Facility Planning & Progress

Since 1999 staff from Douglas and Sarpy Counties, the City of Omaha, Metropolitan Area Planning Agency, Keep Omaha Beautiful Inc. and the Papio-Missouri River Natural Resource District with the assistance of an Architectural-Enginering Consulting Firm, Jacobson-Helgoth, have been meeting to develop a comprehensive and economical plan to deal with unwanted household chemical disposal. Which can be hazardous when misused, or disposed of improperly, and that is what this group is working to prevent—the improper disposal of common household chemicals.

In order to safely manage these materials, a facility is needed to collect the items, provide the opportunity for reuse on select items, consolidate materials where appropriate and ensure safe transport to a federally licensed treatment company. The Omaha metro area collection facility will not be a disposal facility but simply a temporary stop for items on their way to a disposal company.

The project design team is currently in the pre-design planning phase. There are several HHW facilities in the region (Council Bluffs and Des Moines IA, Kansas City MO, Lawrence KS, McCook NE) and members of the design team have already interviewed or visited these facilities. More extensive visits are planned so we can "build it right" and use the lessons learned at these other facilities.

Since the 1980's well over 300 similar HHW facilities have been constructed across the United States where these wastes are collected, categorized, consolidated and prepared for transportation to a separate and independent licensed hazardous waste recycling, treatment or disposal company. Because HHW collection facilities are specially designed to focus on the single task of collecting materials for shipment, there has never been a major incident at a HHW collection facility.

ENVIRONMENT Awareness

The Household Hazardous Waste facility is a joint planning and implementation effort of:

Metropolitan Area Planning Agency (MAPA)
444-6866
(800) 827-6866
Douglas County Health Department
444-7490
Douglas County Environmental Services
444-6181
Sarpy County Environmental Services
253-2461
City of Omaha
444-3908
Papio-Missouri River Natural Resource District
444-6222
Keep Omaha Beautiful Inc.
444-7774
Jacobson Helgoth Consultants
697-0701

Our Mission:

To provide our communities with a convenient, safe and immediate solution to problems of household hazardous waste disposal from their homes.

To reduce the generation of household hazardous waste through education and the promotion of safer alternatives and responsible purchasing practices.

To reduce the volume and toxicity of waste disposed of in municipal solid waste landfills by providing a regional facility that manages household hazardous waste in a manner that ensures safe handling, temporary storage, and disposal.

We Are Committed To:

- Implementing a cost-effective, productive and efficient program
- Protecting public health and the environment from the effects of improper disposal.
- Providing practical strategies for the use, recycling and disposal of products containing hazardous substances.
- Superior customer service.

Household Hazardous Waste Facility Planning

Environmental Protection & Safety

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Special Waste Facility

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Special Waste Facility

While you may not consider them hazardous, many products around your home contain chemicals with the potential to be hazardous if not stored or disposed of properly. These common products such as paints, automotive products, pesticides, garden products are useful, and they are generally safe when properly handled and stored. However, these products which can be found in your garage, basement, kitchen and bathroom, have the potential to poison, corrode, ignite or explode when misused, stored improperly, or disposed of improperly. Careless disposal can pose a threat to health, safety and the environment, and because of this potential risk these items are referred to as household hazardous waste (HHW). The proposed Douglas-Sarpy-Omaha HHW facility will provide our community with a means to properly and safely dispose of these items.

HHW facilities are operated under stringent safety standards and must comply with numerous local, state and federal regulations that protect worker and public safety, and the environment. HHW facilities are designed with multiple layers of safety features and are staffed by workers who receive extensive training in hazardous materials handling. Two and even three levels of containment are included to prevent any possible leaks or spills from leaving the site and reaching surface water or groundwater.

Public safety and the establishment of trust between the HHW facility and the public is vital to the success of the program. The HHW facility will be a much safer place than most hardware, home improvement, automotive and grocery stores where items such as paint, solvents, pool chemicals, adhesives, automotive products and cleaning products are purchased. If a spill or other incident occurs in a store, they do not have the design features that are part of a HHW facility nor do they have the on-site staff trained to safely contain and control an accident. It is estimated that the HHW facility will, at any one, time have only an amount of material equal to or less than an average hardware store.

