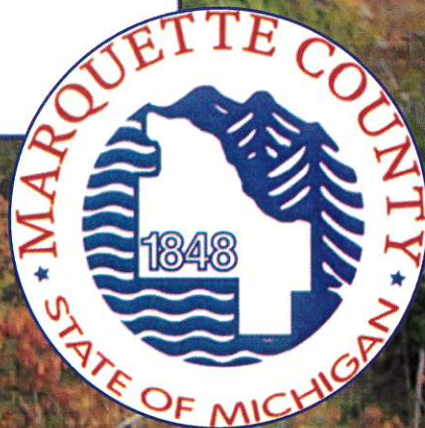
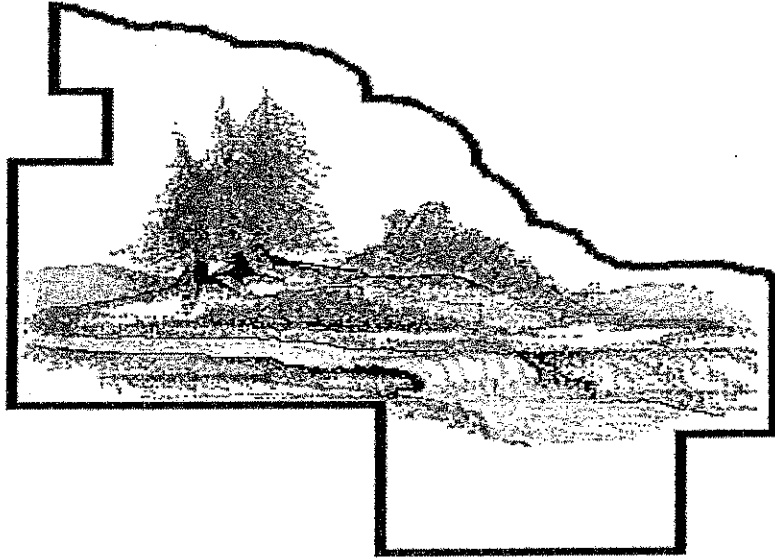


# 2017 Annual Report of the Marquette County Solid Waste Management Authority



# MARQUETTE COUNTY SOLID WASTE MANAGEMENT AUTHORITY



## Mission Statement

*The Authority is committed to the best management of the county's solid waste through education, recycling, and proper disposal in order to protect the environment. The Marquette County Solid Waste Management Authority shall set solid waste management policy and solid waste system implementation in consultation with the Marquette County Board of Commissioners and the Marquette County Planning Commission.*

## Summary

*The Marquette County Solid Waste Management Authority (Landfill) is a state permitted facility that accepts and processes the county's non-hazardous solid waste. In addition, we process and market recycling commodities. We strive to provide services in a cost effective and safe manner. We are diligent in providing a safe and productive work environment. We encourage all staff members to develop to their full potential. We advocate partnerships with our constituent municipalities. The site has a projected capacity of 50+ years.*

**MARQUETTE COUNTY SOLID WASTE MANAGEMENT  
AUTHORITY  
2017  
BOARD OF TRUSTEES,  
EXECUTIVE DIRECTOR  
&  
AUTHORITY STAFF**

Board of Trustees

Randall Yelle, Chairperson  
Dennis Honch, Vice-Chair  
Amy Manning, Treasurer  
Deborah Pellow, Secretary  
Brett Schwenke  
Carr Baldwin  
Joseph Minelli

Appointed by

Sands Township  
Board of Trustees  
City of Marquette  
Marquette County  
City of Marquette  
Marquette County  
Marquette County

Executive Director

Bradley A. Austin

Authority Staff

Finance/Benefits Director

Executive Assistant

Scale Attendant

Operations Lead

Operator III

Operator III

Operator I

Operator I

Mobile Mechanic Lead

Mobile Mechanic III

Mobile Mechanic I

Building and Facilities Lead

Building and Facilities I

Waste Water Lead

Laborer

Laborer

Laborer

Laborer

Sue Eggleston

Amy Stakvel

Nicole Frankovich

Josh Wales

Bob Holmes

Bobby Wales

Mike Larson

Wes Lawrence

Kyle Mackey

Ben Koepp

Dan Vrieland

John Anderson

Brian Schuhmacher

Joe Nowicki

Josh Hansen

Doug Quayle

Chris Lawry

Nick Bertucci

## THE AUTHORITY

### **Origin**

The Authority was established in 1988. At that time, unlicensed and unlined landfills dominated the Upper Peninsula. State efforts to close these landfills prompted local communities to cooperatively develop state of the art waste management systems. All of Marquette County's 23 constituent municipalities are now members of the Authority. The Authority operates under terms specified in an *Intergovernmental Agreement* its bylaws, and articles of incorporation. The landfill opened for business in late December 1989 and a total of 1,601,881.81 tons of waste has been placed in the landfill through December 31, 2017.

