NOLS Disposal and Recycling Guidelines for Common Materials

Purpose
This document provides general guidelines for NOLS staff regarding the proper disposal of materials that may not be appropriate for traditional waste or recycling streams. Materials covered include appliances, electronic items, batteries, cleaning products, fertilizers, pesticides, ashes, medical waste and other items that are present at NOLS facilities.

It is important to note that access to recycling and disposal services will vary from branch to branch and country to country. NOLS staff will likely need to do additional research to identify the best solutions for waste recycling and disposal in their area.

Materials

Appliances
Concerns: Refrigerators, freezers, microwaves, and other appliances often contain materials unsuitable for landfills and incineration facilities. For example, refrigerants from refrigerators and freezers may contain chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and other hazardous materials.

Solutions:
1. Identify reuse opportunities for working appliances. Charitable organizations may be able to take used appliances and find them new homes.
2. Contact local appliance retailers. Many offer collection programs, especially if you are purchasing a new appliance.
3. Check with local utilities to see if they have a collection program. Requirements may vary and programs often require that appliances meet certain standards and are in decent working condition.
4. Connect with municipal waste management agencies. Many communities have drop-off facilities for appliances and other wastes and some organize regular pick up events.
5. Contract with a local waste management service. Regional waste/recycling companies will often take old appliances for a nominal fee.

Electronics (eWaste)
Concerns: Computers, printers, mobile phones, and other common electronic devices contain both recyclable components and hazardous materials. Much like appliances, staff should look for opportunities to extend the product life of electronics and keep ewaste out of traditional waste streams.

Solutions:
1. Identify reuse opportunities for working electronics. Computers can be refurbished and sold and other electronic devices can be donated to local charitable organizations.
2. Check with manufacturers and retailers to see if items are eligible for take-back initiatives.
3. Many municipalities have drop-off locations for ewaste. Connect with local providers for more information about collection programs and protocols. Programs vary country to country and state to state.
4. If local agencies do not provide ewaste collection, consider private waste management companies that collect ewaste. Look for companies that participate in certification programs such as Responsible Recycling Practices (R2) and the e-Stewards® standards.

**Batteries**

**Concerns:** Both wet and dry cell batteries contain heavy metals that should be recycled to keep the materials out of the soil and atmosphere.

**Solutions:**

**Lead-Acid Batteries (Automotive and Non-automotive)**
1. Return your old lead-acid batteries to retailers that sell automotive batteries. In the United States, these retailers are often required to collect batteries for recycling under state laws.
2. Check with local waste agencies about battery collection programs or drop-off sites.

**Dry-Cell Batteries (Non-rechargeable)**
1. Identify local battery collection programs in your area. Reclaimed batteries are often sent to recyclers who can reuse or repurpose most battery materials.
2. Consider shipping used batteries to a reclamation/recycling company.

**Dry-Cell Batteries (Rechargeable)**
1. Check to see if manufacturers and retailers offer take-back programs. Computer and mobile phone manufacturers and retailers often collect old laptop and cell phone batteries for recycling.
2. Consider shipping used batteries to a reclamation/recycling company.

**Cleaning Products**

**Concerns:** Leftover cleaning products may contain hazardous substances that can be toxic, corrosive, flammable, etc.

**Solutions:**
1. Use cleaners that contain safe and natural ingredients. For more information, refer to the NOLS Green Cleaning Policy.
2. Connect with other organizations that may be able to use leftover cleaning products.
3. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.
4. Check with local businesses for recycling or disposal options. Large manufacturing firms and automotive repair shops may accept certain HHW for other organizations and community members.

**Ashes**

**Concerns:** There are few concerns for ashes generated by wood stoves and fireplaces. Most communities allow ashes to be placed in regular garbage bins as long as ashes are completely extinguished.

**Solutions:**
1. Be sure that ashes are extinguished before disposal in garbage bins.
2. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.
**Medical Waste**

**Concerns:** Common medical waste includes sharps (needles), unused pharmaceuticals, and used gloves and wound dressings. Sharps and medications should be kept out of traditional waste streams and used wound dressings need to be handled carefully during disposal. Improper disposal can injure NOLS staff and waste management employees and harm the environment.

