



2019

ANNUAL REPORT

Solid Waste & Recycling Division Staff

(Left to Right) Michael Larson, Resource Recovery Specialist; Diane Duerst, Support Specialist; Morgan Gerck, Director; Megen Hines, Recycling Specialist



Dunn County Solid Waste & Recycling Management Board

The Solid Waste & Recycling Management Board was created in 1992 by the Dunn County Board of Supervisors, and consists of a diverse group of individuals with a wide array of expertise and a history of successful public service in Dunn County. The board performs a valuable, active management role for the Solid Waste and Recycling Division's activities and programs, and continues to provide effective waste management and recycling oversight in support of the residents and officials of participating municipalities, local industries and businesses, solid waste and recycling haulers, and the general public throughout Dunn County. Current members of the Solid Waste & Recycling Management Board include Gary Bjork, Board Chair/County Supervisor District 7; Tim Lienau, Board Vice Chair/County Supervisor District 28; Chuck Maves, County Supervisor District 9; Terry Stamm, Village of Elk Mound; Steve Rasmussen, Town of Hay River; Ed Hartung, Town of Menomonie; Forrest Johnson, Town of Dunn; Zenon Smolarek, U.W. Stout; and Ryland Erdman, City of Menomonie.

Dunn County Solid Waste and Recycling Site Attendants

The Solid Waste & Recycling Division utilizes contracted labor for all staffing needs at the Boyceville, Colfax, Connorsville, Downs ville, Elk Mound, Ridgeland, Rock Creek, and Sand Creek Collection Sites, and the Dunn County Transfer Station and Public Drop-Off. These attendants work tirelessly to provide courteous and service-oriented assistance to all customers using these facilities. An attendant's job is filled with daily challenges in keeping these sites successfully managed for safety and overall operational efficiency, while ensuring that all materials are recycled or disposed of responsibly in accordance with local and state regulations. These attendants serve as the backbone of the county's solid waste and recycling services, and their hard work and dedication to their roles is greatly admired and appreciated by all.



New Recycling Specialist – Megen Hines

In February 2019, the division hired new Recycling Specialist Megen Hines to oversee its recycling programs, services, and educational outreach in Dunn County. Megen's exceptional work ethic, enthusiasm, and attention to detail would provide the County with a wealth of experience and resources aimed at increasing recycling awareness and compliance for all residents, businesses, industries, and farms. Previously, Megen served as the Recycling Specialist in St. Croix County for over four years, and was a Dunn County Solid Waste & Recycling Division intern in the summer of 2012. Megen has bachelor's degrees in Environmental Science from UW-Stout, and in Meteorology from St. Cloud State University.



A Year of Regional, National, and Global Recycling Crises

2019 was an extremely challenging year of recycling operations for the Solid Waste & Recycling Division. Global recycling market crashes as a result of ongoing trade disputes with China continued to spiral into historic lows, creating commodity market uncertainties unlike anything the recycling industry has seen throughout the last 50 years. Previously known as the world's largest processor of recyclables, China would continue to ratchet down its recycling commodity import standards in 2019, effectively bringing the recycling markets and related transportation industries in the United States to a standstill. In Dunn County, there continued to be some opportunities for movements of processed recyclable materials to local and regional vendors, but with commodity pricing at historic lows, revenues generated through the sale of these materials failed to make up for the operational costs of their production. By year's end, severely reduced revenues from the sales of recyclables in Dunn County contributed to a 2019 budget deficit of \$290,062. The principal reasons for why the import bans from China have impacted the recycling industries in the United States so severely over the last several years can be hinged on a single primary factor; the United States, along with most industrialized countries in the world, have not historically invested in the necessary recycling infrastructure required to process the huge volumes of recyclable materials that they generate. The standstill that resulted from the ongoing import bans has created massive stockpiles of recyclables in the United State with nowhere to go, contributing to the dismal market values we continue to see



today. Other factors for the 2019 budget deficit included accelerating maintenance and operational costs at the Dunn County Transfer Station due to its rapidly deteriorating infrastructure, now 29 years in operation, and the rising costs of contracted labor, hauling, and landfill services. In response to these rising costs, the division proposed a new operating model with reduced days and/or hours of operations at all solid waste and recycling facilities. The new model was approved in December 2019 and would become effective January 1, 2020. If there is a silver lining to the ongoing recycling crisis and its global disruption, it is the opportunity to domestically develop the infrastructures and technologies needed to process our own materials in the United States, and possibly those of other countries, to fill the void that exists today. The fruition of that opportunity lies in the political will of the nation and the financial ability of American industries to invest in the global recycling economy.

