



MRF TURF Summer 2008

In this Issue

Drug Collection Information	page 1
Manitowoc County Fair Info	page 1
2008 Clean Sweep Statistics	page 2 & 3
Batteries	page 2
Free Battery Recycling at the MRF What happens to the Batteries?	
Composting	page 3
Manitowoc County Compost Site Information Tips for better Composting	

Community Environmental Education Opportunities

Urban Garden Gang—Stumpjack Coffee Co TR
1st & 3rd Wednesdays—6:30pm—8:30pm

'The Natural Step: For Communities'
Call 686-6980 or email tprigge@manitowoc.org

Watershed Hero's Camp WI Maritime Museum
Grades 5, 6, & 7 July 21-25 call: 684-0218 Wendy

WE NEED YOU!

TEACHERS

Share your successful environmental themed class projects.

Email to:
Bobbischuetze@co.manitowoc.wi.us

BUSINESSES

As a Not-for-Profit we are continually looking for ways to save \$\$

We are seeking 4 advertisers to help defray printing costs of the MRF TURF

For more information email:
Bobbischuetze@co.manitowoc.wi.us

Manitowoc County Drug Disposal Programs

All Manitowoc County residents may bring unwanted drugs and medications free-of-charge to:

August 7
Noon-4pm
Community Care Day
Community House-Fireplace Lobby
1520 17th St., Two Rivers

September 12
2pm-6pm
Maribel Community Center
14905 Mulberry Street, Maribel

October 25
10am-3pm
Crime Prevention Day
Manitowoc County Expo
4921 Expo Drive, Manitowoc

December 5
1pm-5pm
Community House—Behringer Rm
1520 17th St., Two Rivers

Guidelines:

- * Needles and sharps will not be accepted.
- * Keep items in original containers.
- * Do not mix medications in the same container.
- * You may block out personal information on the drug container, please keep the drug name visible
- * Businesses can participate. Preregistration is required. Call 683-4333

Acceptable Items:
Prescription medications
Over-the-counter drugs
Controlled substances
Illegal drugs

Sponsored by the following agencies:



Manitowoc County: Dept of Public Works, Aging Resource Center, Solid Waste Committee, Recycling Center, Public Health Department, Metro Drug Unit, Pharmacy Task Force.
Two Rivers Community House

For additional information call 683-4333

MERCURY THERMOMETER EXCHANGE PROGRAM

Bring in your mercury or basal thermometers and receive a complimentary digital thermometer (limit one digital thermometer per household) All mercury and mercury containing devices will be accepted; however, only household thermometers are eligible for the exchange program.

Manitowoc County Fair

Tuesday, August 19

Tues: 3pm—11pm
Wed & Thurs: 8am—11pm

Sunday, August 24

Fri & Sat: 8am—11:30pm
Sun: 8am—8pm

Volunteers Needed ! Recycling Center Booth

Merchants Building Four hour shifts
Share your Knowledge with Others
Get a **Grounds Day Pass!**

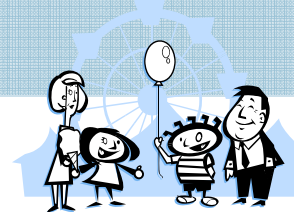
To sign up call 683-4333

Carnival Rides
Tues 5pm—10pm
Wed & Thurs:
1pm—5pm
6pm—10pm
Fri & Sat:
1pm-5pm
6pm—11pm
Sun: 1pm—5pm
6pm—8pm

Rides•Games•Polka Pavilion•Variety Pavilion
Rock Pavilion•Animal Judging•Exhibit Judging
Grandstand Shows



Fair Information available online
[manitowoccountyexpo.com](http://manitowocountyexpo.com)
or call -920-683-4378



For more information call Recycling Center

920-683-4333

Or visit

manitowocrecycles.org

MRF Mission Statement: To provide materials recycling and recovery services to the citizens of Manitowoc County and to keep the public informed about recycling issues.

2008 Tri-County Clean Sweep Statistics

Manitowoc County Results

Collection Sites—Manitowoc County Highway Shop & Kiel City Garage



Participating Households—815

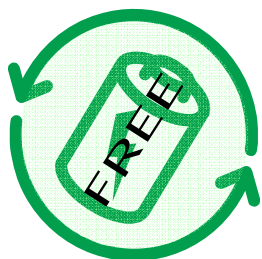
Total lbs of Hazardous Waste—71,824

Table
totals
in
pounds

Latex Paint	35,340
Lead/Oil Based Paint	21,047
Waste Oil	3,960
Pesticides/Poisons	6,088
Solvents/Thinners	2,607

Aerosol Cans	1,688
Caustics/Corrosives	721
Mercury	16
Dioxins	92
Other	265

Thank You to all the
Volunteers
that make the annual
Clean Sweep
programs possible!

