

Storing Hazardous Wastes

Storing hazardous wastes safely is a simple way to help protect your community's health. Hazardous wastes should be stored up off the ground, in containers, and under cover. This will prevent any leakage to the ground. And it will protect the containers from weather degradation. Ideally, the wastes should be stored so they cannot be accessed by the public. Remember to prepare and manage the wastes properly before storing them.



Guidelines for Safe Storage

Storage Equipment

Drum storage and containment

Hazardous waste storage buildings

Least Expensive Option - construct a simple shelter

Moderately Expensive Option - convert a shipping container

Most Expensive Option - prefabricated storage buildings

Guidelines for Safe Storage



1 Separate different types of hazardous wastes:

- Keep products in their original containers if possible.
- Don't mix any products together.
- Don't store a hazardous product in a container that was previously used for a different product.

2. Label all containers:

- Label, identify, and date all containers to the best of your knowledge.
- The labels don't need to be fancy - in fact a pen marker can be used to write on the container (write big and use clear lettering).
- You can also write on a piece of paper and cover it with clear tape for a label.
- DEC also has pre-made stickers for used oil, antifreeze, batteries, and gasoline. Contact DEC and ask for these stickers:



DEC

Deric Marcorelle

907 262-5210 x249

35390 Kalifornsky Beach Rd. Soldotna, AK 99669

Email: deric_marcorell@dec.state.ak.us

- ☉ You can also see our website for a pre-made label which you can print out, cover with clear tape, and secure to your container.

3. Keep containers in good condition:

- ☉ Keep containers dry to prevent corrosion.
- ☉ If a container is beginning to corrode and/or leak, place the container into another sturdy container and label this new container.
- ☉ Check the containers regularly for deterioration. You can make the first day of each month a walk-through storage day.

4. Other storage tips:

- ☉ Make sure lids and caps are sealed tightly.
- ☉ Keep hazardous wastes away from sources of heat, spark, flame, or other ignition methods. This is especially important with flammable wastes and aerosol cans.
- ☉ Store corrosive, flammable, reactive, and toxic products on separate shelves.
- ☉ Store wastes containing volatile chemicals in a well-ventilated area. Volatile chemicals are the usually the ones where the odor spreads out quickly from the container.



REMEMBER - IF YOU CAN SMELL IT, YOU ARE BREATHING IT

Drum storage and containment

Any container used to store hazardous wastes, such as a 55-gallon metal drum or a 5-gallon plastic bucket with a lid, should be:

- ☉ In good condition,
- ☉ Rust-free,
- ☉ Free of holes, and
- ☉ Clean and free of water, dirt, rocks, rags and other trash.

**NEVER MIX ANY HAZARDOUS WASTES TOGETHER—
EVEN ONE DROP IS TOO MUCH.**

If your community is unable to store the hazardous wastes, it is very important that the containers are up off the ground (on tarps on wooden pallets) and are covered (with tarps or visqueen) to keep rain and snow melt out of the containers.



**ONE OF THE SAFEST WAYS TO STORE HAZARDOUS WASTES
IS IN SECONDARY STORAGE CONTAINERS**

What? Secondary containers hold containers that hold wastes. That way you have double insurance for your community.

How much? Stand-alone portable drum containers range from \$150 to \$800. You can purchase them from the companies listed below.



Four drum storage container with flip lids
(also comes in 2-drum or 1- drum size)



Single drum containment

Where? The companies listed below all sell drum containment systems

Want more? Check out the pictures below the company list for more examples

Interstate Products, Inc. www.interstateproducts.com

511 Interstate Court
Sarasota, FL 34240
Phone: 1 (800) 474-7294

Denios, Inc. www.thehazmatpro.com

7000 International Drive
Louisville, KY 40258
Phone: 1 (502) 933-7272

Lab Safety Supply, Inc. www.labsafety.com

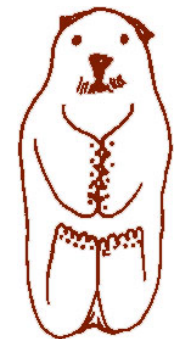
PO Box 1368
Janesville WI USA 53547-1368
Phone: 1 (800) 356-0783

ASA industries, inc. www.hazmatstorage.com

1520 South Grand Avenue
Santa Ana, CA 92705
Phone: 1 (800) 314-8719

New Pig www.newpig.com

One Pork Avenue
Tipton, PA 16684-0304
Phone: 1 (800) 468-4647



Here are some more examples of secondary drum containers:



Four drum containers with spill catchment bottom and flip down lids

Fish totes are available in many of our communities. They work as spill catchments for 55-gal drums and you can store and cover 5-gal drums and batteries.