Record Clean Sweep Event

The 2019 Clean Sweep Event was a massive success, crushing all previous attendance numbers, while also crushing all previous expenditures for hazardous waste disposal and overall event costs. The two-day event was held in Colfax, WI on September 18, and at the Dunn County Transfer Station on September 19, and resulted in a total of 401 participants, including 373 households, 18 businesses, and 10 farms. The total weight of hazardous materials collected at the 2019 event was 268% higher than the amount collected in 2018, likely due to the 91% increase in participation over the previous year. Traffic volumes at the Transfer Station during the event extended as far as 1.9 miles east along Highway 29 and created severe backups requiring the assistance of the Dunn County Sheriff's Department.



The total cost of the 2019 Clean Sweep Event was \$62,016; an increase of 188% over the previous year, and by far the most expensive event in the history of the program. As a minor offset to the overall event costs, the division receives an annual grant of \$15,500 from the Department of Agriculture, Trade and Consumer Protection. The Clean Sweep remains one of the most popular and appreciated programs in Dunn County, and provides an excellent resource for the safe and responsible disposal of hazardous materials.



**DUNN COUNTY SOLID WASTE & RECYCLING
HAZARDOUS WASTE
CLEAN SWEEP EVENT**

SEPTEMBER 18 SEPTEMBER 19

COLFAX FAIRGROUNDS DUNN COUNTY TRANSFER STATION & RECYCLING CENTER
831 E RAILROAD AVENUE, COLFAX, WI E3900 HIGHWAY 29, MENOMONIE, WI
4-6PM: VSQG BUSINESSES, FARMS, & HOUSEHOLDS 2-3PM: VSQG BUSINESSES | 3-4PM FARMS | 4-7PM HOUSEHOLDS



VSQG BUSINESSES

- ▶ By appointment only
- ▶ Qualified VSQGs generate no more than 220lbs of hazardous waste per month, and accumulate less than 2,205lbs in storage
- ▶ Must pre-register online by September 13
- ▶ Discounted business fees applied!

HOUSEHOLDS

- ▶ By appointment only
- ▶ Must pre-register online by September 13
- ▶ Fees apply for Latex Paint

FARMS

- ▶ By appointment only
- ▶ Must pre-register online by September 13
- ▶ Fees apply for Latex Paint

INFORMATION

To pre-register for this event, or for additional information, please visit www.co.dunn.wi.us/hazardouswaste, or contact the Dunn County Solid Waste & Recycling office at 715-232-4017

MATERIALS ACCEPTED

- ▶ AEROSOL CANS
- ▶ AIR FRESHENERS
- ▶ ANTIFREEZE
- ▶ ADHESIVES & GLUES
- ▶ AMMUNITION
- ▶ ASPHALT SEALANTS
- ▶ BATTERIES
- ▶ BULBS, BALLASTS, & LAMPS
- ▶ CLEANERS & SPOT REMOVERS
- ▶ COMPRESSED GAS CYLINDERS
- ▶ PRESSURIZED TANKS
- ▶ CORROSIVES & LYE
- ▶ DRAIN & TOILET BOWL CLEANERS
- ▶ FERTILIZERS
- ▶ LATEX PAINTS
- ▶ MERCURY THERMOMETERS
- ▶ MERCURY THERMOSTATS
- ▶ OIL & LEAD-BASED PAINTS
- ▶ STAINS & VARNISHES
- ▶ FUELS & FUEL ADDITIVES
- ▶ SOLVENTS & STRIPPERS
- ▶ PESTICIDES
- ▶ HERBICIDES
- ▶ INSECTICIDES
- ▶ POLISHES AND WAXES
- ▶ ROOFING TARS
- ▶ NEEDLES & SHARPS
- ▶ SMOKE DETECTORS
- ▶ CARBON MONOXIDE DETECTORS
- ▶ USED OIL & FILTERS



