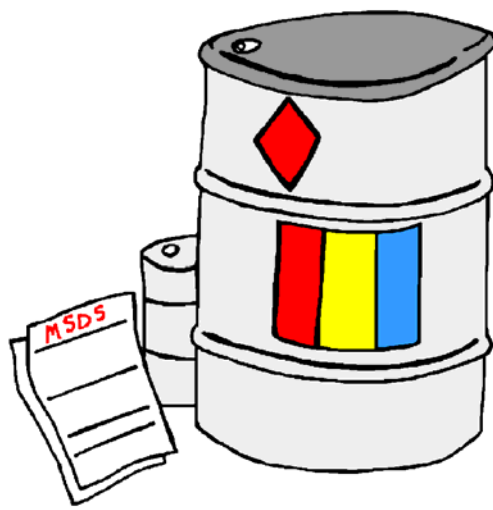


# NORTHEAST COMMUNITY COLLEGE



# WASTE MANAGEMENT PLAN

April 8, 2003  
Revised: March 2007

## **NORTHEAST COMMUNITY COLLEGE**

### **WASTE MANAGEMENT PLAN**

Per Administration Policy Code 2070, Environmental Safety and Health, protection of the health and safety of the employees and students of Northeast Community College is an important goal of the Administration.

The Waste Management Plan has been implemented to accomplish the objectives stated above and to create an environmentally friendly campus. The plan was developed under the guidance of the Safety Sub-Committee. Each employee shall be responsible for compliance with the plan.

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Dr. Bill Path, President

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Date

**NORTHEAST COMMUNITY COLLEGE  
WASTE MANAGEMENT PLAN  
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# **NORTHEAST COMMUNITY COLLEGE WASTE MANAGEMENT PLAN**

## **1.0 General**

The Waste Management Plan is a written document developed and implemented by Northeast Community College to ensure protection for the faculty and staff of Northeast Community College. This guidance applies to all College employees (full-time, part-time, regular, temporary) and students, as well as other community entities and individuals who may be using or participating in College campus activities. It is the purpose of this plan to provide guidance in the safe and proper storage, handling and disposal of hazardous waste. This manual does not cover all regulatory requirements regarding hazardous materials, but should be considered minimal requirements in order to comply with regulations which affect the management of hazardous materials. NECC will contract all waste collections with a company that has a valid Environmental Protection Agency (EPA) ID number.

**PLEASE KEEP IN MIND THAT IT IS THE RESPONSIBILITY OF EACH INDIVIDUAL TO PROTECT THE ENVIRONMENT AND TO TAKE MEASURES TO AVOID ACCIDENTS BY HANDLING AND DISPOSING OF HAZARDOUS WASTE PROPERLY!**

## **1.1 Responsibilities**

Northeast Community College is registered with the EPA as a small quantity generator (SQG) of hazardous waste. It becomes the responsibility of each employee to identify any possible hazardous waste that he or she might be producing and then to assure that the waste is handled in a manner consistent with these guidelines.

The Director of Physical Plant/Safety Director has the primary responsibility of administering Northeast's waste management plan.

## **1.2 Definition of Hazardous Materials**

"Hazardous Material" is any material or substance, which if improperly handled, can be damaging to the health and well-being of humans and the environment.

Hazards associated with a material may be determined by reviewing the Material Safety Data Sheets (MSDS), the product label, or the shipping papers. Federal and State regulations determine if a material is hazardous through specific listings and definitions addressed in the U.S. Code of Federal Regulations and Nebraska Department of Environmental Quality, Title 128. The final tool in determining if a material is hazardous is personal knowledge; an individual may have created the materials or have specific information about the material's properties.

### 1.3 Identifying Hazardous Wastes

The Environmental Protection Agency's Resource Conservation and Recovery Act (RCRA) established authoritative control of the handling and disposal of all solid biological and chemical wastes and discarded liquids and gases in containers. All generators of RCRA regulated waste are required to determine if the waste is hazardous. This is accomplished by determining if any of the constituents of the waste are specifically "listed" hazardous waste constituents or if the waste has a regulated characteristic of hazardous waste.