Source: DEC

REMEMBER - ONCE YOU USE A FISH TOTE FOR HAZARDOUS WASTES - DON'T USE IT FOR FISH (OR ANY OTHER FOOD) AGAIN.

You can buy new fish totes for about \$200 each (with lids) from:

Arctic wire and rope

6407 Arctic Spur Road
Anchorage, AK
Phone: 562 0707

Hazardous Waste Storage Buildings

Least Expensive Option

Construct your own simple shelter structure

Below are three examples of communities that have built their own simple hazardous waste buildings.

Fort Yukon

Fort Yukon constructed a basic structure to shelter their batteries and used oil containers (see picture below). They built locally using a simple design and inexpensive parts (two by fours,

posts, and tin roofing). The shelter keeps out rain and snow so containers stay in good condition longer. **The whole structure only cost a couple hundred dollars.** If you would like to find out more information about the structure built at Fort Yukon, you can contact Vicki Thomas at the Fort Yukon Tribal Council (Tel: 662 2581).



Fort Yukon's Haz Waste storage structure

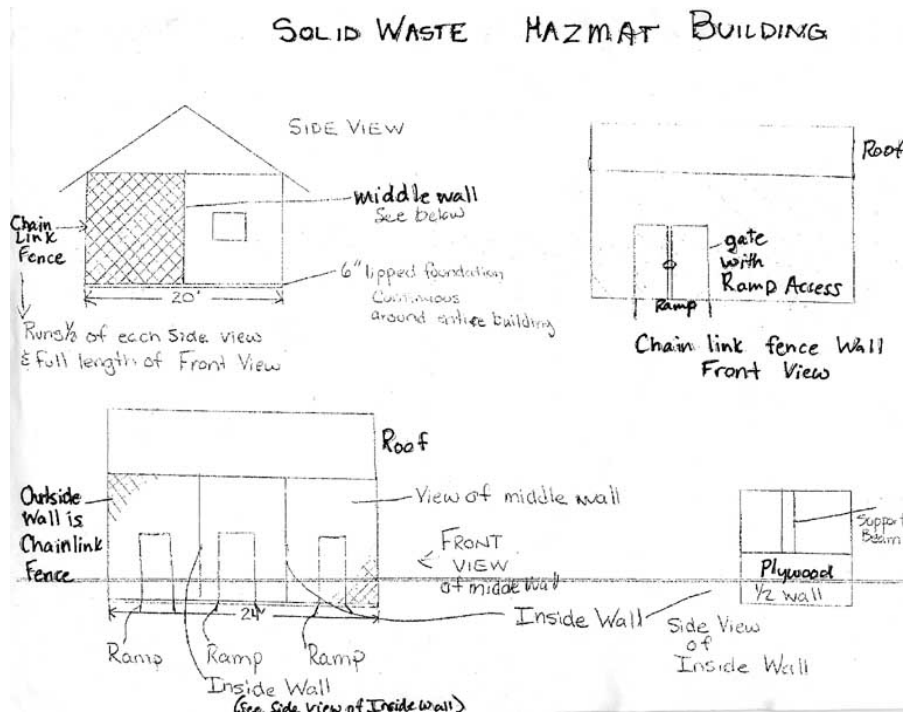
Ouzinkie

Ouzinkie constructed a hazardous waste shed a few years ago. This basic shed is about 18'x10' and is located at their landfill. People can drop off their hazardous wastes there during open hours. They used spruce for the main structure and siding. Roof materials were salvaged from local projects. A geosynthetic liner was purchased to line the floor of the shed and a double door was installed on the side. Last, a sign was put up to let people know what they can and cannot drop-off.

If you would like to talk to Ouzinkie about their hazardous waste shed contact:
Tom Quick at 680-2209.

