Illinois Counties Solid Waste Management Association

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Illinois EPA's
Bureau of Land -- Goal Statement

Protection and restoration of land and groundwater resources in the State of Illinois

SAFE

WASTE

MANAGEMENT

Automotive Wastes

1. Fuels
2. Antifreeze
3. Freon
4. Used motor oil
5. Miscellaneous fluids and oils
6. Parts washing wastes
7. Stormwater Runoff
8. Brake shoes and clutches
9. Batteries
10. Sodium azide air bags
11. Metals
12. Glass
13. Plastics
14. Rubber Parts
15. PCB Capacitors
16. Mercury switches
17. Tires

Salvage Industry Wastes and Acceptable Disposal

(Source: USEPA)

Waste Materials and Fluids	Suggested Disposal Mechanism
Miscellaneous metals	Recycle
Gasoline	Use in facility vehicles
Engine oil	Recycle
Antifreeze/engine coolant	Reuse or recycle
Brake & transmission fluids	Dispose of as hazardous waste
Air conditioning refrigerants	Recover, reclaim, or recycle
Tires	Sell for reuse/energy production; dispose of
Engines	Sell for reuse; recycle as scrap metal
Miscellaneous parts	Sell, recycle, dispose of
Miscellaneous rubber	Sell, dispose of
Hydraulic oil	Recycle along with waste oil
Windshield wiper fluid	Reuse; collect & resell
Brake shoes not containing asbestos	Recycle
Brake shoes containing asbestos	Dispose of
Lead-acid batteries	Collect & ship to a recycler
Oil filters	Drain, collect & recycle
Air bag cartridges	Sell; dispose of

Facility Responsibility

State of Illinois Regulations

- *All* solid **waste generators are *responsible*** for determining whether or not their waste is a special waste
    - See 35 Ill. Adm. Code 808.121.(a)

- **You must also determine if the waste is a hazardous w**aste (Adm. Code 722.111)
    - It is listed in 35 Ill. Adm. Code Part 721
    - It exhibits one of the following characteristics (see statute)

        1. Ignitability
        2. Corrosivity
        3. Reactivity
        4. Toxicity

The Illinois EPA recommends that fluids are removed before the vehicle is disassembled, stored or crushed. Removing fluids and properly containerizing and storing them can help minimize spills or releases that could otherwise harm the environment.

Used Oil

- "Used Oil" means any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities
- Used Oil is <u>not</u> the same as Waste Oil (e.g., spill residues)
- Used Oil:
  - Petroleum-based or synthetic oil contaminated during use
  - Is exempt from hazardous waste regulations if it is recycled or burned for energy recovery
  - Commonly motor oil, transmission fluid, refrigeration oil, compressor oil, hydraulic fluid, metal working fluid, lubes

Used Oil Facts

- 380 million gallons of used oil recycled annually
- Recycled used oil can be used again for same or new task
- Businesses that handle used oil:
  - Generators
    - Auto salvage yards, car repair shops, service stations, quick lube shops, motor pools, metal working shops and boat marinas
  - Collection Centers and Aggregation Points
  - Transporters
  - Re-refiners and Processors
  - Burners
  - Marketers

Used Oil Management Standards

35 Ill. Adm. Code – Part 739

- Storage
  - Only use tanks and storage containers
  - Label all containers, tanks and fill pipes as **“Used Oil”**
  - Keep containers and tanks closed and in good condition (no rust, leaks)
  - Store containers on cement or asphalt pads

(Source: USEPA)

Used Oil Filters

- Prior to recycling or disposal, should be well drained
- Used oil drained from filters can be combined with other used oil
- Recycling as scrap metal is the recommended option for drained filters

Auto Salvage Yard Contamination

- Can result from:
  - Improper parts storage , fluids and refrigerant storage
- Can occur at many stages of salvage operation
  - Vehicle disassembly
  - Fluid drainage operations
    - Can result in soil, groundwater and air contamination

(Source: USEPA)