"Listed" Chemical wastes are found in 40 CFR 261:

"K" listed waste from specific sources.

"F" listed waste from non-specific sources.

"U" listed wastes from off-spec or discarded commercial chemicals.

"P" listed wastes from off-spec or discarded commercial chemicals which have been designated as **Acutely Hazardous**.

Under the "Hazardous and Solid Waste Amendments" of 1984, additional substances were incorporated into the hazardous waste regulations by having characteristics of hazardous waste. A generator must determine if a waste possesses one or more of the following characteristics: ignitability, corrosivity, reactivity or toxicity. A waste known to be contaminated with constituents having one or more of the four characteristics must be handled by the generator as hazardous waste, unless the generator develops the detailed waste analysis required to establish the absence of regulated characteristics to the point specified in the regulations.

Characteristics of Hazardous Wastes:

**Ignitability** – A chemical waste is ignitable if it has a flash point below 140 degrees Fahrenheit, if it is an ignitable compressed gas, or if it is a substance that readily yields oxygen to stimulate combustion. EPA hazardous waste number D001.

**Corrosivity** – Chemical solutions with a pH less than or equal to 2 or greater than or equal to 12.5 are considered corrosive. EPA hazardous waste number D002.

**Reactivity** – Chemicals that are normally unstable or react violently with water. EPA hazardous waste number D003.

**Toxicity** – Toxicity Characteristic Leaching Procedure (TCLP) toxic chemicals are waste in which extracts contain high concentration of heavy metals or pesticides that could be released into the groundwater.

Federal, state and local laws strictly regulate the disposal of hazardous materials. The disposal of any hazardous material in the sewer, on the ground, or in the regular trash is strictly forbidden.

## 1.4 Labeling

In order to comply with EPA regulations regarding hazardous waste, a chemical waste collection container must be appropriately labeled as soon as it is put into use. The container must clearly be labeled with the words "Hazardous Waste", and the fully written chemical name. If the contents of a collection container is a mixture, all components must be listed by percent or volume. Hazardous waste must be kept at or near (in the same lab) the point of generation in order to be considered satellite accumulation areas.

Once the hazardous waste is removed from the point of generation for storage, it must be dated and have the words "Hazardous Waste" clearly labeled on the container or it will not be accepted for disposal. The college then has 180 days to properly dispose of the hazardous waste.

If reusing a container and the contents are not identical to the original product, it must be completely defaced or its old labels removed. The chemical waste must be compatible with the container and its previous contents.

## 1.5 Packaging

Waste storage containers must be non-leaking, chemically compatible, safe, and clearly labeled. All hazardous materials must be kept in appropriate closed containers. All hazardous material containers should remain closed at all times except when adding or removing material.

The following guidelines must be followed when packaging hazardous waste for disposal:

- Use a leak-proof container that will safely contain the contents.
- Do not overfill a container with liquid waste. Allow an empty space of approximately five percent of the container volume for thermal expansion.
- Be suspicious of any pressure build-up inside the container.
- Old cans of ether, picric acid and other peroxide forming or shock sensitive items shall be left in place and not disturbed until safety personnel have evaluated the condition of the container.
- Do not mix incompatible chemicals.
- Do not mix hazardous materials with non-hazardous materials.
- Hazardous waste must be stored based on compatibility. Store materials of the same hazard class together.
- Loose solid materials must be placed in a sealed container or in a covered cardboard box lined with two polyethylene bags.
- Do not leave funnels in the collection container.

## 2.0 Oil Collection

Definition of used oil: 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. New oil is never considered “used oil.”

