2. Xcel French Island WASTE-TO-ENERGY Facility
The WTE Facility is located in the City of La Crosse WI, and began operation in 1987. The facility is owned and operated by Xcel Energy and can process up to 103,000 tons/year of fuel. The fuel for the facility is a 50 percent wood waste and 50 percent RDF mix.

La Crosse County's contract with Xcel Energy guarantees the delivery of 74,500 tons of MSW to the facility annually. La Crosse County delivered 57,779 tons in 2000, and contracts with three Wisconsin and two Minnesota counties for approximately 73,000 tons annually. La Crosse County's new negotiated contract with Xcel Energy expires June 30, 2023.

In 1988, the tip fee at the facility was $48/ton. From 1988 to 1993 the tip fee was increased at a rate that was less than the rate of inflation to $55/ton. This slight increase was needed to cover operational costs and a state imposed recycling fee of $3/ton on disposal of residue from a Waste-To-Energy facility (this is equal to approximately 1/ton of MSW on the tip floor). From 2005 thru 2007 the tip fee was $59.00 per ton increasing to $60.00 per ton in 2008. In 2016 the fee is $62.00.

In a rule making action the USEPA ordered Xcel Energy to upgrade the emissions control equipment to meet large burner standards. The Xcel Energy facility utilizes an

electrostatic precipitator and also needed to upgrade to a bag house scrubber system. These equipment upgrade costs are were $10.9 million dollars.

Houston County and other counties under contract with La Crosse County Disposal System Waste-to-Energy program, agreed to pay a portion of the needed environmental upgrade at the French Island Facility. As outlined in the contract Agreement, Houston County has agreed to pay La Crosse County 20 equal payments of $19,204.39 toward this upgrade. La Crosse County developed an incentive plan that would give a $5.00 per ton credit of non-Processible material delivered to the La Crosse County Landfill. Houston County has been receiving this credit since 2001. Every year, La Crosse County and Houston County review the tonnage's delivered to the La Crosse Landfill and at that time, it is determined if Houston County has a credit balance or a deficit. Prior to 2010, when haulers were not under contract, Houston County needed to levy the necessary funding to meet our contractual obligations. Since 2010, a new ordinance has been adopted and which requires contracts with each hauler doing business in Houston County, we now have a credit balance toward our annual fee. The credit balance that Houston County has with La Crosse County is due largely because all haulers in Houston County have signed a contract stating all materials collected have to be hauled to La Crosse County. Process-able materials must go to the incinerator; all non-Processible materials must go to the landfill site. Without that contract in place, it would be difficult for the County to meet their obligation with La Crosse County.

3. La Crosse County Land Disposal Facilities
La Crosse County operates a sanitary landfill/ash monofill (license number 3253) and demolition landfill (license numbers 03846). The three facilities are located on a 300-acre site just northeast of the City of La Crosse (3202 Berlin Dr., La Crosse, WI 54603).

The original La Crosse County Sanitary Landfill began operating in November 1976 and closed on December 30, 1991. The current landfill opened, December 31, 1991. The current sanitary landfill footprint has capacity for another 20-30 years at the current rate. The non Processible waste that is unburnable is taken to the landfill as unburned residual.

The La Crosse County Sanitary Landfill and ash monofill are co-located on the site. Phases 1 and 2 of the Sanitary Landfill/ash monofill landfill have three liners; one synthetic geo-membrane liner and two liners compacted clay. Phases 3 and 4 meet Subtitle D standard that uses a double liner leachate collection system. Phases V and VI will be constructed to Subtitle D standards. The landfill also has a leachate extraction and treatment system. La Crosse County took the necessary steps in capturing methane

gas so that it could be processed and sold to Gundersen Health Systems that is located near the landfill.

The original Sanitary Landfill began operation on November 1976 and closed on December 30, 1991, that is when the current landfill opened with a footprint of 25.00 acres. In 2008 to address ground water concerns associated with the old unlined landfill La Crosse County reviewed various options. The final decision was made to excavate waste from the old landfill area and then place all waste in the new lined cells and develop new lined cells, on the area the old landfill had been. This is anticipated to not only resolve groundwater concerns, but also provide additional landfill capacity for another 20-30 years into the future.