### **Board of Trustees**

A Board of Trustees governs the Authority. The Board is comprised of seven members. Appointments to the Authority are made by: the Marquette County Board of Commissioners (3), City of Marquette (2), Sands Township (1), and the Board of Trustees (1)-must be a resident of the City of Marquette. Board members have strong backgrounds in engineering, business, education and government. The Board meets once a month.

Past members of the Board of Trustees are as follows:

Earl Yelle	Ed Kinkella	Dawson Carriere
Joe Constance	Loretta Acocks	Tom Knauss
Gary Walker	Robert Clark	George Collins
Tom Griffith	James Kizer	Leonard Parker
Dave Kallio	Donald Wickstrom	Michael Twohey
Edward J. Keto	L. Stan Walker	William Gordon
Donald Potvin	James Hartwig	Ivan Fende
Judith Mattord	Robert Berube II	Rickey Wilson
Gail Griffith	Richard Hendricksen	John Marshall
Sam Elder	Leighton Carlisle III	Rob Schmeling II
Larry Arsenault	Fred Benzie	Jorma Lankinen

## **Budget and Finance**

The overall financial health of the Authority has vastly improved and is stable. Currently, the Authority has no outstanding debt. The tipping fee was increased by \$2.00 per ton effective July 1, 2017.

In December 2015, the Authority implemented a 10 year financial plan in order to finance future landfill construction and equipment needs. The tipping fees will increase by \$2.00 per ton effective July 1, 2018. A 2% per ton increase is planned on July 1 for years 2019 through 2025. The ten year tipping fee rate plan will be evaluated annually by the board.

In FY 2016-2017, the Authority did have an operating income loss of (\$87,893.00) due to the following circumstances:

- Increased health care costs (\$21,500.00)
- MERS pension funding (\$41,000.00)
- Expensed a facility equipment upgrade (baler rebuild \$53,500.00)
- Increased contracted service fees (\$12,000.00)

## **Highlights for 2017**

- Implemented a long term funding plan for MERS Defined Benefit Retirement Program.
- Maintained site compliance. Passed all MDEQ quarterly inspections.
- Obtained MDEQ construction permit.
- Obtained MDEQ landfill license.
- Obtained MDEQ wetland conservation easement.
- Clarified future landfill gas requirements.
- Collectively worked with MDEQ to rectify the landfill Cell 0A-0B overfill issue. Completed 2.9 acres of the project in 2017.
- Invested in and executed several on-site projects that improved operational efficiency and safety.
- Identified the equipment needs of the Authority. Purchased new equipment in order to increase operational efficiency and improve safety.
- Increased participation in the County Dual Stream Recycling Program, adding 1 additional municipality to the program.

- Participated in the Marquette Area Schools STEM day event; distributed recycling outreach material, and educated elementary students on the importance of recycling.
- Conducted several recycling site tours with NMU students; emphasizing the importance of recycling and how it effects our county landfill.
- Increased safety awareness through a creative safety training program; focused on continuous risk assessment of employee work areas.

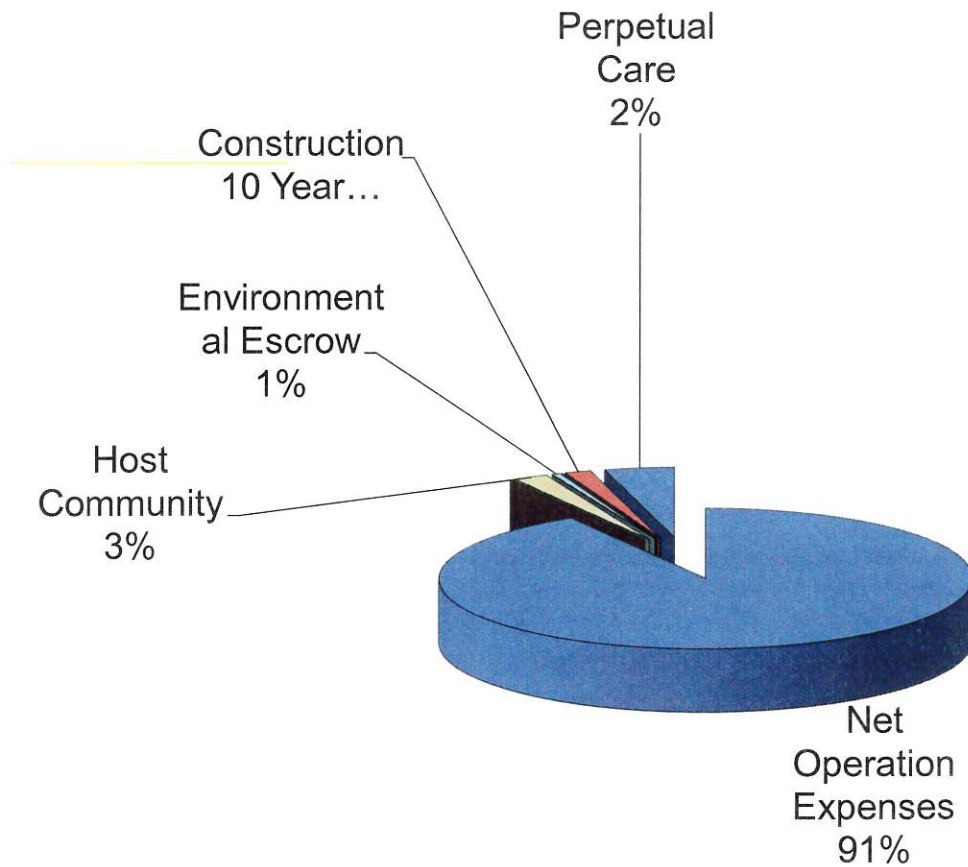
Budgeted FY 2017-2018 tipping fees are presented in Table 1.