Examples of substances that are considered used oil and meet the used oil exemption:

- Spent oil from gasoline and diesel engines
- Spent refrigerant lubricating oil
- Spent lubricating oil from aircraft reciprocating and jet engines
- Spent hydraulic fluid
- Spent heat transfer fluids
- Spent transmission fluid
- Spent cutting oils
- Spent refrigeration oil
- This list does not include all types of used oil

Examples of materials that are not used oil:

- Spent antifreeze
- Spent brake fluid
- Solvents of any kind
- Unused motor oil
- Vegetable and animal oil, even when used as a lubricant
- Oils that do not meet EPA’s definition of used oil can still pose a threat to the environment when disposed of and could be subject to the RCRA regulations for hazardous waste management

The following areas store used oil in designated containers:

- Air Conditioning
- Auto Technology 1<sup>st</sup> year
- Auto Technology 2<sup>nd</sup> year
- Diesel Technology
- Maintenance
- Utility Line/ECC
- Farm

### 2.1 Storage and Collection

- **Do not mix used oil with any other materials.** Used oil mixed with hazardous waste will have to be managed as a hazardous waste.
- Keep materials separate, properly labeled, and sealed in the recommended containers.
- Maintain adequate aisle space between containers to facilitate material transfer, easy access to materials, and inspections.
- Close used oil containers between filling or emptying events.
- Store containers, drums, and bags away from direct traffic routes to prevent accidental damage or spills.

- Organize materials neatly for storage.
- Store incompatible materials separately.
- All containers, tanks, and receptacles of used oil will be clearly marked “USED OIL”.
- Never store used oil in anything other than appropriate storage containers.

## **2.2 Housekeeping Suggestions**

- Sweep regularly.
- Inspect material storage or collection areas regularly to ensure there are no leaks or spills.
- Inspect equipment such as pumps, pipes, storage tanks, valves, and material handling equipment for signs of corrosion, support or foundation failure, or other deterioration. Remove, repair, or replace the defective tank or container immediately.
- Promptly clean up spilled materials to prevent runoff, tracking, and spoilage of other materials.
- Stock cleaning and spill response materials where they are readily available.
- Post reminders of good housekeeping practices.
- Provide instruction on securing containers.
- Schedule housekeeping duties and inspections to ensure good housekeeping is being accomplished.

## **2.3 Responding To Spills**

- Spill kits are located in areas that store used oil.
- If a spill or leak occurs, stop the oil from flowing at the source. If a leak from a container or tank can't be stopped, put the oil in another holding container or tank.
- Construct dikes around material storage areas to contain spills.
- Do not allow spills into floor drains. Contain and control leaks and spills as quickly as possible. Clean leaks and spills immediately using dry methods such as absorbent pads and wipes.
- Use dry absorbent materials such as “kitty” litter or organic-based absorbents to absorb oil and grease on dry surfaces.
- Use “oil only” absorbents for absorbing any oils that may contaminate water in floor drains, ponds, ditches, etc.
- For large spills, contain the spill and notify maintenance. A company will be contracted to handle cleaning up large spills.

## **2.4 Managing Cleanup Materials**

- If oil on rags or other absorbent materials from cleaning up a leak or spill have been used, remove as much of the free-flowing oil as possible and manage the oil appropriately.
- Once the free-flowing used oil has been removed from these materials, they are not considered used oil and may be managed as solid waste as long as they do not exhibit a hazardous waste characteristic. These items are disposed of in the trash and hauled to a solid waste municipal landfill.

### 3.0 Oil Filters

Used oil filters are exempt from regulation under the hazardous waste regulations (Title 128 - Rules and Regulations Governing Hazardous Waste Management in Nebraska - Chapter 7, 009.12) with the exception of terne-plated oil filters.

In order for the exemption to apply, generators must drain oil filters using one of the following hot-draining methods (Hot-draining means the oil is drained near engine operating temperature and above room temperature.):

- Hot-drain and collect.
- Puncture the filter's anti-drain back valve or the filter dome end and hot drain. Drain used oil filters for 12 hours.
- Dismantle and hot-drain.
- Any other equivalent hot-draining method which removes used oil.

Oil filter barrels are located in the following areas:

- Auto Technology 1<sup>st</sup> year
- Auto Technology 2<sup>nd</sup> year
- Diesel Technology
- Maintenance
- Utility Line/ECC
- Farm
- Utility Line

Once the used oil is removed, the filter will be placed in a drum for collection.