Oil Spills and Leaks

- Properly clean up and recycle the used oil
  - Determine if oil is a hazardous waste and dispose appropriately
- Manage *all* cleanup materials (rags, booms) appropriately
- Remove, repair or replace defective tank or container
- Call Illinois Emergency Management Agency
  - (800) 782-7860
- Call the National Response Center if release is 12.5 gallons (25 gallons if from Underground Storage Tank)
  - (800) 424-8802

Gasoline and Oil Contamination of Soil

Exercise Prudence and BMPs

- If used oil becomes contaminated from mixing with hazardous waste:
  - Other federal and state regulations will apply
  - Oil will need to be treated as a hazardous waste
- Store Used Oil Separately From Solvents and Chemicals
- Do Not Mix With Other Substances

Call RCRA Hotline at 1-800-424-9346 for more information

- **Things you should know before handling a spill or leak:**
  - Certain chemicals, when discarded, and the media they contaminate will become hazardous wastes. If, for example, gasoline from a vehicle or AST was spilled, the contaminated soil and gravel will probably meet or exceed the TCLP standard of 0.5 mg/l for benzene, making it a hazardous waste.
  - The generation, storage, transportation, treatment and disposal of hazardous wastes are subject to the requirements of RCRA. The Illinois EPA can handle the site's compliance with those requirements, manage the necessary cleanup, and any enforcement action.

Some guidelines for handling the spill or leak and cleanup

- If used oil, diesel fuel, or antifreeze have been spilled or leaked, the contaminated soil and gravel will probably not meet or exceed any TCLP standards, making the contaminated soil and gravel a non-hazardous special waste.

- Generally speaking, if the contaminated soil and gravel are a non-hazardous special waste, the area affected by the spill or leak does not exceed about 100 square feet in size, appears to be shallow in depth, confined to the generator's property, and limited in its effect on the surrounding environment, you can tell the generator to clean up the contamination and prevent it from happening again.

Some guidelines regarding spill or leak cleanup

- **With non-hazardous special wastes, cleaning up will include telling the generator to:**
  - remove any liquid still present on the ground or in a leaking container to a secure and proper container;
  - remove all the contaminated soil and gravel that are visible or odorous on and below the surface, and place it in a closed container, such as a 55 gallon open top type drum, tarped roll-off box, or a dumpster with a lid; and
  - ship all the wastes to an Illinois EPA permitted landfill, or other properly permitted facility, and provide documentation of proper transportation and disposal.

CAT

Monitoring the cleanup – Beware of "White Rock Remediation"

Other Regulated Wastes Generated by Auto Recycling/Salvage Yards

- Spent solvents from parts washers
- Solvent-contaminated wipers/shop towels
- Waste paints
- Mercury switches
- Used antifreeze contaminated with metals/solvents/fuels
- Used oil contaminated with metals/solvents/fuels

(Source: Automotive Recycler's Association)

Battery Best Management Practices (BMPs)

- Remove batteries before crushing any vehicles
- Use an authorized recycler
- Leave lead cable ends attached to scrap, recycled batteries
- Recycle lead cable ends from recharged, resold batteries
- Store lead-acid batteries inside in acid resistant rack or tub
- Outdoor stored batteries should be on concrete
- Outdoor stored batteries should be covered and contained
- Keep a neutralizing agent (example: baking soda) handy
- Cracked/leaking batteries should be stored dry and enclosed

(Source: Automotive Recyclers Association)

Other Storage Considerations

- Waste batteries or a container of them *must* be labeled or marked clearly with *any* of the following:

    1. Universal Waste – Battery(ies)
    2. Waste Battery(ies)
    3. Used Battery(ies)

    Don't accumulate waste batteries longer than a year

Proper Storage of Used Batteries

Other wastes that can contaminate soil – lead from lead acid batteries

Used/Waste Tires BMPs

- Used and waste tires can be stored on-site
  - –inside or outside (covered) a facility
- Waste tires cannot accumulate for > 90 days
- Must use Illinois Registered Tire Transporters
  - – Commercial
  - – Non-Commercial

Improper Disposal of Waste Tires

Proper Storage of Used Tires

Questions