Hazardous Material Storage and Disposal

Textbook

I-CAR®

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Module 1 - Identifying Hazardous Waste

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Safety And Training

The learning objective for this module includes identifying hazardous waste.

Hazardous waste can be generated from a variety of products found in a collision repair facility.

For safety and health, it is important to be aware of all potential hazards related to your workplace, including hazardous waste. The appropriate safety training and proper handling, storage, and disposal of hazardous waste can help create a safe and healthy work environment.

Exposure to hazardous materials may cause or contribute to a variety of health concerns. Hazardous materials can enter the body by absorbing the material through the skin, breathing in the material, swallowing the material, or injecting the material into the skin.

Exposure to hazardous materials may cause or contribute to a variety of unsafe environmental situations. Environmental concerns include:

- air pollution, which may result from situations such as the release of hazardous air pollutants to include dust and / or vapors.
- water pollution, which may result from situations such as the release of hazardous residue from cleanup, spills, and / or dumping into bodies of water.
- soil pollution, which may result from situations such as hazardous waste leaked, spilled, and / or dumped. Soil pollution can lead to air / water pollution.

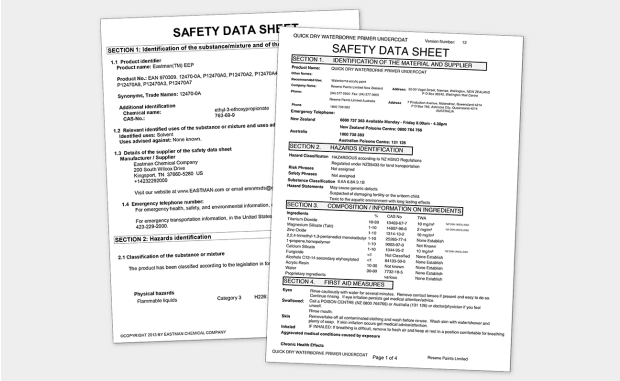
Improper handling, storage, and disposal of hazardous waste can contribute to unsafe situations. Waste materials may also contribute to conditions that can lead to fires, explosions, and other accidents if improperly stored or handled.

The appropriate training regarding hazardous waste helps to ensure that personnel are able to respond effectively to emergencies.

The appropriate training regarding hazardous waste should provide information about:

- safety and health training programs, and the proper protective equipment required

when working with hazardous waste.
- the safety data sheet (SDS) for a material.
- housekeeping / environmental concerns, such as pollution prevention, spill prevention, and cleanup.
- emergency response procedures.
- refresher training.



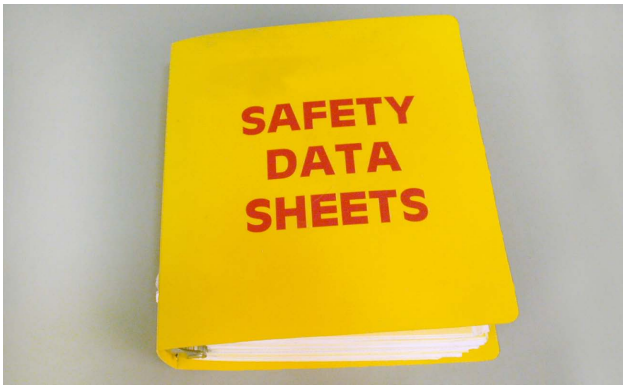
The SDS is a document that provides information about the hazardous characteristics of a material and the appropriate emergency information.

An SDS must accompany every hazardous material in a workplace for professional use. The SDS is a technical document that provides detailed:

- hazard information for handling, storing, disposing, and using the material.
- information regarding the effects of overexposure to the material and the steps to avoid overexposure.
- emergency information.

An SDS must be readily accessible to workers when they are in their work areas during each work shift.

Employers are allowed to add or modify an SDS for a material's use at the workplace. The revised SDS may not contain less information than the original SDS, but may include information on hazards relating to the specific workplace, and include local laws such as waste disposal laws and additional exposure limits. The original SDS must be kept on file at the workplace.



This SDS details specific handling and storage information in section 7.