## 4.0 Bulbs, Ballasts, Batteries

Used light bulbs, ballasts and batteries are collected and stored by maintenance in a designated area following the guidelines outlined in Title 128, Chapter 25 of the Nebraska Hazardous Waste Regulations for universal wastes. A company contracted by Northeast Community College picks up these items for recycling.

Listed below are some of the types of batteries used and the proper disposal methods. If you have batteries that are not included below, please contact Maintenance for disposal instructions.

### Alkaline, carbon-zinc (heavy duty), and zinc-air batteries:

These are the typical non-rechargeable batteries that most people use. They are non-hazardous and can be thrown in the garbage.

### Button batteries:

These batteries are found in watches, calculators, hearing aids, etc. Button batteries often contain mercury, silver, or lithium, and should be collected and given to Maintenance for proper disposal or recycling.

### Lead-acid batteries:

This includes most car and motorcycle batteries. These batteries contain regulated amounts of lead and should be recycled. Businesses will often buy back old batteries when a new one is purchased. If old batteries will not be taken back by the company supplying the new ones, then these batteries should be collected and given to Maintenance for proper disposal.

### Nickel-cadmium (Ni-Cad) batteries:

These are the most common type of rechargeable battery and they can be found in cellular phones, equipment, and toys. Ni-cad batteries contain regulated amounts of cadmium and should be recycled or handled as hazardous waste. If old batteries will not be taken back by the company supplying the new ones, then these batteries should be collected and given to Maintenance for proper disposal.

Recycling is the best option from both an economical and environmental standpoint. Check with companies to make sure that they will take back old batteries when new ones are bought. If batteries cannot be recycled, make sure that they are collected and given to Maintenance for proper disposal.

Sometimes rechargeable batteries are built into a machine or tool (i.e., rechargeable flashlight). When these items will no longer work or stay charged, the whole unit may have to be handled as hazardous waste.

## **5.0 Toner Cartridges**

Cartridges used in printers by all departments on campus are turned into Information Services. These cartridges are stored in a designated area until picked up for recycling.

## **6.0 Cooking Oil**

Used cooking oil is stored in a drum outside the Student Center in an appropriately marked container. This container is picked up on a regular basis.

## **7.0 Sharps**

All sharps must be disposed of in approved sharps containers. These containers are red in color, marked with a biohazard symbol, made of puncture proof plastic and have a lid.

Sharps include, but are not limited to, any article that may cause puncture or cut: discarded hypodermic needles, syringes, pasteur pipettes, broken medical/contaminated glassware, razor blades, scalpels, slides, coverslips and needles. Even if not infectious, many of these items can be physically dangerous and must be treated as medical sharps. Do not re-cap needles before disposal. This practice increases the risk of accidental needlesticks. To avoid this risk, place needles directly into the sharps container after use. Do not re-cap, bend, break, clip or remove needles from the disposable syringe.

Containers of sharps will be disposed of at an approved treatment and disposal facility designated by the college.

## 8.0 Anti-freeze

Used anti-freeze will be stored in appropriately marked drums until picked up for recycling. **Do not** mix anti-freeze with other wastes.

Anti-freeze barrels are located in the following areas:

- Auto Technology 1<sup>st</sup> year
- Auto Technology 2<sup>nd</sup> year
- Diesel Technology
- Utility Line/ECC

## 9.0 Parts Washer Solvent

Parts washing machines on campus use a 140° flash point parts washing solvent. The machines are contracted to be cleaned and solvent recycled on an as needed basis. **Do not** use other solvents (Gunk, Carb Cleaner, thinner, etc.) in the parts washer.

Parts washing machines are located in the following areas:

- Auto Technology 1<sup>st</sup> year
- Auto Technology 2<sup>nd</sup> year
- Diesel Technology
- Maintenance
- Utility Line/ECC

## 10.0 Paint & Paint Related Materials

Most paints fall into one of two categories: water-based or oil-based. Water-based formulas are sometimes referred to as latex, vinyl, or acrylic. Oil-based formulas are sometimes referred to as alkyd, polyurethane, or varnish. Paints may be regulated as a “hazardous waste” when disposed, depending on the formulation.