4. Service Area
La Crosse County presently has contracts for solid waste services with the municipalities located in La Crosse, Buffalo, and parts of Trempealeau and Jackson counties in WI and Houston and part of Wabasha counties in Minnesota.

C. La Crosse County Negotiations Summary

Background

In the summer of 2000 Houston County was notified by La Crosse County that the Environmental Protection Agency (EPA) had reclassified the Northern States Power (NSP) RDF Facility on French Island from a small burner to a large burner and therefore subject to more stringent air quality standards. As a result of the reclassification, La Crosse County informed Houston County that the NSP RDF facility was no longer in compliance with EPA air quality standards for large incinerators. La Crosse County indicated to Houston County that they had until December 31, 2001 to bring the incinerator into compliance with the air quality standards for larger burners. At this time, La Crosse County stated it was their intent to begin negotiations with all of the outlying counties, that supplied waste to the incinerator, to extend the current contract that expires in June of 2008 for an additional fifteen (15 years).

In the spring of 2001, Houston County began negotiating with La Crosse County/NSP (now Xcel Energy) for an extension to the existing contract for the incineration of refuse generated in Houston County. At the same time, Houston County contacted Wabasha County to see if they would be interested in sharing the cost of hiring an attorney to assist them in negotiating a long term contract extension (mutually beneficial as both Minnesota Counties deliver their waste to the Xcel RDF Facility) with La Crosse

County. In October of 2001, Wabasha County agreed to split the cost of hiring Mr. Dick Nowlin, attorney with the firm of Lindquist & Vennum. Mr. Nowlin was the consulting attorney for both Houston and Wabasha County when the original twenty- (20) year contract for the use of the incinerator and landfill was negotiated in 1988.

In October of 2001 Houston County was advised by Brian Tippetts, La Crosse County Solid Waste Administrator, that the contract between Xcel and La Crosse County would be completed shortly and that he would like to set up negotiations with the outlying counties who deliver solid waste to La Crosse County. Houston County responded that they would need time for Attorney Nowlin to review the documents.

During December 2001 and January 2002, Houston and Wabasha Counties began discussions with Attorney Nowlin on the current contract and revisions that both counties would like to see incorporated in the contract extension.

In January 2002, Houston and Wabasha Counties and Attorney Nowlin met with Brian Tippetts, La Crosse County Solid Waste Administrator, and Dave Langen, La Crosse Corporate Counsel to begin discussion of the contract revisions. Houston County and Wabasha County were informed by La Crosse County that in order to extend the current contract, both counties would be required to pay their portion of the upfront costs of 3.4 million dollars incurred to bring the Xcel RFD incinerator into compliance with the EPA Air Quality Standards. Houston County was told their share was approximately $240,000. La Crosse County indicated that they would take these 3.4 million dollars from their landfill surplus fund; however, all counties using the incinerator would be required to reimburse La Crosse County for their assessed share of the 3.4 million dollars based on the amount of refuse that each county delivered to the RDF facility. Houston County delivered approximately 7% of the total burnable waste for a cost of $240,000 to be paid to La Crosse County.

Issues

In March of 2002 Attorney Nowlin submitted a list of questions, on behalf of Houston and Wabasha Counties, to La Crosse County regarding La Crosse Landfill Finances, Landfill Operations and Landfill improvements. Following are examples of the types of questions asked:

a. Is the La Crosse County Landfill Fund separate from the Long Term Care and Closure Fund for the La Crosse County Landfill?

b. How was the Landfill Fund Balance of $9 million generated (sources) and over what time?

c. Is there any way to calculate/estimate the contribution to the Landfill Fund attributable to waste from Houston/Wabasha, and if so what is the approximate amount attributable to Houston/Wabasha waste.

d. How did La Crosse County and/or Xcel arrive at the $11 million cost as a price tag for the air quality emissions control improvements to the French Island Plant?

e. Has a separate cost allocation been made for costs attributable to wood waste combustion and those attributable to RDF facility combustion? Is it possible to do such an allocation?

In March of 2002 Houston County hired Dan O'Neill and Kirk Rosenberger, financial consultants, to review the La Crosse County financing and accounting protocol to provide insight into the La Crosse County Solid Waste Disposal System.

In April 2002 Wabasha County notified Houston County that they had plans to sign a 15 year extension with La Crosse County. On April 12, 2005, Houston County signed an Amendment to the existing Solid Waste Disposal Contract with La Crosse County (which was to terminate on June 30, 2008) thereby extending the contract to June 30, 2023.