TABLE 1: TIPPING FEE BUDGET FY 2017-2018

<b>Tipping Fee Components</b>	<b>Budget</b>	<b>Cost/ Ton</b>
Net Operation Expenses	<b>\$2,610,000</b>	<b>\$43.50</b>
Host Community Fee	<b>\$60,000</b>	<b>\$1.00</b>
Environmental Escrow Fund	<b>\$15,000</b>	<b>\$0.25</b>
**Perpetual Care Fund	<b>\$45,000</b>	<b>\$0.75</b>
Construction 10 year Plan	<b>\$120,000</b>	<b>\$2.00</b>
Total:	<b>\$2,850,000</b>	<b>\$47.50</b>

Based on 5 year average of 60,000 tons

\*\*Will go into 5 year capital until needed for perpetual care





- Annual tonnage, fees, special/surcharges and amounts of contaminated soils from each user municipality are presented in Table 2.

**TABLE 2. 2017 TONNAGE, REVENUES & CONTAMINATED SOIL BY MUNICIPALITY**

Municipality	Tonnage	\$Fee	\$Special/ Surcharge
*City of Marquette	28,251.11	\$1,314,027.27	\$59,075.19
City of Negaunee	2,930.31	\$136,886.65	\$1,884.53
*City of Ishpeming	6,233.38	\$291,662.82	\$3,990.02
Champion Township	6.23	\$291.24	\$0.00
*Chocolay Township	2,662.23	\$124,833.47	\$630.00
Ely Township	38.29	\$291.24	\$0.00
Ewing Township	47.10	\$2,188.31	\$0.00
Forsyth Township	4,589.19	\$214,210.45	\$3,375.00
Humboldt Township	188.29	\$8,764.86	\$1,592.00
Ishpeming Township	512.78	\$23,945.93	\$185.00
Marquette Township	3,249.01	\$151,335.59	\$1,045.00
Michigamme Township	2,176.15	\$101,263.56	\$900.00
Negaunee Township	2,785.41	\$130,434.94	\$2,261.86
Powell Township	549.54	\$25,540.64	\$200.00
Republic Township	545.62	\$25,459.62	\$10.00
Richmond Township	566.94	\$26,509.67	\$575.00
Sands Township	1,277.95	\$59,674.99	\$135.00
Skandia Township	164.99	\$7,843.54	\$100.00
Skandia/West Branch	478.68	\$22,268.33	\$100.00
*Tilden Township	2,099.28	\$98,659.58	\$10,189.50
Turin Township	85.42	\$3,982.47	\$0.00
Wells Township	32.99	\$1,568.97	\$200.00
West Branch Township	1,111.06	\$52,540.04	\$1,345.00
*West Transfer Station	3,146.75	\$146,457.03	\$285.00
Marquette County Road Commission	7.63	\$368.76	\$0.00
KI Conversion Authority	46.95	\$2,230.14	\$0.00
<b>TOTAL:</b>	<b>63,784.08</b>	<b>\$2,974,744.03</b>	<b>\$87,542.10</b>

\*Municipality's totals include another municipality(s)' tonnage

- The tonnage of the various municipalities is compared graphically in Figure 1. The combined tonnage from Waste Management, City of Marquette, and City of Ishpeming made up 65% of total tonnage during 2017.