Facility Environmental Protection and Safety

Safety and environmental protection are obviously the two greatest concerns for the public regarding this facility. They are also the design team's chief concern. To achieve the highest degree of safety and environmental protection, the facility will approach the concerns from two directions

1) **Operating procedures:** ways of doing business at the facility
2) **Design features:** physical things incorporated into the design of the facility

The greatest advancement in safety and environmental protection is that material brought to the facility is not stored in an unsafe manner in homes, under sinks, in basements, or in garages nor is it disposed in the landfill, or poured down the drain.

Spill Prevention and Controls

Is a spill likely? Just as spills of these materials occur in homes every day, there will likely be occasional spills at the HHW facility. However, the staff at the facility will be trained and equipped to deal with these spills far more safely and effectively than a homeowner. Spills at the facility will not be flushed down the drain, allowed to run down the street or thrown in the trash. Large uncontrolled spills are not possible because materials will not be stored in containers larger than a drum and because of the multiple layers of containment that are described later in this brochure.

Environmental Protection & Safety Operating Procedures

A major portion of safety and protection comes from the management and operation of the facility. This means the staff puts safety, environmental protection and professionalism to work in their every action. Facility staff will be specialists in chemistry, safety, materials handling and environmental regulations. Staff will receive specialized training and certification in hazardous materials management with regular refresher courses to maintain top performance. In addition staff will receive training and continuing education in material identification, first aid, spill prevention and response, safety and customer service.

To the casual observer, some of the safety procedures will be very apparent while others will be integrated into the daily operation and would need to be pointed out. Like every other industrial business, operating procedures will be reviewed regularly to further improve the environmental protection and safety of the facility. Some of the planned safety procedures are:

- Customers stay in their cars when delivering material to the facility, and the material is unloaded by facility staff onto carts that are rolled into the building.
- Workers at times will wear protective clothing that includes a respirator mask. This protective gear is for the worker's protection, is often recommended by product labels and handling practices that require special laundering procedures after handling some materials. Outside the facility and in the public areas protective gear will not be needed.

- Unknown materials are tested and classified at the on-site laboratory.
- Incompatible materials are kept separate within the facility. A reaction by incompatible materials could be serious and is prevented by keeping materials separate from beginning to end.
- Storage drums are kept and stored properly: Lids are always on, drums are never stacked, drums are moved one at a time by hand with equipment to keep them upright. Rooms where drums are stored are kept within design limits

- Wastes are removed from the facility as soon as the minimum shipment loads are accumulated.
- Spill or leak response equipment is readily available
- Regular meetings will be held with area fire department Haz-Mat (hazardous material) response teams to keep each abreast of local issues, and enhance each others expertise.
- Each of the environmental and safety design features will be subjected to regular inspection. Some items will be inspected each operating day, while others will be inspected weekly or monthly.

Environmental Protection and Safety Design Features

Security Fence: The facility will be fenced and gated to control access to the facility when the facility is closed and to discourage dumping. The fence will be designed in keeping with the surrounding properties.

Security Cameras: The facility will use security cameras to discourage illegal dumping and vandalism.

Security Alarm: A security alarm linked to emergency services will protect the facility from trespassers, break-ins and vandalism.

Fire Protection & Sprinkler System: The entire building and canopied driveway will have fire detectors and sprinkler system with remote notification to emergency services. The state and local fire marshal will help to design this feature.

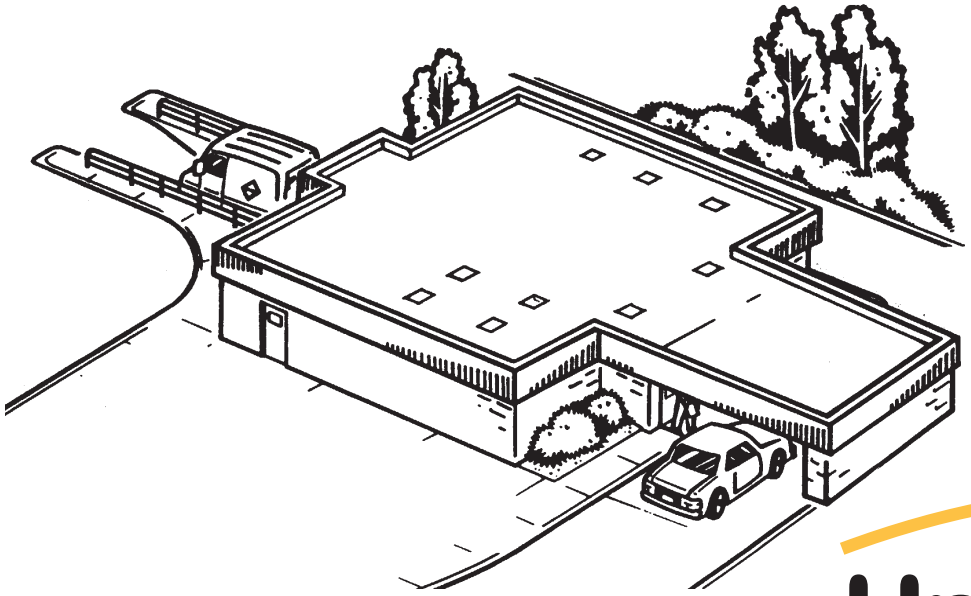
Covered Receiving Area: A canopy that will cover the area where the public will have HHW unloaded from their car will allow the facility to safely operate during inclement weather.