In the summer of 2002 Houston County began meeting with the solid waste haulers licensed to do business in Houston County, for their input in handling solid waste and recyclables. All input received was being reviewed by Houston County. There were suggestions made that Houston County look at all possible alternatives from recycling to other solid waste disposal alternatives.

As a result of the existing integrated Solid Waste and Recycling Policies and Programs, Houston County is able to achieve the following benefits:

- Recycling rate of 44% (including source reduction and yard waste credits)
- Increased convenience for residents.
- Significant decrease in dumping in ditches, roadsides.
- Less litter – County is more attractive for tourism.
- Revenue earned through aluminum buy-back program.
- Greater County control of system.

- Level playing field for all haulers.
- Low cost to County.

PAST POLICIES AND PROGRAM IMPLEMENTATION

Household Hazardous Waste

In June of 1992 Houston County signed a contract with Winona County as our Regional Sponsor for Household Hazardous Waste (HHW) Management. This contract, which runs through the year 2017, allows Houston County residents to bring their hazardous wastes to the permanent disposal center located in Winona County.

On January 23, 2018 a new contract between Houston County and Winona County so residents may continue to use the Winona County HHW facility and also for Winona County to continue being our Regional Sponsor. Houston County does an extensive amount of public education on HHW. In 2007 Winona and Houston County were faced with major flooding and La Crosse County offered their mobile units to assist Houston County with their collection and disposal of household hazardous waste. The benefits were recognized at that time, of having La Crosse County bring their mobile unit into Houston County. Houston County negotiated with La Crosse County HHW Facility to begin offing three schedule collections in the county per year. Another benefit of the La Crosse County Hazardous Waste Facility is its closer for residents to use and also available year around.

Houston County, in cooperation with local rural electrical suppliers, has implemented an annual one-day special collection of fluorescent/HID light tubes. Bulbs are collected at each of our five supervised drop-off sites. Volunteers, who receive special training for this event, staff the collection. Houston County utilizes the state bid to properly dispose of all fluorescent light bulbs collected. Bulbs are boxed, transported and shipped to the recycler.

General Policy and Goals

Houston County has negotiated with Winona County as being our Regional Sponsor while also utilizing the La Crosse County Household Hazardous Waste Facility and mobile units. Houston County recognizes the importance of disposing of HHW in an environmentally sound manner. The County has set the goal of being able to provide the residents of the County with opportunities to dispose of this material in a manner which

will not impair air quality, contaminate the soil, surface water or ground water. The County also recognizes the importance of education in the proper disposal of HHW and is committed to providing this education to all the citizens of Houston County.

Specific Programs to be Developed

Houston County currently has a contract with Winona County for the disposal of HHW. Both Houston and Winona County are looking for ways to increase our participation in this contract.

Paint Stewardship was passed on a state wide basis on November of 2014. In the spring of 2017, Houston County was able to participate in the Paint Care Program. With the coordination between all three counties (Houston, Winona, and La Crosse), Houston County residents now have free disposal of their paints. The first two collections of 2017 yielded over 3,000 pounds of paint. Good paint is removed from disposal and is being offered by both Winona County and La Crosse County in their paint exchange programs.

Houston County's also participates in the waste pesticide/herbicide program that is offered by the Minnesota Department of Agriculture. There is no fee charged for this material when collected. There are three collection dates per year set up in conjunction with the La Crosse County Mobile unit for collection of Hazardous waste.

In addition Houston County will continue to review and monitor our contracts with both Winona and La Crosse Counties.

Responsible Persons and Required Staff Time.

The Environmental Services Director is the lead person for coordinating and scheduling all collections and contracts dealing with household hazardous waste.

Estimated Program Budget, Schedule and Funding

Under the terms of the contract with Winona County, Houston County receives a staff stipend for operating the Houston County Program. The cost of operating the HHW program is included in the operating budget of the recycling center.