A supplier-provided SDS is divided into 16 categories or sections

- Section 1: Product Identification
- Section 2: Hazard(s) Identification
- Section 3: Composition / Information On Ingredients
- Section 4: First Aid Measures
- Section 5: Fire-Fighting Measures
- Section 6: Accidental Release Measures
- Section 7: Handling And Storage
- Section 8: Exposure Controls / Personal Protection

- Section 9: Physical And Chemical Properties
- Section 10: Stability And Reactivity
- Section 11: Toxicological Information
- Section 12: Ecological Information (non-mandatory)
- Section 13: Disposal Considerations (non-mandatory)
- Section 14: Transport Information (non-mandatory)
- Section 15: Regulatory Information (non-mandatory)
- Section 16: Other Information

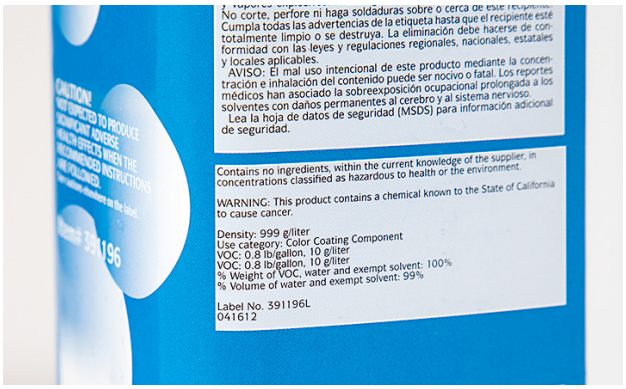
Additional hazardous materials training classes are available.

More information about hazardous materials, personal safety, and detailed SDS information can be found in the I-CAR Live Hazardous Materials, Personal Safety, and Refinish Safety (WKR01) training program.

More information about hazardous airborne pollutants can be found in the I-CAR Hazardous Airborne Pollution Reduction (HAP01) online training program.

Additional information on hazardous waste compliance can be found at the U.S. Environmental Protection Agency (EPA), or Coordinating Committee For Automotive Repair (CCAR) - GreenLink websites.

Hazardous Waste Identification

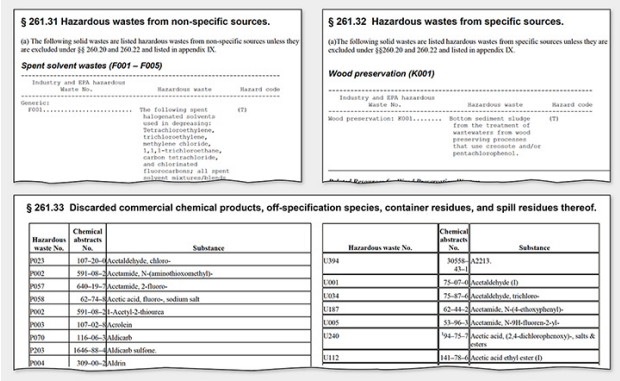


Product labels will indicate if a material poses a potential danger to health or the environment.

Hazardous waste may include solids, semi-solids, liquids, or contained gaseous materials. Products that are no longer used for their original purpose may be a hazardous waste if the material poses a potential danger to health or the environment. If the material was considered hazardous originally, it is likely to remain hazardous after use.

Hazardous wastes are classified into two categories:

- Listed
- Characteristic



§ 261.31 Hazardous wastes from non-specific sources.

(a) The following solid wastes are listed hazardous wastes from non-specific sources unless they are excluded under §§ 260.20 and 260.22 and listed in appendix IX.

Spent solvent wastes (F001 – F005)

Industry and EPA hazardous Waste No.	Hazardous waste	Hazard code
Generic: F001	The following spent halogenated solvents used in degreasing: Tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends	(T)

§ 261.32 Hazardous wastes from specific sources.

(a)The following solid wastes are listed hazardous wastes from specific sources unless they are excluded under §§260.20 and 260.22 and listed in appendix IX.

Wood preservation (K001)

Industry and EPA hazardous Waste No.	Hazardous waste	Hazard code
Wood preservation: K001	Bottom sediment sludge from the treatment of wastewaters from wood preserving processes that use creosote and/or pentachlorophenol.	(T)

§ 261.33 Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof.

