



# Managing Spent Lead-Acid Batteries

## Requirements for Generators

Waste/Hazardous Waste #4.06, rev. June 2003

*This fact sheet is intended as guidance for businesses that generate spent lead-acid batteries.*

### Contents

Environmental Concerns .....	1
Storing .....	1
Indoor Storage .....	1
Outdoor Storage .....	1
Inspecting .....	1
Recycling and Recordkeeping .....	1
Helpful Hints .....	2
More Information .....	2
Shipping Log .....	3-4

### Environmental Concerns

If managed improperly, spent lead-acid batteries (SLABs) may leak or spill and cause lead and/or acid contamination of the soil and ground water. Persons who generate, collect or accumulate spent lead-acid batteries are responsible for proper storage and containment of leaks or spills.

### Storing Batteries

Spent lead-acid batteries (SLABs) may be stored either indoors or outdoors. *Indoors* means in a building having a roof and at least three walls which are permanently attached to an impermeable floor which lies directly on the ground. Semitrailers and sheds without floors do not qualify as indoor storage areas.

### Indoor Storage

Store SLABs on a non-reactive, curbed and impermeable surface. A non-reactive and impermeable surface will help ensure that acid and lead will not corrode or pass through the containment area and leak into the soil or ground water. Curbing will prevent leaks or spills from running off the edge of the containment area.

If your storage area has a floor drain, place the batteries in a plastic tub or other container that will provide adequate containment of a spill or leak.

### Outdoor Storage

In addition to storing SLABs on a non-reactive, curbed and impermeable surface, construct the outdoor storage area in a way that will prevent rain, snow, and draining water from entering.

### Inspecting Batteries

Inspect batteries regularly for cracks or leaks. SLABs stored outdoors have a greater possibility of cracking and leaking due to freezing and thawing, and should be inspected more often.

Place cracked or leaking batteries in an acid-resistant, leakproof, closed container.

Small spills and leaks may be neutralized with lime, cement or another caustic. Contain the spill material and manage it as a hazardous waste.

Report any **uncontained** spills by calling the 24-hour

### Minnesota Duty Officer

(651) 649-5451

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(800) 422-0798

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(800) 627-3529

### Recycling and Record Keeping

Recycle spent batteries by sending them to a reclaimer. Batteries going to a reclaimer may be picked up by a battery hauler, a battery supplier, or transported by the generator. (*See hazardous waste fact sheet #6.06 for a list of haulers and outlets.*) When transporting spent lead-acid batteries, you do not need to use a hazardous waste manifest. Persons who transport or reclaim spent lead-acid batteries are subject to additional requirements. For more information about transporting lead-acid batteries, see hazardous



waste fact sheet #4.08, *Transporting Spent Lead-Acid Batteries (SLABs)*.

At least 75 percent of the batteries you accumulate each year must be sent to a reclaimer. If you do not recycle at least 75 percent of your batteries each year, you will be subject to additional storage requirements.

Keep records to document that you are recycling. A sample shipping log is included on pages three and four. You may copy this for your own use or design your own.

In Greater Minnesota, recycled SLABs do not need to be reported on hazardous waste license applications. If batteries are your only hazardous waste, you do not need a hazardous waste generator license.

Many metropolitan counties require that SLABs be reported and also require a hazardous waste generator license. Check with your county office.

### Helpful Hints

- There are a number of containers made specifically to store batteries. Capacity varies from a few batteries up to about 75 batteries. Check with your supplier for more information.
- A plastic ‘kiddie’ swimming pool is a low cost option if you have only a few batteries to store. Because these pools crack easily during the winter, they are only a temporary storage solution. If used outside, the batteries and pool must be covered with a tarpaulin or other material to prevent rain and snow from entering the pool.
- A wooden frame lined with heavy polyethylene may also be used to store batteries. Check the liner regularly for cracks or tears.
- If storing batteries on asphalt or concrete, coat the surface with a good acid-resistant epoxy, fiberglass or plastic coating, or line the area with heavy polyethylene. If using a poly liner, check it regularly for cracks or tears.
- Sealed five-gallon plastic (polyethylene) pails are adequate for storing a leaking or cracked battery.
- Store batteries upright to prevent leaking from the vent holes.
- Stack batteries no more than five high – less if the stack becomes unstable. You may wish to place wood or some other type of divider between the batteries to prevent the terminal posts from puncturing the battery stored above.

### More Information

Your metropolitan county and the Minnesota Pollution Control Agency (MPCA) have staff available to answer waste management questions. For more information, contact your metropolitan county hazardous waste office or the MPCA office closest to your county.

The Minnesota Technical Assistance Program (MnTAP) has staff that can help you find waste to reduce waste.

#### Metro County Hazardous Waste Offices

Anoka County .....	(763) 422-7093
Carver County .....	(952) 361-1800
Dakota County .....	(952) 891-7020
Hennepin County .....	(612) 348-8100
Ramsey County .....	(651) 773-4466
Scott County .....	(952) 496-8177
Washington County .....	(651) 430-6655

#### Minnesota Pollution Control Agency

Toll free .....	(800) 657-3864
Brainerd .....	(218) 828-2492
Detroit Lakes .....	(218) 847-1519
Duluth .....	(218) 723-4660
Marshall .....	(507) 537-7146
Rochester .....	(507) 285-7343
St. Paul .....	(651) 297-2274
Willmar .....	(320) 214-3786

**Web Site** ..... <http://www.pca.state.mn.us>

#### Minnesota Technical Assistance Program

Local .....	(612) 624-1300
Greater Minnesota .....	(800) 247-0015

**Web Site** ..... <http://www.mntap.umn.edu>

This fact sheet prepared in cooperation with . . .

- *Metropolitan County Hazardous Waste Staff*
- *Minnesota Technical Assistance Program*



