# Hazardous Waste– Quick Reference

Solid waste is what most of us think of as "trash" or "garbage" we produce. Despite its name, "solid" waste, it can be solid, liquid or contained gas. Broadly defined, solid waste is any material no longer used for its originally intended purpose, that will be discarded, treated to reclaim its original properties or processed to be used for an alternative purpose.

For more information on properly managing solid waste, please see the following pages and topics.

- Recycling and composting overview
- What to recycle
- Landfills
- Health care waste
- Beneficial use of industrial byproducts
- Managing accumulated sediment from storm water ponds (NR 528)
- Managing construction and demolition waste
- Waste tires in Wisconsin

## Dangerous Waste (DW)

Includes the waste which is dangerous to life, health, and the environment. For this reason, it requires special handling and disposal. (See, NR 679, NR 500, NR 447, TSCA for more information.)

Dangerous waste includes,

- Asbestos
- Lead Paint
- Oil
- Infectious, pharmaceutical, medical
- Electronics
- Radioactive materials
- PCB's

## **DW Topics:**

### **Used Oil:**

Used Oil includes,

- Motor oils
- Greases
- Emulsions
- Machine shop coolants
- Heating media
- Brake fluids
- Transmission fluids
- Other hydraulic fluids
- Electrical insulating oils

- Metal working fluids
- Refrigeration oils

Containers and above ground tanks used to store used oil shall be labeled clearly with the words "USED OIL", NOT "Waste Oil". NR 679.22(3)

Hazardous Waste label can be used only if oil contains something hazardous.

Not leave funnels on oil tanks. Close oil tank tightly with its original cap.

See WI DNR Publication WA 233 <u>Used Oil Management</u> and <u>Satisfying the Rebuttable Presumption for more details.</u>

**Used Oil Filters: WI ACT86** 

Used oil filters are regulated as used oil and lanfill banned since 2011. They should be recycled after adaquately drained. Store in containers that are in good condition and not leaking and label as "Used Oil".

Oil Absorbents: WI ACT 152

Oil absorbents can landfill if:

- · no free flowing oil in the absorbent material
- absorbents are not hazardous waste

Best management practices: Recycle by sending to energy recovery or oil recovery.

See WI DNR Publication WA 1522 <u>Managing Automative Engine Used Oil Filters and WA1503 Used Oil Filters and Absorbents Landfill Ban Questions and Answers</u> for more details.

#### **DW - Infectious Waste**

Infectious waste is solid waste that contains pathogens. It includes:

- Sharps (needles, lancets, etc.)
- Bulk amounts of blood and body fluids (OSHA's terms: drippable, pourable, squeezable, flakeable)
- Microbiological laboratory waste
- Human tissue

Animal infectious waste

Exposure to infectious waste could contract an infectious disease. Storage must be enclosed container which has a label with an universal biohazard symbol.





Biosafety Level 2

AUTHORIZED PERSONNEL ONLY

See <u>Basic Infectious Waste Requirements for Generators of Small Amounts and Solidifying Infectious Waste for more details.</u>

### **DW - COVID 19 Infectious Waste**

COVID-19 waste that contains sharps (or other infectious materials if not disinfected) should continue to go out as medical waste.

See the <u>WDNR's Infectious Waste Regulations</u> page and listed below links for more detail.

- https://www.cdc.gov/coronavirus/2019-ncov/lab/faqs.html
- https://www.meriinc.com/how-to-dispose-of-covid-19-and-antibody-testwaste/
- https://www.stericycle.com/covid-hub/packaging-guidance
- https://dnr.wisconsin.gov/topic/HealthWaste/Infectious.html (see COVID-19 tab)

#### **DW- Pharmaceutical Waste**

Pharmaceutical waste may include, but not limited to:

- Expired drugs
- Patients' discarded medications
- Waste materials containing excess drugs (syringes, IV bags, tubing, vials, etc.)

### What is regulated?

- DEA controlled substances
- Containers that held P-Listed drugs
- Drugs that are a hazardous waste (mercurochrome, arsenic compounds)

See, <u>WI DNR Health Care Initiative Fact Sheet (PUB WA-1257 2008)</u> - Evaluating & Managing Pharmaceutical Waste and <u>Managing Excess Vaccines</u>.

#### **DW - Radioactive Waste**

Radioactive waste is waste that contains radioactive material. These materials may include smoke detectors, exit signs etc. which are used in everyday life. Look for radioactive symbols and notices or warnings on the waste material. Call Risk Management x2320 for assistance. And do Not disassemble manufactured articles.



#### DW - Electronics

Computers, computer accessories, TVs, cell phones and other electronics contain harmful materials including lead, mercury, cadmium, chromium, other heavy metals and chemical flame retardants. When landfilled, burned or illegally dumped, these chemicals can leach into soil or groundwater, where they may affect human and environmental health. Improperly handled discarded electronics may also cause health risks to workers at companies that manage the electronics.