Hazardous waste No.	Chemical abstracts No.	Substance
P023	107-20-0	Acetaldehyde, chloro-
P002	591-08-2	Acetamide, N-(aminothioxomethyl)-
P057	640-19-7	Acetamide, 2-fluoro-
P058	62-74-8	Acetic acid, fluoro-, sodium salt
P002	591-08-2	1-Acetyl-2-thiourea
P003	107-02-8	Acrolein
P070	116-06-3	Aldicarb
P203	1646-88-4	Aldicarb sulfone.
P004	309-00-2	Aldrin

Hazardous waste No.	Chemical abstracts No.	Substance
U394	30558-43-1	A2213.
U001	75-07-0	Acetaldehyde (I)
U034	75-87-6	Acetaldehyde, trichloro-
U187	62-44-2	Acetamide, N-(4-ethoxyphenyl)-
U005	53-96-3	Acetamide, N-9H-fluoren-2-yl-
U240	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-, salts & esters
U112	141-78-6	Acetic acid ethyl ester (I)

The Code of Federal Regulations (40 CFR Part 261) details the four types of listed waste.

Waste is considered hazardous if it appears on one of four lists published in the Code of Federal Regulations (40 CFR Part 261):

- F list - Non-specific sources
- K list - Specific sources
- P list - Discarded commercial chemical products
- U list - Discarded commercial chemical products

Currently, more than 500 wastes are listed. Wastes are listed as hazardous because they are known to be harmful to human health and the environment when not managed properly.

These symbols represent material waste that has ignitable, corrosive, reactive, and / or toxic hazardous material characteristics.

Waste that does not appear as listed may be considered hazardous if it has ignitable, corrosive, reactive, and / or toxic characteristics.

An ignitable waste has a flash point below 140ºF. These types of waste can create a fire under certain conditions such as temperature or pressure, or are capable of spontaneous combustion. Examples include used paints, oils, and solvents.

A corrosive waste is a strong acid or strong base or alkali. Strong acids may be referred to as corrosive and strong bases may be referred to as caustic. The pH of a substance can be defined as the measure of acidity or alkalinity on a scale whose values range from 0 to 14 with 7 representing neutral. Numbers less than 7 correspond to increasing acidity. Numbers greater than 7 correspond to increasing alkalinity. A strong acid has a pH less than or equal to 2.0 and a strong base has a pH greater than or equal to 12.5. Examples include acid or alkaline cleaning solutions and battery acid.

Hazardous wastes with reactive characteristics are unstable or undergo chemical reactions, such as generating toxic gases, or are explosive. Examples include some fiberglass body filler, polyester body filler, and rubberized undercoating. Closed containers of these types of materials that are exposed to high temperatures, such as fire conditions, may explode.

Hazardous waste that is considered toxic may be in chemical form, or contain metals, and / or organic compounds. Toxic wastes are harmful or fatal when ingested or absorbed, or leach toxic chemicals into the soil or groundwater when disposed. Examples include expired paints / solvents and used spraybooth filters that contain heavy metals.

A storage container contents can be tested to determine if it has toxic characteristics by using the TCLP.

If a material is not specifically listed as toxic, it can be tested to determine if it has toxic characteristics by a licensed environmental laboratory using the Toxicity Characteristic Leaching Procedure (TCLP). Some waste haulers may require that materials not specifically listed as toxic be tested before being transported.

The TCLP is a one-time test that determines whether some waste must be considered hazardous. The TCLP does not have to be repeated unless different materials are used.

The TCLP is designed to duplicate the leaching process that occurs when wastes are buried in a typical landfill. If the leached substances from the waste contain any of the regulated contaminants at concentrations equal to or greater than the regulatory levels, then the waste is determined to exhibit toxic characteristics. Some of the regulated contaminants that may exist in a collision facility include heavy metals such as cadmium, lead, or mercury.

Various refinishing materials may be sources for the generation of liquid hazardous waste.

Potentially hazardous waste may be in a liquid state. Some examples of hazardous liquids commonly found in a repair facility include solvents, expired paint, and oil-based materials. Other hazardous liquids may include antifreeze, battery acid, metal etching acid, corrosives, and

wastewater. The acid in lead-acid batteries is highly corrosive.

Potential sources of solid hazardous waste include disposable paint mixing equipment.

Potentially hazardous waste may be in a solid state. Hazardous solid waste may include such materials as disposable paint mixing equipment, empty coating containers, spraybooth filters, and solvent recycling sludge.

Other hazardous solids may include towels and absorbent materials containing potentially hazardous liquids, refrigerant recovery equipment filters, fluorescent bulbs, and lead-acid batteries. Lead has been linked to central nervous system damage in humans and animals.