Staff (Administration)	$ 3,017.00
Postage, telephone, advertising	$ 955.00
Printing of special brochures	$ 1,200.00
Disposal of HHW	$ 3,500.00
Total	$ 8,672.00

Public Education

Houston County continues to carry on an active/aggressive public advertising campaign. The purpose of the education program is to assist the general public on identification, reduction and proper handling of HHW and to establish an information service to answer the public's questions and provide technical assistance on proper management of HHW. Ways to increase awareness of the HHW issues include public brochures, classroom education, utilizing local media and cooperation with solid waste haulers and retailers. Houston County feels public education is very important because it has the potential to decrease disposal costs. If a hazardous waste can be safely disposed of at home or if it can be reused or recycled, it reduces the cost of the program.

The Houston County Public Education Program Includes:

Training all staff and volunteers associated with the HHW Program in accordance with MPCA guidelines.

- A designated telephone number for the HHW coordinator. This number is available during normal business (answering machine is available 24 hours a day) hours and is staffed by trained personnel. The MPCA provides telephone training and a Telephone Advice Guidance Manual.

- Callers are first encouraged to donate the item to organizations, etc. that could make use of it. If this is not feasible, callers are instructed how to safely dispose of the item (i.e. drying paint by layer).

- Houston County submits annual reports to Winona County outlining our activities/expenditures annually. Activities include public and classroom presentations on HHW; newspaper columns/advertising; preparation and distribution of brochures; training seminars, etc.

Waste Minimization Activities

Houston County shall encourage the local exchange of used products as follows:

An alternative to disposal of waste is offered through the telephone advice system whereby the staff directs callers to individuals, organizations and businesses (i.e. schools, community theater groups, parade organizers for community celebrations) that are able and willing to use unwanted paints, thinners which the caller desires to discard. This method has proved very successful in reducing the amount of HHW generated in Houston County.

Environmental Issues

The following section is an excerpt from our 1991 Solid Waste Management Plan Update.
The motivating factors behind the County's interests in improving solid waste management are environmental concerns. Currently there are no landfills permitted in Houston County. Houston County's waste is processed in Wisconsin. Because a new or expanded landfill is needed, and because of the emerging cooperative efforts of Houston, on April 12, 2005, Houston County signed an Amendment to the existing Solid Waste Disposal Contract with La Crosse County which was to terminate on June 30, 2008) extending it to June 30, 2023.

The importance of communication between county government, city and township government and the public sector is given priority by the Environmental Services Department. The Environmental Service Director seeks input, on a regular basis, from the Houston County Board of Commissioners before implementing and/or altering any supervised drop-off site policies. If and when county board approval is granted the changes/additions/deletions are then presented to each city and township for their approval.

The Houston County Environmental Services Director maintains communications with the cities and townships to keep them informed of solid waste and recycling activities. Every year the director attends city council meetings and the Annual Township Association Meeting to present a detailed report of the revenue and expenditures of the supervised drop-off sites. At this same meeting, the Environmental Services Director reviews any new programs or changes in service and/or fees to be implemented during the coming year.

Each year the Environmental Service Office reviews with each city and township, permits for any new homes or multi-family apartments, etc. built or homes that may have been demolished during the year. This count is either added to or deducted from their quarterly household billing fees for the supervised drop-off sites for the coming year. Because each city, not the county, is responsible for permits within their municipality, the city is asked to provide this information to the Environmental Services Office for adjustments to their quarterly household billing fees for the supervised drop-off sites for the coming year.

The Environmental Service Director has assisted each city in developing a Solid Waste Ordinance for their municipality. The Director is also responsible for providing assistance to cities and townships, in preparing bid specifications and contracts, etc. for collection of MSW within their jurisdiction, to insure that all MSW generated in Houston County is delivered to the XCEL Energy French Island RDF Facility in La Crosse, Wisconsin, as provided for in the terms of the Solid Waste Disposal Contract between La Crosse County and Houston County. The contracts must also include provisions for the pickup, handling, and processing within their municipality.

In addition the Environmental Service Director is also available, at any time during the year, to attend any city or township meeting to answer any questions or provide assistance with any phase of solid waste or recycling.

The Environmental Service Director educates the public by preparation of informational brochures covering the supervised drop-off sites, composting, household hazardous waste and other solid waste and recycling program and issues. These brochures and notices of coming events are sent periodically to each city and township. The brochures are also distributed county wide via county newspapers and posted in libraries. All special collections are advertised in county newspapers.

