



The Waste Not

VOLUME 7, ISSUE 3
SUMMER 2017

OUR VISION

To provide Brown County municipal, commercial and industrial customers cost-effective and sustainable solid waste management systems with the focus on resource recovery primarily through recycling, repurposing and energy recovery

Recycling TIP Floor to be Replaced

The week of September 11-17 the Brown County Port & Resource Recovery Department will be replacing the Recycling TIP Floor and will be **CLOSED** for drop-off of recyclables. The Recycling Transfer Station will reopen on September 18 for regular business. Haulers will have three options for that week:

1. Hold recyclables for the week
2. Deliver directly to the Tri-County Recycling Facility (1410 Holland Road, Appleton). Please call prior to direct hauling to ensure arrangements are made, (920) 492-4950.
3. Use Advanced Disposal Services (ADS), (1799 S. Broadway St., De Pere). We have made arrangements with ADS to accept Brown County recyclables as our material.



There will be dumpsters provided for **small residential** drop-offs during this time frame at outside the Recycling Transfer Station. Material will only be accepted from a resident. The location of these dumpsters is still to be determined.

Call us at (920) 492-4950 or check our website www.BrownCountyRecycling.org for more information.

INSIDE THIS ISSUE:

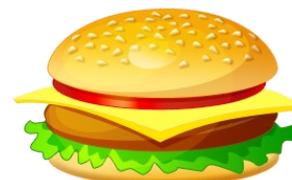
Firework Disposal	2
What Happens to... Light Bulbs?	3
Solvent Recycling: A Different Type of Recycling	4

Customer Appreciation Days

On August 22nd and 23rd the Brown County Port & Resource Recovery Department will host its **Annual Customer Appreciation Days!**

Waste Transfer Station - 3734 W. Mason St.
Tuesday, August 22nd, 2017
10:00 am - 2:00 pm

Recycling Transfer Station - 2561 S. Broadway
Wednesday, August 23rd, 2017
10:00 am—2:00 pm



Firework Disposal

By *Shelby Schraufnagel*

We keep our summers in Wisconsin full with bonfires, fireworks, boating and camping. But what happens to the matches or lighters to start bonfires; empty, unused or expired fireworks; expired boat flares and fire extinguishers? Surely these explosive items can't be ending up in the garbage, right?

This summer, fireworks disposed of incorrectly in Green Bay were the cause of \$10,000 worth of damage to a resident's garage. The damage occurred when used fireworks were placed in the recycling bin on the side of the resident's house. Occurrences like this are not uncommon as it is not unusual for fireworks to start on fire well after the party is over.



Items that are explosive need to be disposed of in a careful and cautious manner to avoid the risk of personal injury or damage to property. The proper way to dispose of spent fireworks is to place them in a bucket of water over night away from buildings and then place them in the garbage, not a recycling bin.

Along the same lines, flares that are required in every marine vessel, or that may be used for camping, cannot be placed in a recycling or garbage bin. Flares are an explosive just like fireworks and need to be treated as such. The Brown County Sheriff's Department accepts marine flares and ground flares, as well as ammunition from residents at their office at 2684 Development Drive. Please call (920) 448-4200 for hours.

Other items that are used to start fires or could start fires if improperly disposed of include lighters, unused or unwanted boxes of matches, e-cigarettes and expired fire extinguishers. Those items can be taken to:

Brown County Hazardous Material Recovery Facility
2561 S. Broadway in Ashwaubenon
Thursday noon—6:00 pm
Saturday 8:00 am—2:00 pm
Businesses will be processed by appointment ONLY

The Hazardous Material Recovery Facility was created for residents in Brown County as a location to take their dangerous chemicals. Unfortunately, the facility does not have the proper means to handle explosive items such as flares and unused fireworks.

The Hazardous Material Recovery Facility is able to accept most hazardous materials from residents. However, there are few items that **cannot be accepted** through the program. The list includes, fireworks, ammunition, flares and other explosives as listed above, asbestos (Outagamie County (920) 832-5277), black powder (Brown County Sheriff's Department (920) 391-7450), sharps (local pharmacies will accept these, call the pharmacy first for proper packaging) and pharmaceuticals (Brown County Sheriff's Department (920) 391-7450).

*Locations and phone numbers listed in parenthesis are acceptable locations for these items that the Hazardous Material Recovery Facility cannot accept.

*This list is not all inclusive.

What Happens to... Light Bulbs?