Oil-based paints are regulated due to their flammability and the presence of regulated solvents such as xylene and toluene. Water-based paints are generally not regulated since they are nonflammable. However, paints (both water-based and oil-based) that contain certain metallic pigments or fortifiers are regulated as a hazardous waste when disposed. These regulated metals include the following: cadmium, chromium, lead, silver, barium, mercury, arsenic, and selenium. Information concerning the presence of regulated materials and the type of formulation can be obtained from the label, Material Safety Data Sheet, or manufacturer.

- **Water-based Paint** – Disposal of water-based paints that do not contain regulated metals can be accomplished by spreading the paint on a piece of plastic or cardboard (no thicker than one inch) and allowing it to air dry. For drying purposes, the paint should be dried in a well-ventilated area that is protected from rain. When completely dry, it can be disposed in the normal trash. Never place wet paint in the trash. When washing paint brushes, pans, and related materials that have been used with water-based paint, always use a drain that is connected to the sanitary sewer. Never wash paints to the storm sewer.

- **Oil based Paints** – Where possible, substitute water-based paint for oil-based paint. If oil-based paint must be used, follow the instructions for use. Excess oil-based paints, since they contain regulated materials, cannot be dried but must be collected. If paint cans have missing or deteriorated labels, write the contents on the can in some other permanent manner. Include manufacturer, product name, product number and chemical constituents.

- **Paint thinners and mineral spirits** must be collected and stored in appropriately marked containers until full. Once the containers are full, a company contracted by Northeast Community College will be contacted for pickup. The contracted company will recycle.

Used paint thinners/minerals spirits containers are stored in the following areas:

- Auto Body
- Art Department
- Building Construction

- **Empty paint cans** from both water-based and oil-based paints (except aerosol cans) may be discarded as ordinary garbage.

### 11.0 Aerosol Cans

In accordance with the Nebraska Department of Environmental Quality (NDEQ) hazardous waste regulations, pressurized aerosol cans must be disposed of as hazardous waste. Examples of pressurized aerosol cans include, but not limited to: aerosol paints, cleaners, lubricants, whipped topping, etc. Aerosol cans pose a potential risk of explosion if exposed to heat. All departments that generate aerosol cans must follow these procedures:

1. Collect and store all aerosol cans in a designated barrel with lid.
2. The container will be labeled as follows: AEROSOL CANS ONLY.
3. Once the barrels are full, the cans will be picked up and a puncturing device will be used to puncture the cans. The contents of the cans will be stored in a 55 gallon drum with a log being kept of what is being stored in the drum. Once the drum is full, it will be shipped off for recycling.

## **12.0 Pesticides**

Only persons certified in the safe handling of pesticides will accept delivery of pesticides. Each chemical received should be accompanied by the appropriate Material Safety Data Sheet.

### **12.1 Pesticide Collecting**

Pesticides must not be collected from farmers or anyone else for the purpose of storage, disposal, or giving or selling them to other applicators or hazardous waste disposal companies.

### **12.2 Pesticide Disposal**

All pesticides will be disposed of by (1) using up as labeled, (2) donating to someone who can legally use them, or 3) a licensed commercial waste disposal company. Proper planning and careful calculations should eliminate the need for disposal of large quantities of excess spray solutions. Small quantities should be sprayed out along field borders or on the row ends. Care must be taken not to exceed the labeled application rate. Tank and equipment rinses should also be applied along field borders or on the row ends. If decontamination solutions, cleaners, detergents, ammonia, chlorine bleaches, etc. are used to remove residues, adequate dilution may be necessary to prevent soil and plant injury.

### **12.3 Pesticide Container Disposal**

Each person is responsible for proper disposal and it is a violation of state and federal law if containers are not properly emptied, triple rinsed, punctured and crushed. Empty containers can be disposed by the following methods:

- a. Whenever possible, dispose of small pesticide containers (5 gallon volume or less) in NECC dumpsters. Triple rinse or power rinse containers before they are punctured and crushed.
- b. Containers (triple rinsed) should be returned to the supplier or given to scrap dealer or drum reconditioners.
- c. Some pesticide containers that have been triple rinsed can be recycled directly to the pesticide manufacturer. Alternatively, they can also be sent to scrap metal dealers or drum reconditioners. Containers that are not triple rinsed are regulated according to their contents.