The Environmental Service Department welcomes comments from all citizens, cities and township officials and from the general public as to ideas on what can be done to improve the supervised drop-off sites service. In 2005, in response to input from all sectors of the county, the Houston County Board agreed to expand the weekday hours of operation at the drop-off sites from 2:00 to 7:00 p.m. on Mondays to 10:00 a.m. to 6:00 p.m. one day per week at each site. The Saturday hours of 8:00 a.m. to 3:00 were not changed.

In the early 1990's when the county switched to a bag system for municipal solid waste (MSW) collection, it became apparent that the solid waste system needed to expand to

supervised drop-off collection sites to meet the needs of the entire county who did not have curbside collection of MSW available to them and to minimize or eliminate roadside dumping of what is commonly referred to as problem materials. The plan was to develop centralized collections sites in or near the five major cities in the county. Each site would have bins for the collection of MSW, demolition materials, large household items, tires, appliances and recyclables. In 2005 bins were added for the collection of E-waste. E-Waste disposal was beginning to be a problem. Staff recognized this issue and found a disposal company and paid for addressing this portion of the waste stream by adjusting the household fee to pay disposal of household waste. Businesses are encouraged to call Winona or La Crosse County for their HHW disposal needs.

Houston County took the responsibility for locating each site and the construction of a small insulated office structure. The county also agreed to provide funding for labor to staff the sites. It was agreed by each city and township that they would pay a quarterly assessment fee, based on their number of households in their jurisdiction, for their household residents to use these sites at no charge, for disposal of problem materials such as appliances, tires and E-waste. Households, from those rural areas, not having curbside collection, would pay on a per bag fee for MSW. Fees for demolition materials such as sheetrock, insulation, shingles, etc. would be based on a cubic yard fee.

All Houston County businesses are allowed to use the drop-off sites; however, because they are not assessed a fee like households, they are charged for the disposal of all items except recyclables.

All assessments and fees are reviewed annually and subject to adjustment based on disposal costs incurred by the county. The monthly Household fee rates were increased in 2005 to cover the cost of E-waste collection, processing and transportation. As of 2018 the Household fee rates are set at $3.50 per household.

September 25, 2018

Attached to the 10-year Solid Waste Management Plan are the following exhibits that can be reviewed at the Houston County Environmental Services Office located at the Historic Courthouse, Room 209, Caledonia, MN 55921.

1) Houston County Solid Waste Ordinance
2) Haulers
3) Budgets
4) La Crosse County Solid Waste Plan
5) City's Solid Waste Ordinance
6) La Crosse County Annual Report 2016
7) La Crosse County Landfill Master Plan
8) La Crosse County Master Land Use Plan
9) Houston County Solid Waste Agreements
10) La Crosse County Solid Waste Contract

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	2013		2014		2015		2016		2017		Total	
Management Method	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Total	Total %
Recycling	3,209	25.58%	3,866	30.44%	3,780	27.92%	3,730	27.20%	3,945	38.02%	18,530	29.47%
Organics	0	0.00%	813	6.40%	820	6.06%	919	6.70%	825	7.95%	3,377	5.37%
Total Recycling	3,209	25.58%	4,679	36.84%	4,600	33.98%	4,649	33.90%	4,770	45.97%	21,907	34.84%
Resource Recovery	6,717	53.54%	5,815	45.79%	6,651	49.12%	7,030	51.27%	4,376	42.17%	30,589	48.65%
Landfill	2,452	19.54%	2,038	16.05%	2,120	15.66%	1,941	14.16%	1,138	10.97%	9,689	15.41%
On-site	168	1.34%	168	1.32%	168	1.24%	92	0.67%	92	0.89%	688	1.09%
Total MSW	9,337	74.42%	8,021	63.16%	8,939	66.02%	9,063	66.10%	5,606	54.03%	40,966	65.16%
Total MMSW	12,546	100.00 %	12,700	100.00 %	13,539	100.00 %	13,712	100.00 %	10,376	100.00 %	62,873	100.00 %