By Chris Blan

After replacing a couple of burnt out light bulbs, you stand above an open garbage can—bulbs in hand—wondering if there is a better way to manage used light bulbs than tossing them into the trash. Determined to find an alternative, you type www.browncountyrecycles.org into your laptop or smart phone browser. Scrolling through the site you find that incandescent bulbs, although they can be placed in your trash, can also be recycled at the Brown County Hazardous Materials Recovery (HMR) Facility. Fluorescent bulbs, you read, should be properly recycled due to small amounts of mercury in the bulb. You go on to read that ALL bulbs are accepted at:

Brown County Hazardous Material Recovery Facility
Thursday noon—6:00 pm & Saturday 8:00 am—2:00 pm
\$0.25/bulb for Brown County residents
Additional fees may apply for out-of-county residents
Businesses will be processed by appointment ONLY

You decide on a day and time to drop off your bulbs and pay the fee. Driving away you may be thinking, **“What happens to my light bulbs”** now?

The Brown County HMR receives over 25,000 bulbs of all types each year. Bulbs are sorted based on type and shape (incandescent, metal halide, compact fluorescent, 4-foot and 8-foot inline fluorescent, and numerous other categories). The HMR utilizes a local vendor to process all the bulbs we collect. Employees wearing protective gear at the bulb recycling company feed bulbs into large industrial processing equipment that breaks the bulbs and separates the glass, metal caps and the mercury-containing phosphor powder. Since much of the mercury in a fluorescent bulb escapes once the bulb is broken, this whole process is done in a vacuum environment. Environmental testing is done daily to ensure workers and the environment are protected and equipment is operating efficiently. The glass is often landfilled, the copper (and other metal) is recycled and the phosphor mercury powder, along with the vacuum filters, are sent to a specialized facility in Wisconsin where the mercury is recovered via a highly regulated distillation process.

The New “Kid” on the Block

No bulb has advanced quicker from concept to consumer availability AND at an economic price quicker than the LED bulb. LEDs are the most energy efficient and longest lasting bulb on the market. The HMR facility is slowly seeing an increase in the number of LED bulbs being brought in for recycling. Unfortunately, LEDs are not as easily recycled compared to other bulbs. Most LEDs have a hard polycarbonate lens that needs to be manually cut off and components disassembled and separated by hand. At this time, the electronics component is the only part that is recycled. The increased manual labor results in a higher recycling cost per bulb. There is confidence that in time bulb recycling technology and recycling markets will adapt to LED bulb technology and the growing number of LEDs being sent for recycling.

Did You Know?

Compact fluorescent light bulbs are an energy-saving alternative to incandescent bulbs - they produce the same amount of light, use one third of the electricity, and last up to ten times as long. And LED bulbs can last even longer with even lower energy usage.

It is also safe to put old incandescent bulbs in the trash.



Solvent Recycling: A Different Type of Recycling

By Alex Ray

As you may have learned from previous issues of *The Waste Not*, many of the solvents brought to the Brown County Hazardous Materials Recovery Facility (those not put out for public use) are disposed of via a third party contractor to use as fuel for cement kilns. However, if a business is a large consumer of solvents (think cabinet manufacturers, or painting businesses), an alternative may be available closer to home: solvent distillation.

Solvents can include paint thinner, nail polish remover, spot remover and even perfume.

The process of solvent distillation allows for dirty solvent to be recycled to yield near virgin quality solvent while creating less waste needing to be disposed of. The distillation process itself is fairly simple to understand. The process begins by mixing the “dirty” or used solvent, with an additional, low volatile organic compound (VOC) solvent, called an ‘extracting agent’. This yields a mixture in which conventional distillation can be used to create a fluid with two layers: a top layer consisting of relatively pure, high VOC solvent to be collected and reused, and a bottom layer consisting of the extracting agent and low VOC compounds. Once separated, this bottom layer can then be further distilled, yielding the extracting agent, to be used in the process again, and a low VOC residue.

The resulting low VOC residue will still need to be disposed of, but there is a much smaller quantity. This allows for some savings on disposal, as less material overall will need to be disposed of. There are many manufacturers of solvent distillation equipment, but to be economically feasible a large amount of material is needed to make the purchase of distillation equipment feasible. Thus this method of solvent recycling may only make sense for large producers.

If you have solvents to get rid of or even the residue from a solvent distillation system, our Hazardous Materials Recovery Facility can assist with your disposal needs. To set up an appointment, or answer any questions, please feel free to contact the facility at (920) 492-4964.

Follow Us

For facts, general information and ideas on how to reduce waste, follow us on Facebook, Twitter and Pinterest! [We post information you want to know several times a week.](#)

If you are interested in reading more about a resource recovery topic online or in our newsletter let us know! We would love to hear from you.

Email us at bc_resource_recovery@co.brown.wi.us with your idea and we will post it or include



Brown County Port & Resource Recovery Department

Recycling & Hazardous Waste Facilities
2561 S. Broadway | Green Bay, WI 54304

Waste Transfer Station
3734 W. Mason | Green Bay, WI 54155

Phone: 920-492-4950
Fax: 920-492-4957
E-mail: bc_resource_recovery@co.brown.wi.us
www.BrownCountyRecycling.org