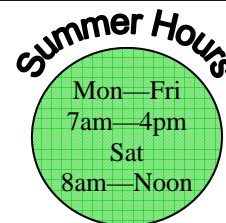


BATTERY RECYCLING at the MRF

Bring your batteries to the Manitowoc County Recycling Center during office hours.
Damaged or leaking batteries should be enclosed in a plastic bag or plastic container.
Please tape terminals when possible.

All Rechargeable Batteries will be accepted for Free.
Disposable Batteries will be accepted for Free up to 3 lbs per visit.

Batteries of all types can be recycled to reclaim metals such as nickel, iron, lead, cadmium, and cobalt.
Some batteries contain hazardous chemicals such as cadmium and mercury that can enter our soil, air and water if disposed of improperly.
Do not throw batteries in the trash or burn them. Large quantities of improperly stored batteries can become a fire hazard.



What happens to the Batteries?

Source: www.batteryrecycling.com

The following is a brief discussion about how batteries of different chemistries are physically recycled at the end-site recycling plant.

Lead Acid Battery Recycling

The battery is broken apart in a hammer mill; a machine that hammers the battery into pieces. The broken battery pieces are then placed into a vat, where the lead and heavy materials fall to the bottom and the plastic floats. At this point, the polypropylene pieces are scooped away and the liquids are drawn off, leaving the lead and heavy metals.

Each of the materials goes into a different recycling “stream”.

Plastic—Polypropylene pieces are washed, blown dry, and sent to a plastic recycler where the pieces are melted together into an almost liquid state. The molten plastic is put through an extruder that produces small plastic pellets of a uniform size. The pellets are sold to a manufacturer of battery cases and the process begins again.

Lead—Lead grids, lead oxide, and other lead parts are cleaned and heated within smelting furnaces. The molten melted lead is then poured into ingot molds. After a few minutes, the impurities float to the top of the still molten lead in the ingot molds. These impurities are scraped away and the ingots are left to cool. When the ingots are cool, they’re removed from the molds and sent to battery manufacturers, where they’re re-melted and used in the production of new batteries.

Sulfuric Acid—Old battery acid can be handled in two ways: 1) The acid is neutralized with an industrial compound similar to household baking soda. Neutralization turns the acid into water. The water is then treated, cleaned, tested in a waste water treatment plant to be sure it meets clean water standards. 2) The acid is processed and converted to sodium sulfate, an odorless white powder that’s used in laundry detergent, glass, and textile manufacturing.

Alkaline/Zinc Carbon/Zinc Air Batteries—These batteries are recycled during steel making processes, where they’re placed in a molten mill furnaces as a feedstock. The zinc from the batteries is fumed off into a vacuum bag house for recovery, while the end metal product is used to make low-grade steel (i.e. rebar)

Nickel-Cadmium, Nickel Metal Hydride, and Lithium Ion Batteries—These batteries are recycled via a High-Temperature Metal Reclamation (HTMR) process, during which all of the high temperature metals contained within the battery feedstock (i.e. nickel, iron, cobalt, manganese, and chromium) report to the molten-metal bath within the furnace, amalgamate, then solidify during the casting operation. The low-melt metals (i.e. zinc, lithium, and cadmium) separate during the melting operation and are collected as a metal-oxide.

Lithium Batteries—The contents of the batteries are exposed using a shredder or a high-speed hammer depending on battery size. The contents are then submerged in caustic (basic not acidic) water. This caustic solution neutralizes the electrolytes, and ferrous and non-ferrous metals are recovered. The clean scrap metal is then sold to metal recyclers. The solution is then filtered. The carbon is recovered and pressed into moist sheets of carbon cake. Some of the carbon is recycled with cobalt. The lithium in the solution (lithium hydroxide) is converted to lithium carbonate, a fine white powder. What results is technical grade lithium carbonate, which is used to make lithium ingot metal and foil for batteries. It also provides lithium metal for resale and for the manufacture of sulfur dioxide batteries.

Mercury Batteries—The batteries and heavy metals are recovered through a controlled-temperature process. It’s important to note: the percentage of mercuric oxide batteries is decreasing since the passage of the Mercury-Containing Rechargeable Battery Management Act (The Battery Act) of 1996. This act prohibits, or otherwise conditions, the sale of certain types of mercury-containing batteries (i.e., alkaline-manganese, zinc-carbon, button-cell mercuric-oxide and other mercuric-oxide batteries) in the United States.