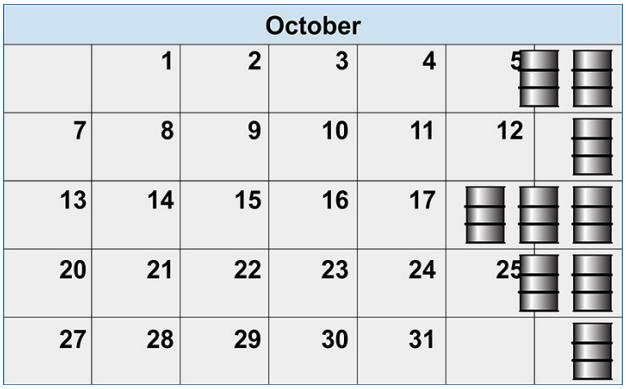
Dust and shavings can be hazardous waste and should be prevented from becoming airborne. Avoid inhaling particulates. Always wear the proper protective equipment when working around airborne particulates. To help control airborne particulates:

- a vacuum system should be used.
- do not use compressed air to clean the work area.
- mist with water or use a cleanup aid such as a sweeping compound.
- handle hazardous dust and shavings waste carefully.

Hazardous Waste Generation

Only waste that is in a container or other unit waiting to be disposed of is considered generated.

The U.S. EPA states that generation occurs when a substance becomes a waste. When determining the volume of waste generated, only waste that is in a container or other unit waiting to be disposed of is considered generated. For example, solvent stored in a drum waiting for disposal or recycling is generated waste, while solvent in a parts washer that is currently in use is not yet a waste and the facility has not generated it.



Quantity of waste generated in a calendar month determines which regulations apply.

According to EPA guidelines, the quantity of waste generated in a calendar month determines which regulations apply. There are three classes of generators:

- Conditionally-exempt small quantity generator
- Small quantity generator
- Large quantity generator

Monthly Quantity Limits	220 lbs. Or Less	220 – 2,200 lbs.	2,200 lbs. Or More
EPA ID #	Not Required	Required	Required
Storage Requirements	None	Basic Requirements With Technical Standards For Tanks Or Containers	Full Compliance For Management Of Tanks, Containers, Drip Pads, Or Containment Bldgs.
Manifest	Not Required	Required	Required
Personnel Training	Not Required	Basic Training Required	Required

Conditionally-exempt small quantity generators (CESQG) generate approximately 1/2 of a 55 gallon drum or less of hazardous waste in any month.

Conditionally-exempt small quantity generators generate no more than 220 lb of hazardous waste per month (this is approximately 1/2 of a 55 gallon drum or less of hazardous waste in any month). The facilities:

- are not required to obtain an EPA identification (ID) number.
- have no storage requirements.
- do not need a shipping manifest.
- do not need personnel training.

Monthly Quantity Limits	220 lbs. Or Less	220 – 2,200 lbs.	2,200 lbs. Or More
EPA ID #	Not Required	Required	Required
Storage Requirements	None	Basic Requirements With Technical Standards For Tanks Or Containers	Full Compliance For Management Of Tanks, Containers, Drip Pads, Or Containment Bldgs.
Manifest	Not Required	Required	Required
Personnel Training	Not Required	Basic Training Required	Required

Small quantity generator (SQG) generate more than 1/2 of a 55 gallon drum of hazardous waste, but less than five 55 gallon drums of hazardous waste in any month.

Small quantity generators generate between 220 lb and 2,200 lb of hazardous waste per month (this is more than 1/2 of a 55 gallon drum of hazardous waste, but less than five 55 gallon drums of hazardous waste in any month). These facilities:

- must have an EPA ID number.
- have basic storage requirements with technical standards for tanks or containers.
- require a shipping manifest.
- require basic personnel training.

Monthly Quantity Limits	220 lbs. Or Less	220 – 2,200 lbs.	2,200 lbs. Or More
EPA ID #	Not Required	Required	Required
Storage Requirements	None	Basic Requirements With Technical Standards For Tanks Or Containers	Full Compliance For Management Of Tanks, Containers, Drip Pads, Or Containment Bldgs.
Manifest	Not Required	Required	Required
Personnel Training	Not Required	Basic Training Required	Required

Large quantity generator (LQG) generate approximately five 55 gallon drums or more of hazardous waste in any month

Large quantity generators generate over 2,200 lb of hazardous waste per month (approximately five 55 gallon drums or more of hazardous waste in any month). The facilities:

- must have an EPA ID number.
- have full storage compliance for management of tanks, containers, drip pads or containment buildings.
- require shipping manifests.
- require personnel training.