MATERIALS NOT ACCEPTED

- ▶ ASBESTOS
- ▶ BIOLOGICAL WASTES
- ▶ MEDICAL & INFECTIOUS WASTES
- ▶ EXPLOSIVES
- ▶ PICRIC ACID
- ▶ POLYFOAM SPRAY TANKS
- ▶ RADIOACTIVE MATERIALS
- ▶ BAD ATTITUDES



*****ECRWSSEDDM*****
Residential Customer

LATEX PAINT FEES

- ▶ PINTS \$1
- ▶ QUARTS \$2
- ▶ GALLONS \$5
- ▶ 5 GALLON PAILS \$20

Fees based on the size of the container, not the volume of paint inside, so consolidate to save money!

CASH OR CHECK ONLY



715-232-4017
co.dunn.wi.us/swr
dunncountyrecycling

Changes to Recycling Opportunities and Services

Due in part to ongoing global recycling market crashes, the Solid Waste & Recycling Management Board motioned to discontinue collection and processing opportunities for several commodities in 2019. The division had been utilizing established market outlets for a variety of non-mandated recyclable materials, including woven polypropylene grain, feed, and super sacks, carrier stock, and vinyl siding. While these items helped to expand the stewardship and diversity of Dunn County's recycling portfolio, the division would benefit from reducing its overall production capacity to only those items with the strongest market opportunities. Mixed Rigid Plastic recycling, arguably one of the most beneficial recycling programs in Dunn



County in terms of resource conservation, was modified to accept these materials at the Dunn County Transfer Station only, with all other collection site locations landfilling this material due to the high costs of transporting them to the Transfer Station for processing. Mixed Rigid Plastics make up a very large portion of the waste plastics generated in our everyday lives. By recycling these common items, which include plastic buckets, drums, shelving, laundry baskets, totes, children's toys, yard furniture, flower pots, etc., we increase sustainability and environmental stewardship in Dunn County and throughout the State of Wisconsin, while significantly reducing landfill wastes and preserving natural resources.

Agricultural Plastic Film Capture and Recycling

In late 2016, the Dunn County Solid Waste & Recycling Division partnered with Revolution Plastics of Little Rock, AR to begin capturing and recycling the massive volumes of used agricultural film materials that are prevalent on Wisconsin farms. Commonly used for silage bags and other agricultural uses, these films are constructed of readily recyclable #4 LDPE plastic, and through a proprietary wash and manufacturing process, Revolution Plastics is able to recycle these materials into clean, post-consumer resins for new products. By mid-summer 2018, the collection program in Wisconsin and Minnesota had captured over 50,000,000 pounds of agricultural films for recycling! A total of 50,580 pounds of agricultural films were collected at the Boyceville and Colfax Collection Sites, and the Dunn County Transfer Station in 2019.



Ongoing Efforts to Promote Stewardship and Maintain Compliance

A major challenge in the solid waste industry involves effective communications to residents, businesses, industries, and farms in encouraging them to abide by solid waste and recycling laws and regulations in their daily lives. This requires a collective mentality and commitment to proper disposal methods for a variety of materials, and the implementation of effective training and education programs. In 2019, the Transfer Station, Public Drop-Off, and Collection Sites continued their efforts to capture non-landfill wastes, hazardous materials, and recyclable items from municipal and commercial trash sources. Non-landfill items such as electronics, batteries, lamps and ballasts, tires, pressurized tanks and cylinders, live ammunition, needles, unused chemicals, etc. are routinely discovered mixed with trash, either mistakenly or intentionally, and must be removed for proper disposal or recycling; a practice known as “Diversion”. Active diversion efforts reduce the amount of prohibited materials that are sent to landfills, and ensures that they are disposed of responsibly. If not removed from trash prior to landfilling, they can become serious safety hazards to processors and haulers, and contribute to fires, surface and groundwater contamination, and other regulatory compliance issues. Transfer Station and collection site staff continued to practice exceptional diversion management of these non-landfill sources in 2019.