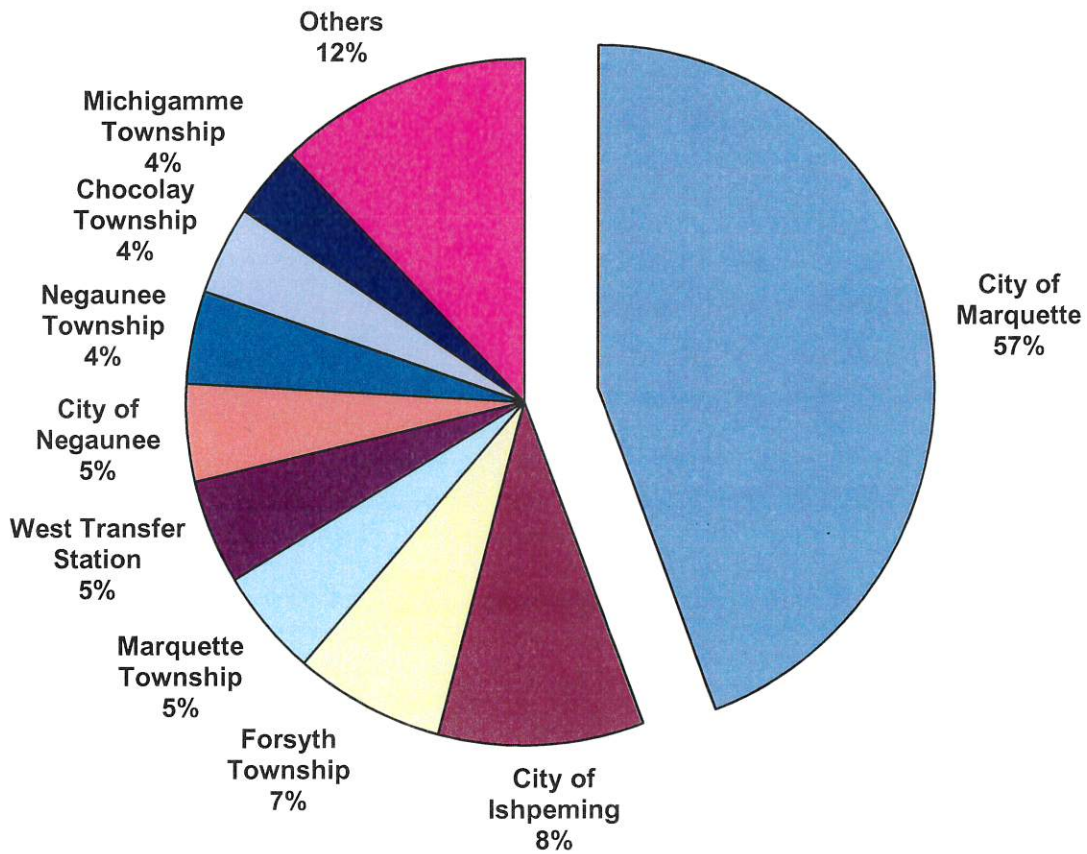


FIGURE 1. 2017 MUNICIPALITY TONNAGE PRODUCED

The Authority has several dedicated accounts that will be allocated for future expenses, ensure adequate funding in case of an emergency, and provide economic and environmental stability to the organization. Some of these funds are required by statute. Year-end fund balances in these accounts for 2016 and 2017 are presented in Table 3.