Thorne Bay

The City of Thorne Bay built nifty hazardous waste storage building with some bonus features. See the below diagram. Their shed is divided into three separate storage areas. The separate areas are for storing wastes that should not be placed together. This shed has spill gutters, venting, and fencing. People can store materials inside the fence, but outside the shed. The roof extends over part of the outside fenced area, for extra sheltered space. Give Russ Station a call at the City of Thorne Bay to ask about their design. Phone: 828 3380



Here are some other examples of simple hazardous waste storage sheds:



Dennis Lundine, DEC



Hazardous Waste Storage Buildings

Moderately Expensive Option

Convert or purchase a used shipping container for storage



Modifications

You can modify the containers to suit your community's needs. For example, you can order a lock box to put on the container to keep it secure. Spill catchments can be installed on the floor to collect any wastes that spill or leak. Shelving can be added to increase storage room and organize smaller items.

Whatever else you do - **it is a good idea to install air vents.** Hazardous waste vapors need a way to escape and not build up.

Side vents are generally called "louvered vents" and they look something like this:



Vents on top of the container are "turbine vents" and look like this :



Listed below are a few companies that sell used containers. Give them a call to find out about their current container and modification prices.

A note on shipping the containers:

Some communities have been able to get **FREE container shipping** when the container is used for a shipment coming already to the community. If a barge shipment is planned for your community, **contact the barge company to see if the container you buy can be used to hold the goods you are shipping.** The barge



companies generally require the containers to be "normal" size (because they stack the containers on the barge in a certain way). So, containers with some modifications (like lock boxes that stick out), may make it more difficult to get free shipping. If the container precludes free shipping, you can purchase the materials for the modifications and install the parts yourself once the container arrives.

Who sells them?

Listed below are a few companies that sell used containers, including modifications.

McKinney Trailers and Containers

20 foot containers are approx \$1300
40 foot containers are approx \$1200
Address: 4450 B St. N.W. Auburn, WA 98001
Phone: 1 (800) 773-0903
Web: www.e-mckinney.com

Pacific Northwest Equipment

20 foot containers are approx \$1600
40 foot containers are approx \$1800
Address: 3161 Elliott Ave. Suite 340 Seattle, WA 98121
Phone: 1 (800) 659-0147 or 1 (206) 286-3177
Web: www.pnwgroup.com

Northland Barge

20 foot containers are approx \$1500
Contact Mike Hamm or Robert Jones
Phone: 276 4030

Modern Motor Used Equipment

20 foot containers are approx \$1800-\$2000
40 foot containers are approx \$2200-\$2400
They also sell insulated ex-refrigerator containers for approx \$2100
Address: 701 E 104th Ave Anchorage, AK
Phone: 344-3008

Alaska Cargo Transport Inc

20 foot containers are approx \$2500
Address: 825 Whitney Rd Anchorage, AK
Phone: 276-3535



Hazardous Waste Storage Buildings

Most Expensive Option

Prefabricated storage buildings



If you have a large budget for a hazardous waste storage system, you may want to purchase a prefabricated hazardous waste storage building.

Companies construct these portable buildings specifically for storing different types of hazardous wastes. Basic safety features are built into these storage systems. You can request a variety of additional options for extra costs such as lighting, fire suppression systems, hi-tech ventilation systems, etc. **These pre-fab buildings can start at about \$10,000 for a basic model.** If you are looking to purchase one, you can start by calling one of the companies below. Ask them about their various models and costs.

Who sells them?

Safety Storage Inc.

2301 Bert Drive

Hollister, CA 95023

Phone: 1 (800) 344 6539

Web: www.safetystorage.com

Environmental Compliance Products

8907 Warner Ave., Suite 122

Huntington Beach, CA 92647

Phone: 1 (800) 643-7065

Web:

<http://www.ecpenvironmental.com>

Want to talk to someone who uses a pre-fab storage building?

The Glacier Bay National Park Landfill purchased one from Safety Storage and they use it to store materials such as paint, cleaners, etc. The materials are available for re-use and anyone in the community can drop by and pick out what they might use.

You can contact Jason Parks at the Glacier Bay National Park Landfill in Gustavus, Alaska at 697-2327 to ask them how they like it.



Jason Parks at Glacier Bay shows the inside of the storage unit



Glacier Bay National Park Landfill Hazardous Waste Storage Unit