Deer Carcass Collection and Disposal Program Continues

Each year in Dunn County, the Solid Waste & Recycling Division provides a safe and efficient disposal service for deer carcasses harvested during the fall and winter hunting seasons. In late 2018, the Wisconsin Department of Natural Resources began to implement restrictions on the transportation of deer carcasses across county lines in Wisconsin in an effort to control the spread of CWD (Chronic Wasting Disease). Due to these restrictions, and a concern for current scientific studies that showed the capacity of the CWD protein to remain viable after aggressive leachate and wastewater treatment processes, local landfills stopped accepting deer remains for fear of spreading this contagion. To address this disruption, the Dunn County Solid Waste & Recycling Division and the Barron County Waste to Energy and Recycling Facility partnered in 2018 to establish an approved plan for the incineration of all deer carcasses captured through the Dunn County collection program. This program continued in 2019, resulting in 34,000 pounds of deer carcasses collected during the fall/winter hunting season. The ongoing Dunn County/Barron County partnership is highly regarded as a creative and viable solution to the ongoing CWD problem in Wisconsin by providing controlled collection and the complete destruction of deer carcasses and any potential CWD proteins associated with these materials.

New Partnerships in Yard Waste Composting

The Boyceville, Colfax, and Elk Mound collection sites in Dunn County continued to provide free yard waste services to all residents of municipalities that participated in the division's Solid Waste and/or Recycling Programs in 2019. Active composting of yard waste has been practiced at these sites since the composting program and mandatory state licensure was implemented in 2018. Due to the high volumes of yard wastes that are received annually at these locations, along with the increasing associated costs of the composting process, changes were made in 2019 to partner with several local farms that were in need of raw yard waste materials for blending with their commercial manure composting operations. By mid-year, most incoming raw yard wastes were collected and hauled directly to these farms, eliminating the expense of composting them at the collection sites. Mulch, firewood, and finished compost generated at the Boyceville, Colfax, and Elk Mound facilities is free to take for any resident of a municipality that participates in the division's programs.



Necessity for Investments in Infrastructure and Operations

The Dunn County Solid Waste & Recycling Division facilitates one of the most comprehensive waste and recycling programs in the State of Wisconsin. The Dunn County Transfer Station, and most of the 8 county collection sites have operated as well established fixtures in the community for the past 29 years. Much of this infrastructure is in dire need of replacement and expansion. In 2019, the Solid Waste & Recycling Division accelerated discussions and planning for the development of a new Transfer Station to replace the current facility on Highway 29. A Production Assessment Study was completed by FOTH Infrastructure and Environment, LLC, to determine the effectiveness of the current solid waste and recycling processing capabilities in place at the Transfer Station, and to review its overall operational efficiencies. This study determined that the Transfer Station has outlived its intended useful lifespan and design capacity, and was in need of major repairs and production infrastructure critical to improving production capacity, efficiency, and safety. The prospect of a new transfer facility would require a Preliminary Engineering and Feasibility Study to determine proper scaling, engineering, throughput, and a multitude of other operational considerations. In December 2019, discussions ensued to plan for this study to be completed in 2020, requesting contingency funding from the county's general fund in the amount of \$32,500 to cover the anticipated cost.



2019 SOLID WASTE AND COMMODITY REPORT

COMMODITY	AMOUNT SHIPPED
Transfer Station Solid Waste	22,847 Tons 45,694,000 Pounds
Collection Site Compactor Solid Waste	2,006 Tons 4,012,000 Pounds
Collection Site Demolition Waste	390 Tons 780,000 Pounds
Transfer Station Leachate	28,523 Gallons
Cardboard	923 Tons 1,846,000 Pounds
Paper	406 Tons 812,000 Pounds
#1 Plastics	91 Tons 182,000 Pounds
#2 Plastics	69 Tons 138,000 Pounds
#3 Plastics	21 Tons 42,000 Pounds
#4 Plastics	17 Tons 34,000 Pounds
#5 Plastics	41 Tons 82,000 Pounds
Mixed Rigid Plastics	50 Tons 100,000 Pounds
Agricultural Plastic Film	25 Tons 50,000 Pounds
Glass	437 Tons 874,000 Pounds
Aluminum Cans	41 Tons 82,000 Pounds
Steel Cans	64 Tons 128,000 Pounds
Unprepared Scrap Steel	469 Tons 938,000 Pounds
Non-Ferrous Scrap Metals	26 Tons 52,000 Pounds
Lead-Acid Batteries	8 Tons 16,000 Pounds
Electronics	76 Tons 152,000 Pounds
Used Tires	203 Tons 406,000 Pounds
Lamps & Bulbs	18,898 Units
Clean Sweep Hazardous Waste	32 Tons 64,000 Pounds
Used Oil	11,940 Gallons
Used Oil Filters	28 Drums
Used Antifreeze	790 Gallons
Deer Carcasses	17 Tons 34,000 Pounds
Yard Waste	2,190 Cubic Yards