**Solutions:**

**Sharps**
1. Collect needles and other sharps in proper sharps disposal containers. Purchase sharps containers from local pharmacies or online retailers.
2. Identify collection options within the community. Options may include:
   - Drop-off collection sites at hospitals, doctor's offices, health clinics, pharmacies, medical waste facilities, police and fire departments, or other community organizations.
   - Community household hazardous waste (HHW) drop-off sites.
   - Special waste pick-up services from a waste management agency.

Note: Do not place sharps in recycling bins or garbage containers and do not flush them down the toilet.

**Pharmaceuticals**
1. Take expired medications to local pharmacies for proper disposal.
2. Check with local waste management agencies to see if they accept pharmaceuticals as part of an existing hazardous household waste (HHW) collection program.
3. In large communities, police departments and other agencies may offer collection programs.

Note: Do not flush pharmaceuticals down the toilet. This can contaminate local drinking water and hurt the environment.

**Gloves and Wound Dressings**
1. Check with local waste management agencies to see if they accept these items as part of an existing hazardous household waste (HHW) collection program.
2. If no collection program exists, double bag these materials. Most waste agencies allow combining these materials with other garbage.

Note: Check state regulations for handling requirements for bloodborne pathogens.

**Paint**

**Concerns:** Leftover paint products may contain hazardous substances that can be toxic, corrosive, flammable, etc. Newer latex paints contain fewer toxins but disposing of excess paint as hazardous household waste can be expensive. Do not dispose of excess paint products with regular garbage.

**Solutions:**
1. Keep painting! Identify other projects that can utilize any excess paint.
2. Connect with other community organizations that can use any excess paint.
3. Store the paint for future projects.
4. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.

**Pesticides and Fertilizers**

**Concerns:** Improper disposal can harm the environment and endanger humans and animals. Unfortunately, these materials cannot be recycled.

**Solutions:**
1. Reduce use of pesticides and fertilizers. If use is necessary, plan and purchase only what you can use.
2. Connect with other organizations that may be able to use any excess fertilizer or pesticides.
3. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.

**Propane Tanks**

**Concerns:** Propane tanks at the end of their usable lives require special handling for recycling. Tanks may explode under the right conditions.

**Solutions:**
1. Reuse propane tanks as long as they are in safe working condition.
2. Find new owners for reusable propane tanks.
3. Contact local hardware stores or other propane retailers. Many will take back used propane tanks.
4. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.

**Vehicle Waste**

**Concerns:** Vehicle fluids (oil, antifreeze) are hazardous waste and other vehicle waste (tires) can be recycled and diverted from traditional waste streams.

**Solutions:**

**Motor Oil and Antifreeze**
1. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.
2. Check with automotive repair shops. Many shops will take your used oil and antifreeze for proper disposal or recycling.

**Tires**
1. Check with automotive repair shops. Many shops will take old tires for proper disposal or recycling.
2. Municipalities and local waste management agencies may offer collection services or drop-off sites. Note that most collection programs charge for taking old tires.

**Other Special and Hazardous Waste**

**Solutions:**
1. Identify household hazardous waste (HHW) collection programs in your community. These programs may offer pick-up on specific collection days or collect HHW at a facility.
2. Check for local, state, or national programs that deal with particular types of hazardous or special waste.

**Resources**

Environmental Protection Agency – [www.epa.gov](http://www.epa.gov)
- Battery Recycling: [http://www.epa.gov/osw/conserve/materials/battery.htm](http://www.epa.gov/osw/conserve/materials/battery.htm)
  - [http://www.call2recycle.org](http://www.call2recycle.org)
- Medical Waste:
  - Sharps: [http://www.epa.gov/osw/nonhaz/industrial/medical/disposal.htm](http://www.epa.gov/osw/nonhaz/industrial/medical/disposal.htm)

State and Country Information
- Washington:
  - [http://www.ecy.wa.gov/waste.html](http://www.ecy.wa.gov/waste.html)
  - Conway: [http://www.skagitcounty.net](http://www.skagitcounty.net)

Other Resources:
- Product Stewardship Institute - [www.productstewardship.us](http://www.productstewardship.us)
- Earth911 – [www.earth911.com](http://www.earth911.com)