Handling Wastes: Vehicle Batteries

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Environmental Hazards of Batteries A battery is an electrochemical device with the ability to convert chemical energy to electrical energy to provide power to electronic devices. Batteries may contain lead, cadmium, mercury, copper, zinc, lead, manganese, nickel, and lithium which can be hazardous when incorrectly disposed. Batteries may produce the following potential problems or hazards:

- Pollute the lakes and streams as the metals vaporize into the air when burned.
- Contribute to heavy metals that leach from solid waste landfills.
- Expose the environment and water to lead and sulfuric acid.
- Contain strong acids that are corrosive.
- May cause burns or danger to eyes and skin.

Heavy metals have the potential to enter the water supply from the leachate or runoff from landfills. It is estimated that nonrecycled lead-acid batteries produce about 65 percent of the lead in the municipal waste stream. When burned, some heavy metals such as mercury may vaporize and escape into the air, and cadmium and lead may end up in the ash, making the ash a hazardous material for disposal.

Vehicle Batteries

Seventy million auto batteries are produced each year in the U.S. About 80 percent of discarded lead-acid batteries are being collected and recycled. Lead-acid batteries contain about 15 to 20 pounds of lead per battery and about 1 to 2 gallons of sulfuric acid.

Auto batteries may be recycled by trading in an old battery when replacing a battery. Most battery distribution centers, automotive garages and repair centers have collection points. Batteries are also accepted at some scrap yards, auto dismantlers, and some retail chain stores. Batteries should be stored in a secure area, locked or away from children and sources of sparks. If you have old batteries, find a place that will recycle them.