**TABLE 3. AUTHORITY FUND BALANCES YEAR END 2016 and 2017**

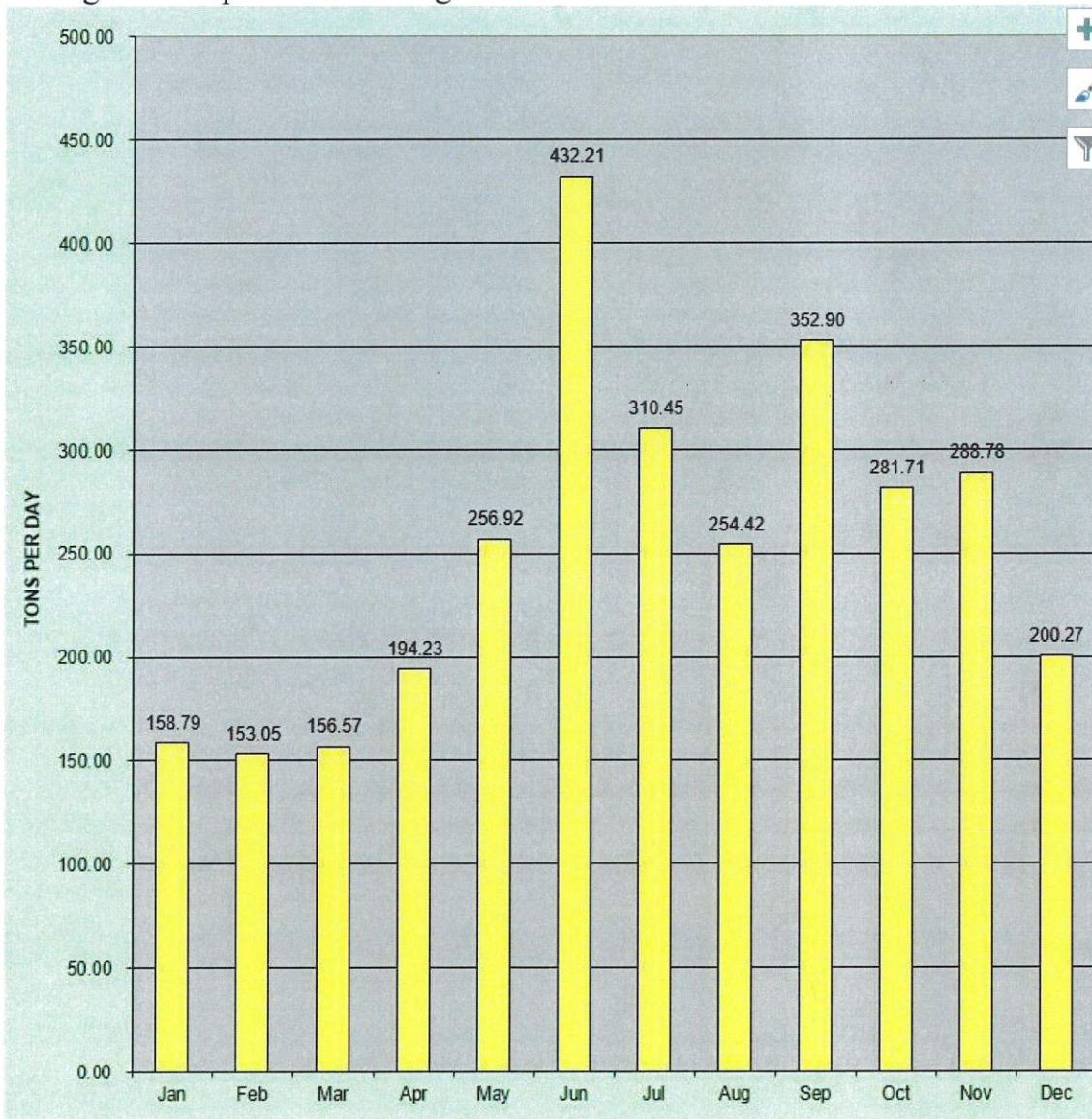
<b>Fund</b>	<b>December 2016 Balance</b>	<b>December 2017 Balance</b>
Construction Sinking	Included in capital outlay	Included in capital outlay
General Cash Account	\$1,112,363	\$799,260
Equipment Replacement	Included in capital outlay	Included in capital outlay
Contaminated Soil	\$0	\$0
*Perpetual Care	\$2,946,283	\$2,991,329
Environmental Escrow	\$621,993	\$629,432
Household Hazardous Waste	\$40,000	\$40,000
Capital Outlay	\$2,284,927	\$2,411,079
Sick Accrual	\$0	\$0
Host Community	\$35,533	\$19,077
Payroll Checking Account	\$32,258	\$26,149
Petty Cash	\$200	\$200
Recycling (infrastructure)	\$75,000	\$75,000
Total:	\$7,148,557	\$6,991,526

\*State mandated fund in restricted trust.

## OPERATIONS

### Tonnage

A total of 73,679.66 tons of Type II and III waste was disposed and processed at the facility during Fiscal Year 2016-17. During calendar year 2017, a total of 63,784.08 tons of Type II and III waste was land-filled. The most tonnage received on any single day occurred on September 19, 2017 with 739.52 tons land-filled. The average daily tonnage for 2017 was 253.11 tons versus 307.98 in 2016. Fifty-four percent of the material the landfill received was Type II material (household waste) and forty-six percent was Type III material (bulky construction debris). The average daily tonnage in months during 2017 is presented in Figure 2.



**FIGURE 2. AVERAGE DAILY TONNAGE BY MONTH: 2017**

## **Website**

The Authority launched a new website in 2017 to enhance communication with our constituents and the general public. Authority staff continues to update and improve the website. It also contains schedules, fees, waste acceptance guidelines, general information, links and other pertinent information. It can be found at [www.mcswwa.com](http://www.mcswwa.com).

## **Leachate**

Landfill leachate is the water that enters the waste mass in the landfill and is contaminated by the waste. Leachate must be collected and treated before it can be released to the environment. The Authority collected, treated, and discharged 15,860,100 gallons of leachate in 2017. No leachate was hauled off site in 2017. In case of emergency, leachate haulage options are available to Ishpeming Area Waste Water, KI Sawyer, and Marquette.

The Authority is operating under the new NPDES permit which took effect in November 2017. The new permit conditions contain some restrictions; however the permit will allow us to continue collecting, treating, and discharging landfill leachate as we have in previous years.