Conducting periodic inspections will ensure a compliant hazadous waste storage program.

The EPA or the Occupational Safety and Health Administration (OSHA) issue most hazardous waste regulations in the U.S. However, enforcement is almost always done at the state level. Facilities should check state regulations for specific rules.

Module Wrap-Up

The topic discussed in this module included identifying hazardous waste.

Module 2 - Proper Storage Of Hazardous Waste

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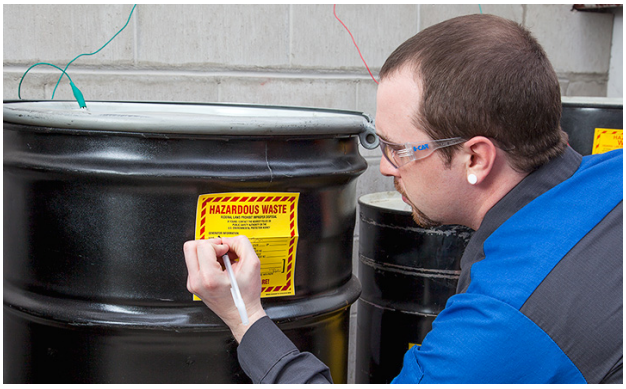
Hazardous Waste Storage

The learning objective for this module includes determing proper storage of hazardous waste.



When selecting a container, consider the amount and characteristics of the waste.

All hazardous wastes should be handled and stored properly to minimize risks to human health, safety, and the environment. To provide safe storage of hazardous waste, allow for spill containment in case of an accidental spill such as overfilling. Locate containers away from drains to reduce the likelihood of hazardous materials entering storm drain or sewer systems in case of a spill.

Keep a written record of the types of hazardous wastes that are stored on the property and the contents of each container. Follow the limits for the quantities of hazardous waste that can be stored and the maximum time the materials can be stored on site.

Storage containers should be made of materials appropriate for the type of hazardous waste contained. For example, highly corrosive wastes will react with a steel drum, causing the drum to fail. Use plastic, or plastic-lined, steel drums to safely store corrosive wastes.

Ensure that adequate space is provided between hazardous waste storage containers to help prevent cross contamination of incompatible materials.

Keeping containers closed except when being filled or emptied helps to prevent spills, evaporation, contamination, and to reduce exposure or the release of fumes.

Providing adequate distance between containers allows safe and easy access to each container. Additionally, adequate distance between containers helps to prevent cross contamination and chemical reactions. The mixing of materials from touching containers may chemically react.

Containers holding flammable waste should be electrically grounded to control static discharge. Static discharge may ignite fumes / fluids. A conductive wire attached to the hazardous waste container can be used to redirect current away from the waste area.

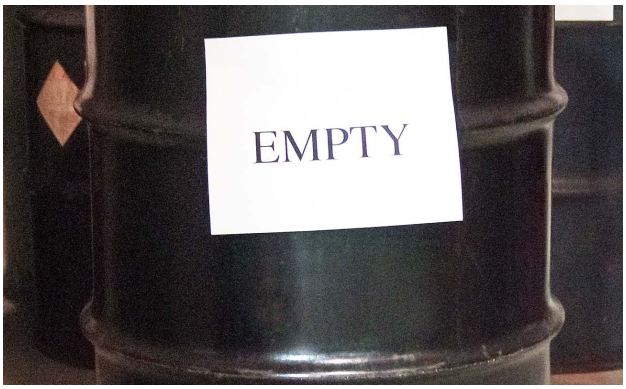
Spill trays can be used to provide secondary containment and may be required by applicable regulations. Spill trays help to:

- control leaks and spills.
- prevent waste from entering drains and storm sewers.
- prevent the mixing of incompatible materials.

Funnels can be used when filling hazardous waste containers to help prevent leaks and spills.