Houston County Estimated Solid Waste Budget 2018-2027*

	Number of households=		8,002												
	Inflation Rate=		1%				5 Year Total						5 Year Total	10 Year Total
Total MSW Tonnage Projections:	10,376						-						-	-
(from Goal-Volume Table)	*Base Year*													
Expenditures	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**5 Year Total**	**2023**	**2024**	**2025**	**2026**	**2027**	**5 Year Total**	**10 Year Total**
SW/Recycling Admin and Drop Site Labor	429,296	429,296	433,589	437,925	442,304	446,727	2,189,841	451,194	455,706	460,263	464,866	469,515	2,301,545	**4,491,386**
Recycling:														
Processing and Redemption Fees	82,500	82,500	83,325	84,158	85,000	85,850	420,833	86,708	87,575	88,451	89,336	90,229	442,300	**863,133**
Promotion and Education	2,200	2,200	2,222	2,244	2,267	2,289	11,222	2,312	2,335	2,359	2,382	2,406	11,795	**23,017**
Other Operating Expenses	69,900	69,900	70,599	71,305	72,018	72,738	356,560	73,466	74,200	74,942	75,692	76,449	374,748	**731,309**
Recycling Total	*154,600*	154,600	*156,146*	*157,707*	*159,285*	*160,877*	*788,615*	*162,486*	*164,111*	*165,752*	*167,410*	*169,084*	*828,843*	***1,617,458***
Household Hazardous Waste	3,000	3,000	3,030	3,060	3,091	3,122	15,303	3,153	3,185	3,216	3,249	3,281	16,084	**31,387**
Drop Site Operation:														
Problem Material Disposal	236,500	236,500	238,865	241,254	243,666	246,103	1,206,388	248,564	251,050	253,560	256,096	258,657	1,267,926	**2,474,313**
C&D Disposal	50,000	50,000	50,500	51,005	51,515	52,030	255,050	52,551	53,076	53,607	54,143	54,684	268,060	**523,111**
MMSW Disposal	61,850	61,850	62,469	63,093	63,724	64,361	315,497	65,005	65,655	66,312	66,975	67,644	331,591	**647,088**
Other Operating Costs	36,025	36,025	36,385	36,749	37,117	37,488	183,764	37,863	38,241	38,624	39,010	39,400	193,138	**376,901**
Drop Site Total	*384,375*	384,375	*388,219*	*392,101*	*396,022*	*399,982*	*1,960,699*	*403,982*	*408,022*	*412,102*	*416,223*	*420,385*	*2,060,714*	***4,021,413***
Total Program Cost:	**971,271**	**971,271**	**980,984**	**990,794**	**1,000,701**	**1,010,708**	**4,954,458**	**1,020,816**	**1,031,024**	**1,041,334**	**1,051,747**	**1,062,265**	**5,207,185**	**10,161,644**
Gross cost per HH per year:	121	121	123	124	125	126	619	128	129	130	131	133	651	**1,270**
Gross cost per ton MSW generated	94	94	95	95	96	97	477	98	99	100	101	102	502	**979**
Revenues														
SCORE Grant	69,692	69,692	69,692	69,692	69,692	69,692	348,460	69,692	69,692	69,692	69,692	69,692	348,460	**696,920**
HHW Grant	8,000	8,000	8,000	8,000	8,000	8,000	40,000	8,000	8,000	8,000	8,000	8,000	40,000	**80,000**
Disposal Fees	177,200	177,200	178,972	180,762	182,569	184,395	903,898	186,239	188,101	189,982	191,882	193,801	950,006	**1,853,904**
Material Sales	80,300	80,300	81,103	81,914	82,733	83,561	409,611	84,396	85,240	86,092	86,953	87,823	430,505	**840,116**
Miscellaneous	10,150	10,150	10,252	10,354	10,458	10,562	51,775	10,668	10,774	10,882	10,991	11,101	54,416	**106,191**
SW Assessment	366,500	366,500	370,165	373,867	377,605	381,381	1,869,518	385,195	389,047	392,938	396,867	400,836	1,964,883	**3,834,401**
General Revenue	259,429	259,429	262,800	266,205	269,644	273,117	1,331,196	276,626	280,169	283,747	287,362	291,012	**1,418,916**	**2,750,112**
Total Program Revenues	**971,271**	**971,271**	**980,984**	**990,794**	**1,000,701**	**1,010,708**	**4,954,458**	**1,020,816**	**1,031,024**	**1,041,334**	**1,051,747**	**1,062,265**	**5,207,185**	**10,161,644**
Net Budget	*0*	0	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	***0***

*This budget is not binding. The Board sets the budget annually. One percent inflation has been figured into this budget and will need to be revised as needed.