Currently, any leachate that is produced is being managed on site with two methods. First, leachate is pumped or “recirculated” out of the lagoons over the existing landfill surfaces. This method allows for some treatment of the organic portion of the waste mass. Second, a portion of the leachate volume is processed with two aerosol units referred to as “Neptune Guns”. This process has increased leachate storage capacities on site. In addition, the process has allowed for the processing of leachate in the colder winter months. Both leachate management methods are approved by the MDEQ.

The Authority continues to pursue long term leachate management options. In the meantime, we will continue to minimize the amount of leachate produced. This is accomplished by installing intermediate plastic cover over existing landfill surfaces. The goal is to minimize the amount of leachate produced.

In the future, the Authority will continue to evaluate the most effective ways to manage leachate. We will continue to collect, treat, and discharge leachate per our NPDES permit.

### **Construction**

In 2017, the Authority continued to rectify a portion of the landfill area that was constructed contrary to approved engineered plans. Roughly 3 acres of the project was completed in 2017. Construction will continue in 2018. The project will be completed no later than October 31, 2018.

### **Landfill**

The Authority continued to perform daily waste placement of Type II and III waste received. Additional waste tonnage was received in 2017 due to the new hospital construction in the City of Marquette and other construction projects around the county.

The Authority worked with MDEQ to obtain a new construction permit in 2017, which secured additional landfill space for the future. The Authority has approximately 50 years of landfill space remaining. In addition, a new landfill license was secured from MDEQ. This license allows us to operate daily and is valid for 5 years. The license will be renewed in 2022.

### **Compost and Organics**

The Authority continued to accept and process organic waste to include yard and food waste. This material is processed in a separate cell and is not part of the landfill cells. Processed compost material is utilized for various construction and beautification projects performed on site.

The Authority continues to pursue options for organic waste diversion both residentially and commercially. Organics make up roughly 60% of municipal solid waste. The diversion of residential organic materials from the landfill has many logistical challenges. This type of program would require significant coordination between the constituent municipalities, their haulers, the landfill, and residents and/or businesses of Marquette County. Previously, we have had discussions with Northern Michigan University, local school districts, and the Marquette Food Co-op; exploring the feasibility of organic waste diversion “pilot” projects.

### **Dual Stream Recycling**

Dual stream residential recycling has been delivered to the Authority by private haulers, residents, and businesses since 2012. Upon being named Director of Operations in 2015, the Authority has been evaluating the entire operation as a whole; including the dual stream recycling program.

The Authority does not charge a tipping fee for delivered recyclable commodities. However, there is a cost involved with recycling that includes: sorting, baling, loading, and transportation of the commodities. These activities involve the use of staff and equipment time. Currently,

these costs are covered solely on the commodity market returns. The Authority goal is to cover the costs of processing and marketing recyclable commodities.

In 2017, the Authority continued to process and market delivered recyclable commodities. Marketed commodities included paper, plastic, and metal. New rigid processing equipment was put on line in 2017, in an effort to increase work safety, efficiency, and improve product quality/value. The new equipment did improve worker safety and efficiency. However, the Authority continued to have issues with product quality due to contamination within the collected recyclable commodities.

The Authority conducted an extensive study on each individual recyclable commodity in 2017. The focus of this study was to determine operational issues, processing costs, and accessibility to markets. In addition, what adverse effects these commodities may have to the environment if disposed in our landfill.

### **Recycling - Glass Removal**

In October 2017, I recommended to the Authority Board the removal of glass from the residential recycling bin. This recommendation was based on a 12-18 month comprehensive study and evaluation. The study was performed by several members of the Authority staff including myself. A key factor in this recommendation, was how glass was impacting our own recycling program. In addition, what was happening with glass nationally, regionally, and locally. As a whole, it was determined that recycling glass was not economically feasible or practical in Marquette County. Glass was officially removed from the recycling program on January 1, 2018.

The decision to remove glass was difficult. Glass is considered an iconic recyclable item. It is recyclable, however it is a negative value commodity based on our location. The closest glass recycling facility is over 300 miles away. In addition, the impacts of glass being disposed into the landfill are minimal. Glass is inert, and does not produce landfill gas or leachate. Further, the impact of glass on landfill space utilization are nominal as compared to other recyclable commodities.

Overall, glass is a challenging commodity. The Authority continues to pursue cost effective end markets for glass. If viable markets emerge in the future, glass recycling will be re-evaluated.

### **Recycling - Efforts and Education**

All recycling efforts are focused on our 23 constituent municipalities. Currently sixteen municipalities are participating in the county dual stream recycling program to include: Ishpeming Township, Michigamme Township, Republic Township, Tilden Township, Richmond Township, Forsyth Township, Chocolay Township, Marquette Township, Negaunee Township, Sands Township, City of Ishpeming, City of Negaunee, City of Marquette, Skandia Township, West Branch Township, and Humboldt Township. The West End Transfer Station also participates in the dual stream recycling program. In addition, we continued to service local school districts, businesses, and civic groups who were interested in participating in the County Dual Stream Recycling Program.