Stationary funnels for pouring liquid materials can be used to help prevent leaks and spills. Stationary funnels should be screwed into the access opening of a storage drum, have a closable lid, and have a check valve to prevent the escape of vapors. If funnels are used on a drum, the container should be secured in a manner to prevent the loss of liquids from accidental overturning of the container. For example, the drum may be chained to a wall or building support column.

To avoid cross contamination / mixing of incompatible materials, do not use the same funnel for all wastes. If the same funnel is used for more than one waste material, it should be rinsed between uses. The rinse water may have to be handled as hazardous waste.



Clearly label "Empty" on all empty hazardous material drums.

Empty drums should not be sold or given away to the general public or disposed of in public or private landfills. They should be returned to the product supplier if possible. Empty drums should be sealed and stored separate from containers in use. Clearly label "Empty" on all empty hazardous material drums.

Store used lead-acid batteries separately from other wastes.

Store lead-acid batteries in a separate room, in an area without a floor drain, on an acid-resistant floor, and on pallets. Storing batteries on pallets makes it easier

to see if the batteries are leaking. If a battery is cracked or leaking, store it in an acid-resistant container.

Inspect stored batteries weekly, and document each inspection. Use a trade-in / trade-out policy with a vendor to avoid improper disposal of batteries.

Follow applicable regulations for construction and location of hazardous waste storage areas.

Hazardous waste storage areas may be located indoors or outdoors. Follow local building and fire codes regarding construction and location of storage areas. Because requirements can vary, be sure to check local and state regulations.

Store hazardous materials on a concrete surface with the proper spill tray or containment curb. Storage areas should be kept away from drains and storm sewers. Provide protection from situations such as exposure to weather, water contamination, or the possibility of being driven into by a vehicle. Protect from exposure to sunlight or rain.

Hazardous wastes may be stored in locked areas to prevent vandalism. A surrounding wall or fence can be used for security.

Refer to “Video: Proper Handling And Storage Of Hazardous Waste ” in the presentation. This video discusses concepts for removing spraybooth filters and disposing of them properly.

Required Labeling

Clear and accurate labeling helps prevent handling and storage mistakes.

Warning labels are required for all hazardous materials in the workplace for products used and stored, and waste collected and stored. Labels should indicate that the content is "Hazardous Waste," the accumulation start date, which is the date the container contents were first added, and any other information required by applicable

regulations. Waste containers should be clearly and accurately labeled to prevent mixing incompatible materials together.

Limit access to the storage area to authorized, trained personnel. Label the hazardous waste area for "Authorized Personnel Only."

Hazard symbols are diamond shaped for U.S. markets.

Hazard symbols on product labels are in picture form so they can be read in any language. The symbols show an immediate hazard warning about the contents of the container.

Each of these symbols represents a type of hazardous material. These types and their symbols include:

- compressed gas - white cylinder.
- flammable and combustible material - flame.
- oxidizing material - flame over a circle.
- causes immediate and serious (acute) toxic effects - skull and crossbones.
- causes other toxic effects - the letter "T" with a dot below it.
- biohazard - four overlapping circles.
- corrosive material - hand and piece of material being corroded by a liquid.
- dangerously reactive material - the letter "R" with a test tube in the middle of it.

Separate Waste Materials

Hazardous waste must be stored separately according to the type of material.

Each type of hazardous waste must be stored separately. Separate containers are required for:

- brake fluid.
- engine and similar oils.
- engine coolant.
- solvent-borne waste.
- waterborne waste.
- solid waste, such as empty containers and spraybooth filters.

Hazardous waste must be stored separately from containers of unused material.

Do not store used shop towels with other materials.

Do not store incompatible wastes together. Mixing incompatible materials may result in dangerous chemical reactions. For example, used towels or absorbent materials may chemically react or spontaneously combust if stored with other materials.

Refer to sources such as the product SDS, waste hauler, or recycling center for specific information regarding hazardous combinations. A waste may be considered unsuitable for combining with another waste or material when the combination might result in:

- extreme heat or pressure generation.
- fire, explosion, or violent reaction.
- formation of substances that are shock sensitive, friction sensitive, or otherwise have the potential to react violently.

Hazardous combinations and potential consequences may include:

- acid + oil or grease = fire
- aluminum powder + aluminum nitrate = explosion
- ammonia + bleach = toxic gas
- chlorine gas + acetylene = explosion

Module Wrap-Up

The topic discussed in this module included proper storage of hazardous waste.