### **13.0 Photo Lab**

All photography chemicals will be stored in properly labeled containers. The MSDS of the chemicals will be used to determine how the waste will be handled. The chemicals currently being used require a neutralization process with disposal down the drain.

### **14.0 Computers/Monitors**

Computers and monitors no longer used by the college that are in working order are stored in the warehouse until a sale can be held on campus. Receipts of these sales will be kept by the Business Office. Monitors that no longer work will be stored in the warehouse until a pickup is scheduled with a company that will recycle the monitors.

### **15.0 Sand Interceptor/Sludge Pits**

Sludge pits are cleaned out by an approved contractor. The sludge from the pits/sand interceptors are pumped and transported to Norfolk's waste water treatment facility where the sludge is treated.

Sand Interceptor/sludge pits are located in the following areas:

- Outside Diesel
- Maintenance
- Outside Utility Line/ECC
- 1<sup>st</sup> Year Auto Technology
- Outside 2<sup>nd</sup> Year Auto Technology
- Outside Auto Body
- Ag Complex
- Utility Line

### **16.0 Refrigerant**

Refrigerant will be handled in accordance with the rules and regulations set forth by the EPA under section 608 or 609 of the Clean Air Act. Employees handling refrigerant on campus (installing, recovering, or recycling) are to be certified by IMACA (International Mobile Air Conditioning Association), MACS (Mobile Air Conditioning Society) or universally certified (Types I, II, and III) through RSES (Refrigeration Service Engineers Society) or equivalent. Employees not holding such certification should be under the direct supervision of someone that is certified. Equipment used for the handling of refrigerant must be specifically designed for that purpose.

**COMPANIES CONTRACTED BY NORTHEAST COMMUNITY COLLEGE  
(As of 3/07)**

**Oil pickup:**

Jebro  
2303 Bridgeport Drive  
Sioux City, IA 51111  
800-231-8555  
EPA ID #IAD020201604

**Oil filters:**

Product Recovery and Recycling  
PO Box 36  
Fort Calhoun, NE 68023-0036  
402-456-7998  
EPA ID # - Not required per NDEQ

**Bulbs, ballasts, batteries, computer monitors:**

Midwest Lamp Recycling, Inc.  
3224 Kingsley Way  
Madison, WI 53713  
800-251-7646  
EPA ID #WIR000050302

**Toner cartridges:**

Media Recovery, Inc.  
7501 "O" Street, Suite 101  
Lincoln, NE 68510  
800-316-1050

**Sharps containers:**

Stericycle  
6100 North 60<sup>th</sup> Street  
Lincoln, NE 68507-3229  
866-783-7422  
Agency/State ID#H-1564

**Parts washer solvents:**

W.S. Supplies  
65 Bus Brown Drive  
Woodbine, IA 51579  
800-728-0696  
EPA ID #IAD980854350

**Anti-freeze:**

W.S. Supplies  
65 Bus Brown Drive  
Woodbine, IA 51579  
800-728-0696  
EPA ID #IAD980854350

**Paint related waste:**

W.S. Supplies  
65 Bus Brown Drive  
Woodbine, IA 51579  
800-728-0696  
EPA ID #IAD980854350

**Sludge:**

Pollard Pumping  
813 Monroe Avenue  
Norfolk, NE 68701  
402-371-8492

**City of Norfolk:**

Water Pollution Control Division 844-2220  
Solid Waste Division 844-2230

**Kitchen oil:**

Darling International Inc.  
4734 S 27<sup>th</sup> Street  
Omaha, NE 68107  
402-443-3777

**Rechargeable Batteries:**

O.L. Scheers in Norfolk sends to  
Inmetco RBRC  
One Inmetco Drive  
Ellwood City, PA 16117