2008 Tri-County Clean Sweep Statistics

Calumet County Results

Households—223 Total lbs of Hazardous Waste—13,144

Lead/Oil Based Paint	6,476
Waste Oil	1,960
Pesticides/Poisons	1,702
Solvents/Thinners	746
Aerosol Cans	618
Caustics/Corrosives	390

PCBs	15
Reactives	5
Mercury	56
Dioxins	118
Other	1,058

Sheboygan County Results

Households—684 Total lbs of Hazardous Waste—37,677

Lead/Oil Based Paint	23,291
Waste Oil	1,520
Pesticides/Poisons	6,613
Solvents/Thinners	2,382
Aerosol Cans	1,992

Caustics/Corrosives	908
Reactives	17
Mercury	73
Dioxins	34
Other	847

Manitowoc County Compost Sites

April thru October

Basswood Rd Compost Site 3000 Basswood Rd, Manitowoc
Mon-Fri 7am-6pm Sat 8am-12pm

Woodland Dr Compost Site 4191 Woodland Dr, Two Rivers
Mon-Fri 10am-6pm Sat 8am-4pm

Compost site products available during regular Basswood site office hours: Mon-Fri 7am—4pm Sat 8am—Noon (No loaders on Sat) (unsifted available at both)

Benefits of Compost

- Reduces the need for water, fertilizers, and pesticides
- Enriches Soils
- Helps clean contaminated soil
- Helps prevent pollution



Benefits of Wood Chips

- Helps retain soil moisture
- Prevents heavy rain damage
- Increases survival of new trees
- Reduces soil temperature extremes
- Prevents direct contact with soil of vegetables
- Reduces weed growth, saving landscaping time

SCREENED COMPOST PRICES

- 5 gallons: \$1.00
- 1 bushel: \$2.00
- 1 cubic yard: \$10.50

Unscreened compost is always available for **FREE!!!**

WOODCHIP PRICES

- 5 gallons: \$0.25
- 1 bushel: \$0.50
- 1 cubic yard: \$5.25
- 5 cubic yards including Delivery Charge: \$52.50

FREE Drop Off

Accepted Items: Grass, leaves, flowers, plants, pumpkins, fruits, vegetables, garden waste, yard waste, brush, branches (not more than 6 inches in diameter or longer than 5 feet), woodchips, saw dust, and Holiday Trees.

Unacceptable Items: Stumps, animal waste, sod with soil, topsoil or dirt, rocks, gravel, lumber, garbage, large branches **greater than 6 inches in diameter or longer than 5 feet.**

Tips for Better Composting

1. Don't throw away your kitchen scraps – add them to the compost pile. Kitchen scraps are typically high in nitrogen, which helps heat up the compost pile and speed up the composting process. Egg shells, coffee grounds, fruit and vegetable peels and scraps are all outstanding materials to add.
 2. If you're composting with a compost pile, bigger is often better. Heat builds up with a big pile. You don't want to get much bigger than about 3 feet by 3 feet though.
 3. Keep your compost aerated! If you are composting with a tumbling composter, make sure you turn it whenever you add new materials. If you are composting with a pile, or in a static (non-tumbling) compost bin, be sure to mix up the contents so that the pile gets oxygen and can break down effectively.
 4. Don't let the compost completely dry out. A compost pile needs moisture to keep the composting process active.
 5. Don't keep your compost too wet so that it gets soggy and starts to stink. Just as too dry is bad, too wet is also something that you should avoid.
 6. Too much of any one material will slow down the composting process. If you have all leaves, all grass clippings or an overload of any other single type of material, it can throw off the balance of the pile. In general, it's good to keep a mix of green and brown material.
- Source: www.compostguide.com

Compost Bin Sale

Gardeners and homeowners, turn your household food scraps into rich compost for your garden or plants. Not only does home composting provide excellent compost, but you can also save on your garbage disposal costs.

Large, 13-cubic ft compost bins are available at the Recycling Center for only:

\$35.00



Stop in today to See a floor model!

MRF—Manitowoc Co Recycling Center
3000 Basswood Lane, Manitowoc

Manitowoc County Recycling Center

3000 Basswood Road P.O. Box 351
Manitowoc, WI 54220-0351



Manitowoc County Recycling Center
3000 Basswood Road, Manitowoc, WI 54220
Phone: 920-683-4333 Fax: 920-683-5030
www.manitowocrecycles.org

Main Office Hours

Monday – Friday 7:00 am – 4:00 pm
Saturday (seasonal) 8:00 am – Noon

Residential Drop Off

You can drop off the following materials for recycling:

**Plastic Bottles, Tin and Aluminum Cans, Glass Bottles,
Magazines, Newspaper, Cardboard, Paper.**

Please call the Recycling Center if you have questions

regarding where to recycle other materials or visit www.manitowocrecycles.org for a list.

TOURS & PRESENTATIONS

Do you want to learn:

- What we do at the Recycling Center?
- How Manitowoc County recycles?
- More about composting?
- What you can do to recycle better?

Call 683-4333 and set up a tour or group presentation
or learn on-line.

Get useful information at:

www.manitowocrecycles.org

*The Manitowoc County Recycling Center is managed and operated by Holiday House of Manitowoc County Inc.
Serving people with disabilities since 1957.*