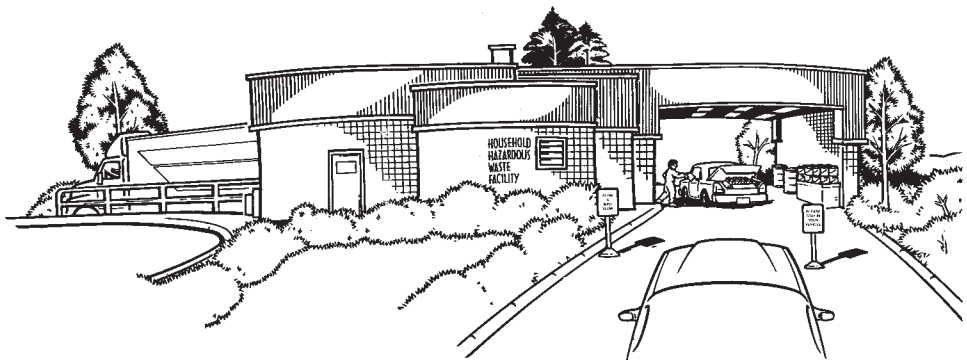
Spill Containment: Both inside the building and outside under the canopy, there will be floor drains leading to a pit (sump) to contain spills and prevent any runoff. For all stored material, multiple layers of containment will minimize the likelihood of spills or leaks. To accomplish this—individual containers of HHW will be packed inside drums (if liquid) with any extra space filled with an inert absorbent material; the drums are stored within a shallow tank.

Separated Storage: Different types of wastes will be kept apart to prevent any inadvertent mixing or interaction between the products.

On-site Laboratory: One of the best safety features of our facility will be our on-site laboratory. The laboratory will provide personnel the tools they need to safely determine an unknown item's characteristics, so that it is handled appropriately.

Safety showers, eye washes, ventilation and cooling: Required by law for many businesses and this facility.





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Special Waste Facility

The graphics used in this brochure have been provided courtesy of Metro, Regional Environmental Management Department of Portland, Oregon and originally used in their brochure, *Introducing The H2W Solution*. We thank them for their assistance. **These graphics are used only for illustrative purposes and it should not construed that the facility will be designed, constructed, operated or function in the manner shown.**