Recycling education and outreach to the future generations is critical. In 2017, the Authority participated in the STEM Day at Marquette Area Public Schools. The Authority provided education to kids about recycling and distributed recycling outreach material. Several recycling and landfill tours were conducted with local school districts and NMU in 2017. In addition, the Authority partnered with NMU for the Zero Waste Event held at the Berry Events Center. The goal was to divert all hockey game concession stand materials away from the landfill. Through the collective efforts of NMU staff/students and the Authority, a 90% landfill diversion rate was achieved.

Also in 2017, in partnership with MDEQ, the City of Marquette, and the West End Sanitation Authority, the Authority conducted community electronic waste recycling events. These events were a success. Over 28,000 pounds of electronic waste was collected and sent to electronic waste recycling facilities.

### **Recycling - Commodity Markets**

The access to commodity markets is essential to any successful recycling program. The Authority has established good relationships with several commodity buyers in the region. Mixed paper we receive is marketed with Sonoco U.S. Paper located in Menasha and Depere, Wisconsin. Plastic has been marketed with several commodity buyers to include: American Waste and Recycling (Traverse City, MI), Recycling Revolution (Highland Park, MI), and Revital Plastics (Ontario, Canada). Metal was marketed with local vendor Negaunee Iron and Metal. The Authority continues to monitor existing markets and explore additional opportunities in order to receive the maximum value for our material.



## RESOURCE RECOVERY

The Authority continues to serve as an information center, answering questions from the public while working with the public schools and Northern Michigan University to promote public awareness, educational programs, household hazardous waste diversion, and recycling. The Authority will continue to promote recycling as a cost effective option to landfilling. We will continue to expand our recycling program to better serve our constituents.

The shingle recycling program was suspended in 2016. Recycled shingles from the Authority were being processed and used as a road material. Payne and Dolan informed us that road specifications had changed. They could no longer accept or process the shingles at their site. Currently, shingles are being disposed in the landfill at the standard tipping fee rate.

The sharps recovery program continues to be a great success as it cost effectively diverts medical waste away from our employees, haulers, and the general public.

The Household Hazardous Waste (HHW) Collection Program had two collection sites in 2017 throughout Marquette County: West End Transfer Station (*north side of US 41 west of Ishpeming*) and the Marquette County Landfill (*600 County Road NP, Marquette*). The HHW collections were held from May through October in 2017. Table 4 summarizes total HHW collected in 2017 versus 2016.

**TABLE 4. HHW COLLECTED DURING 2016 AND 2017**

<b>Item</b>	<b>2016 Collection</b>	<b>2017 Collection</b>
General HHW	11,340 pounds	11,934 pounds
Car Batteries	108 each	64 each
Motor Oil	2,575 gallons	2,275 gallons
Antifreeze	400 gallons	375 gallons
Oil Filters	1,170 pounds	800 pounds
Mercury	8.8 pounds	2.4 pounds
Pesticides	1,365 pounds	1,466.5 pounds
Fluorescent Bulbs	3,892 each	2,314 each
<b>Total Deliveries</b>	<b>747</b>	<b>589</b>

(Aerosols are not included)

Waste oil collected at the HHW sites is used to heat landfill facilities. The Authority initiated its HHW program from a grant it received in 1991. The Authority now funds all costs except collection staffing. The cost of staffing HHW sites is financed by a surcharge on municipalities that are not directly providing staffing of a HHW collection.

The Authority was awarded the 2017 Clean Sweep grant in the amount of \$4,000. This grant will only cover the costs of pesticides and herbicides disposal. The clean sweep grant no longer covers the cost of mercury disposal. This grant does not require matching local funding or continuation of the project after the grant money is depleted. However, the Authority does hope to continue with these programs after the grant agreement has expired. As of this writing, the grant was to continue as EPA funding was being supplied to the Michigan Department of Agriculture.

The Authority has been diverting fluorescent lights and the associated mercury from the landfill. The Authority is focusing on the diversion of pesticides, mercury and oil based paint from the waste stream. The goal is to keep it out of the landfill. These materials are the biggest treatment, contamination and regulatory problems that the Authority is currently facing.

We have been assisting Conditionally Exempt Small Quantity Generators with the optimum disposal of waste materials that we don't want in the landfill. These small producers are not obligated to divert materials such as fluorescent bulbs from the landfill, but do so with the Authority's assistance.

### **Tires**

The Authority processed 11,635 tires in 2017, providing an inexpensive outlet for discarded tires in the community. The program helps keep tires out of the woods and the shredded tires are used for daily cover and roads. The rate of \$1.50 per car tire charged by the Authority is the lowest in Marquette County.