RECYCLING COMMODITY LIST

Plastics

#1 PETE Bottles & Jars
#1 Clear PETE Thermoforms
(Discontinued 2018)
#2 HDPE Pigmented
#2 HDPE Natural
#2 HDPE Z-Bale
#2 HMW Drums
#2 HMW Jugs
#3 PVC Siding
(Discontinued 2019)
#4 LDPE Film & Bags
#4 LDPE Lids
#5 PP Containers & Tubs
#5 PP Woven Sacks
(Discontinued 2019)
#5 PP Lumber Wrap
(Discontinued 2019)
#5 PP Super Sacks
(Discontinued 2019)
Mixed Rigid Plastics

Metals

Unprepared Steel Shred
Aluminum Breakage
Sheet Aluminum
Extruded Aluminum
Cast Aluminum
Cast Aluminum Rims
UBC Aluminum Cans
Aluminum Foil/Aerosols
Zinc Diecast
MLC Heavy Aluminum
Steel Cans
#2 Copper Pipe, Sheet, Wire
#1 Insulated Copper Wire
#2 Insulated Copper Wire
Holiday Lights
Aluminum ACSR Wire
Clean Mixed Brass
Brass Shells
Brass Breakage
Non-Magnetic Stainless Steel
Molybdenum Stove Elements
Ni-Chrome Wire Elements
Lead-Acid Batteries
Lead Weights and Bar
Magnesium Frames

Non-PCB Ballasts
Compressed Gas Cylinders
Pressurized Tanks
Copper Electric Motors
Copper Electric Transformers
Aluminum Electric
Transformers
Aluminum Radiators
Brass Radiators

Electronics

CRT TV's & Monitors
LCD TV's & Monitors
Computer Towers
Laptops
Cell Phones
Tablets
Digital Cameras
Miscellaneous Electronics
Smoke/CO Detectors
Low Grade Circuitry
High Grade Circuitry
High Grade Motherboards
Gold Memory
Silver Memory
Fiber Processors
Ceramic Processors
Slot Processors
Ribbon Cables
Ink Jet Cartridges
Toner Cartridges
Aluminum Heat Sinks
Aluminum-Copper Heat Sinks
Hard Drives
CD/DVD/Disk Drives
Power Supply with Wire
Keyboard Silver Mylars
Silver IC Chips
High Grade Slot Cards
Computer Fans
LED Lamps
PCB Ballasts
Solar Panels

Batteries

Alkaline Batteries
Nickel-Cadmium Tool
Batteries

Nickel-Cadmium
Miscellaneous
Lithium-Ion Tool Batteries
Lithium-Ion Laptop Batteries
Lithium-Ion Cell Phone
Batteries
Lithium-Ion Miscellaneous
Lithium-Ion Medical Batteries
Lithium Coin Cell Batteries
Nickel-Metal Hydride Tool
Batteries
Nickel-Metal Hydride
Miscellaneous
Carbon-Zinc Batteries
Zinc-Air Button Batteries

Lamps & Tubes

CFL's
High Pressure Sodium
Mercury Vapor
Metal Halide
Fluorescent Lamps
UV Lamps
Incandescent & Halogen
Neon Tubes
Neon Signs

Fiber

Cardboard
Paper
Carrier Stock
Fiber Cores

Fluids

Used Oil
Used Antifreeze
Used Oil Filters
Leachate/Septage
Mercury Thermostats,
Thermometers, Pressure
Switches

Yard Waste

Wood, Leaves, Clippings,
Mulch, Compost

Hazardous Waste

Clean Sweep
Diversion
Sharps