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April 19, 2001

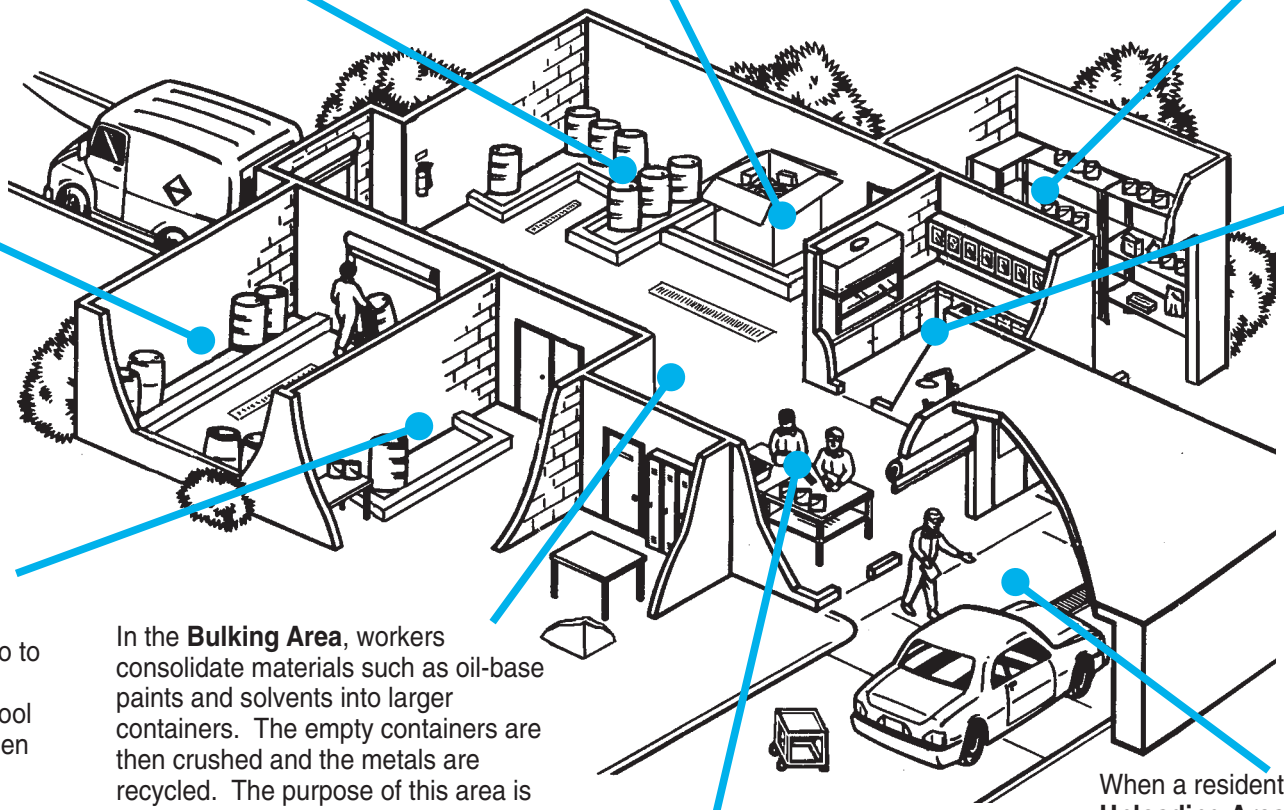
Flammable and combustible liquids and solids, compressed gases (aerosols) go to **Flammable Storage**. Examples are gasoline and other automotive fluids, turpentine, varnishes and stains. (kept in a remote building not shown)

Alkaline liquids and solids, that include items with a high pH like lime go to **Alkaline Storage**. Examples include oven cleaner, lye, bleach and ammonia.

Pesticides and poisons that are not corrosives or oxidizers go to **Pesticides Storage**.

The facility is at its heart a recycling center, for HHW. The **ReShop** will offer good, usable products that have been dropped off at the facility by other residents. A variety of household cleaners, garden products, automotive products, paints, stains, varnishes, and hobby supplies will be generally available. Types and quantities of products will vary.

Acidic liquids and solids go to **Acids Storage**. Muriatic and sulfuric acid and cleaning compounds are examples.



In the **Laboratory**, unidentified materials are opened for sampling and testing under the fume hood. When identified, they are routed to the appropriate area to be recycled, consolidated or packaged for disposal.

Oxidizers, organic peroxides, water reactive and other reactive materials go to **Oxidizers Storage**. Examples include pool chlorine and hydrogen peroxide.

In the **Bulking Area**, workers consolidate materials such as oil-base paints and solvents into larger containers. The empty containers are then crushed and the metals are recycled. The purpose of this area is volume reduction. The metal paint cans will be recycled.

The cart full of materials is weighed in the **Receiving Area**, after which the items are sorted and inventoried. Unidentified materials go to the laboratory for analysis. Materials are distributed to the appropriate area to be recycled, placed in the ReShop or consolidated and sealed for transport to a licensed disposal facility.

When a resident arrives at the **Covered Vehicle Unloading Area**, an operator greets the customer and visually inspects the items. The customer will complete a short form for the purpose of documentation. To help identify any unknowns, staff will ask the resident about any items that don't have readable labels. Following that, facility staff will unload the items onto a cart and the customer then drives away or parks their vehicle to enter the ReShop.