## **2018 AND BEYOND**

### **Future Budget and Finance**

The current State of Michigan fee on solid waste disposal is \$.36 per ton. In January 2018, Governor Snyder proposed a \$4.75 ton fee on solid waste disposal. This proposed fee would generate roughly \$79 million. According to the state, generated revenue will be allocated to remediate existing or future contaminated sites, solid waste management, recycling grants, water quality monitoring grants, and state park infrastructure.

The funding is connected to proposed legislation that includes the revision of Part 115 (MDEQ solid waste regulations). In addition, proposed legislation places emphasis on the management of materials versus disposal of materials. Specifically, recyclable and compost materials. Currently, the recycling rate in Michigan is at 15%. The Governor has set a goal of 30% to 45%.

The Authority is monitoring the status of this legislation. The proposed tipping fee increase on solid waste is significant, and will impact constituent municipality budgets.

The Authority will continue to make concerted efforts to invest in projects and equipment that provide maximum value. In addition, Authority staff are continually reminded to be resourceful and take care of Authority assets.

In December 2015, the Authority implemented a 10 year financial plan in order to finance future landfill construction and equipment needs. The tipping fees will increase by \$2.00 per ton effective July 1, 2018. A 2% per ton increase is planned on July 1 for years 2019 through 2025. The ten year tipping fee rate plan will be evaluated annually by the board.

### **Landfill and Site Construction**

Landfill construction and site development continues to be evaluated each year. Specifically, partial landfill cell closure, future cell construction, and the utilization of landfill gas will be the primary focus of the Authority.

The Authority is taking a pro-active approach to landfill gas. Moving forward, it is the Authority's intent to conduct feasibility studies on the most effective use of landfill gas. Alternative energy options such as heating our on-site buildings are being explored.

The County Road NP Bridge will be replaced in 2018. A temporary bridge will be installed during construction of the new bridge. Estimated time to complete the bridge replacement is 3-4 months.

In an effort to increase access to residential recycling, enhance facility aesthetics, and improve the overall safety and efficiency of the operation, the construction of a new administration and materials management building is underway. The administration building functions will include the scale attendant and office staff work areas, storage areas, board room, customer foyer, restrooms, and a breakroom. The materials management building will provide a one stop recycling shop for the residents of Marquette County. Residents will be able to recycle electronic waste, confidential documents, scrap metal, tires, and refrigerant devices. Bins will also be available for fiber and rigid recycling drop offs. Additional items for recycling are being

explored by the Authority. Overall, the new structures will provide a more user friendly and convenient access to recycling.

### **Recycling**

The Authority is pursuing a county wide change over from dual stream recycling to single stream recycling. Currently, residents of the county are utilizing the dual stream system. Conversely, commercial businesses are utilizing a single stream system. With dual stream, residents are placing materials curbside on alternating weeks (fiber and rigid). With single stream, commercial businesses can place both fiber and rigid into one bin.

The single stream recycling system is more user friendly and convenient. Residents will no longer have to decide which week it is (fiber or rigid). They can simply place all recyclables in one bin. A residential survey will be conducted by the Authority to see which system they are more likely to participate in. Residential feedback thus far via social media; has indicated that residents would like to see the single stream system.

The Authority is pursuing the costs of recycling infrastructure upgrades in order to facilitate a single stream recycling system. Collected single stream recycling (plastic, paper, and metal), will need to be separated prior to going to market. This will require a significant capital investment in equipment.

Overall, the Authority continues to pursue ways to increase access and participation in recycling. The more tons we divert away from the landfill, the longer our landfill will last.

### **Household Hazardous Waste**

The HHW Program will continue to focus on removing mercury from our environment. After mercury, chlorinated solvents and waste oil will be emphasized as the greatest threats to the Marquette County environment. By expanding our services, improving our training, and implementing various site and equipment upgrades, the program is expected to continue to improve at a constant cost.

In 2013, the Clean Lakes U.P. grant was utilized to properly dispose of prescription medication. Local law enforcement provided drop locations for residents. Although the grant ended in 2015, several police departments have continued to collect prescription drugs. Diversion of prescription medications from the landfill and sewer systems minimizes the environmental harm caused by these materials.

### **Grants**

The Authority will continue to search for and pursue cost effective Federal and State of Michigan grants.

We worked with Marquette City on orphan tire collection and disposal. They received a 2017 tire grant. Tires were collected in the City of Marquette and the Authority hauled these tires to the landfill. The Authority is a licensed hauler and end user. Marquette City collected 4,000 tires.

### **Personnel**

Each employee at the Authority has a detailed job description provided to them. Employee performance is evaluated annually. Staff safety training is conducted continuously based on the needs of the Authority.