Electronic devices covered under the Wisconsin's electronics recycling law ban include: computers and computer peripherals; TVs; desktop printers fax machines; DVD players, VCRs and other video players (DVRs); and cell phones.

See WI DNR PUB-WA 1473 2010 Managing Electronic Wastes Destined for Recycling and "Which Electronics Can I Recycle Under E-Cycle WI?" for more details.

## **UNIVERSAL WASTE (UW)**

#### Universal Waste

To encourage and facilitate recycling, Wisconsin's universal waste regulations reduce the hazardous waste management standards for Wisconsin's designated universal wastes by requiring less recordkeeping and allowing longer storage accumulation (max. 1year).

Keys to managing universal waste:

- **TRAIN:** Employees who handle universal waste require training. Keep training records.
- **KEEP CLOSED:** All containers of used lamps, antifreeze, pesticides and mercury-containing equipment must be closed.
- LABEL: All containers or individual items must be correctly labelled.
- **DATE:** Containers or individual items must be labelled with the date when the item was first placed in the container or the date when the item became waste.
- **REMOVE:** Waste must be picked up or taken for recycling within one year of the date on the container.

## **UW - Lamps**

Lamps that can be managed as universal waste include:

- Fluorescent lamps (tube style),
- Compact fluorescent lamps (CFLs),
- Mercury vapor lamps,
- Metal halide lamps,

- High-pressure sodiumvapor lamps,
- Ultraviolet lamps,
- Neon lights,
- · Black lights,
- LED lamps.

Broken lamps should be placed in closed, leak-proof, non-metal containers and handled as hazardous waste.

### **Management Practices:**

- Keep containers closed
- Label and date storage boxes clearly with the words "universal waste lamps,"
  "waste lamps" or "used lamps."
- Mark the date on which the lamps were placed in storage on the cartons or boxes, or keep records of when lamps were placed in storage.
- Can store for one year
- Tape all corners and flaps
- Keep from breaking
- Reuse original package

See WI DNR WA-195 <u>Lamp and Bulb Management and WA 653 2001 Management of</u> "Green" Fluorescent Bulbs for more details.

#### **UW - Batteries**

Batteries used in many household and office products, as well as motor vehicle batteries, contain a variety of heavy metals and other materials that can be harmful to human health and the environment if not handled properly.

Batteries that may be managed as universal waste include:

- button batteries
- lithium and lithium-ion batteries
- rechargeable nickel-cadmium batteries
- nickel-metal hydride batteries
- sealed lead-acid batteries
- silver oxide batteries
- mercury oxide batteries

Alkaline batteries are not hazardous and may be disposed of or recycled. See <u>Battery Recycling for Businesses</u> for more details.

## **Management Practices:**

- Keep containers closed
- Label and date the container clearly with the words "universal wastebatteries," "waste batteries" or "used batteries"
- Separate battery types
- Isolate battery terminals
- Keep from breaking
- Can store for one year

## **UW - Mercury Equipment**

Mercury-containing equipment that can be managed as universal waste includes:

- Thermostats,
- Barometers,
- Mercury switches,
- Old silver-mercury thermometers,
- Certain medical equipment.

Broken mercury devices should be placed in closed, leak-proof, non-metal containers and handled as hazardous waste.

## Management Practices:

- · Keep containers closed
- Label and date the container clearly with the words "Universal Waste— Mercury Containing Equipment," "Waste Mercury-Containing Equipment," or "Used Mercury-Containing Equipment."
- Do not break devices

- Keep spill kit available
- Use non-metal rigid containers
- Can store for one year

See WA 1004-2006 Management of Mercury Containing Equipment for more details.

#### **UW - Antifreeze**

Waste antifreeze, also called used engine coolant or used ethylene or propylene glycol, often contains heavy metals such as lead, cadmium and chromium in high enough levels to make it a regulated hazardous waste. Mixing antifreeze with any other waste may make it ineligible for recycling due to contamination.

#### **Management Practices:**

- Keep containers closed
- Label and date the container clearly with the words "Used Antifreeze."
- Can store for one year
- · Do not mix with other chemicals
- It is illegal to dump in storm water, sewer, septic tank, or absorption field.

See WA 356 Managing Used Antifreeze for more details.

#### **UW - Pesticides**

Waste pesticides include those that are cancelled, suspended, banned, recently purchased but unused and pesticide residue that remains in spray tanks.

All waste pesticides must be kept in closed containers that will not leak or spill under normal conditions.

Original product labels must be attached to containers of waste pesticides, even if the container that stores the residue in is not the original container.

All containers must be correctly labeled as "Universal Waste - Pesticides" or "Waste Pesticides" and have original product labels.

Individual items must be labeled with the date when the user decided the pesticide was deem waste.

Pesticides must be removed for recycling within one year of the date on the container.

## RESOURCES & REFERENCES

Management of hazardous waste in Wisconsin | | Wisconsin DNR

Management of universal waste in Wisconsin | | Wisconsin DNR