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Module 3 - Proper Disposal And Records Of Hazardous Waste

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Spills

Learning objectives for this module include:

- determining proper disposal of hazardous waste.
- maintaining proper hazardous waste records.

Hazardous waste cleanup can include small particulates like dust or shavings.

Improper handling and / or storage of hazardous waste may lead to leaks or spills. It is important that all leaks and spills of potentially hazardous materials are cleaned up and disposed of properly. In case of a leak or spill:

- identify the material.
- notify others in the area that may be affected.
- eliminate any flame and other ignition sources.
- ventilate the area.
- refer to the SDS for safe handling procedures.
- prevent the spill from reaching floor drains and / or storm sewers.
- neutralize the spill if necessary.
- report the spill to the appropriate manager.
- document the incident and maintain these records.

On-site employees may clean up a leak or spill that is not considered dangerous and is containable. Considerations when determining whether on-site employees can safely handle a spill include:

- the size of spill.
- personal protective equipment available.
- the type and amount of neutralizers / absorbent material and containment equipment available.
- properly trained personnel.

Emergency spill kits should be available in case of accidental leaks / spills.

Keep emergency spill kits in areas where there is potential for spills. Spill control kit items may include:

- personal protective equipment.
- cleaning agents and equipment.
- containment socks or berms.

- absorbents.
- neutralizers.
- heavy-duty garbage bags.
- SDS.

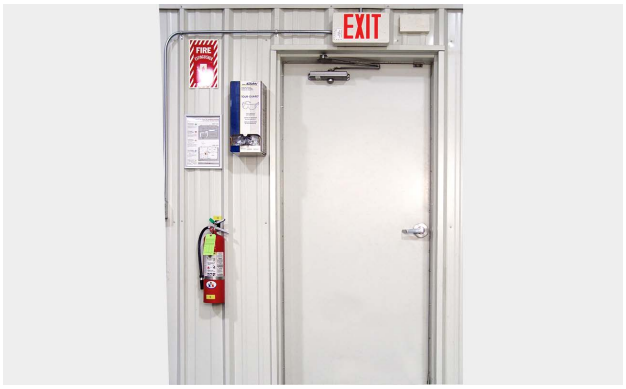
Absorbents may include materials such as:

- absorbent clay, used for oil, grease, and hydraulic fluid-type spills.
- granular charcoal used for solvent type spills.
- diatomite or diatomaceous earth; natural, microscopic diatom shells used for absorbing acids and bases.

Neutralizers may include materials such as:

- baking soda which is used for neutralizing most acids.
- citric acid which is used for neutralizing bases.

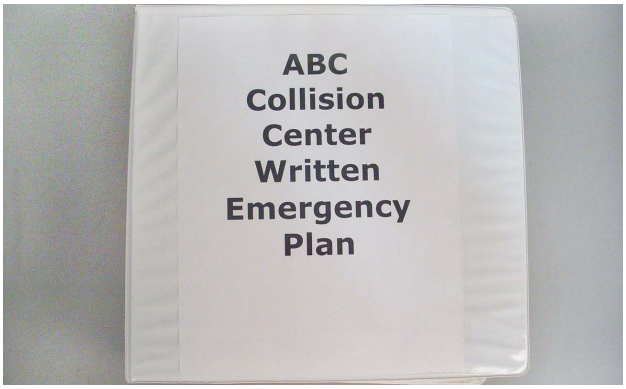
It is important that personnel follow emergency spill cleanup procedures when using absorbent or neutralizing materials. Rapid degradation or volatile reactions can occur if incompatible materials are combined.



Knowing where all emergency exits are located will aid in a quick evacuation during a dangerous hazard emergency.

When dealing with a non-containable or extremely dangerous spill:

- evacuate the building.
- call emergency personnel.
- notify others in the area that may be affected.
- provide SDS to responders.



Written procedures provide guidelines to follow in case of emergencies.

Develop written emergency procedures to respond to emergency situations. Establishing written procedures for hazardous waste emergencies can reduce the impact if a leak, spill, fire, or

explosion occurs. EPA guidelines state that if an automotive repair facility is a large quantity generator, it must have a written contingency plan that includes:

- instructions on what to do in the event of a fire, explosion, or release.
- arrangements agreed to by local police and fire departments, hospitals, and state and local emergency response teams to provide emergency services.
- contact information for all persons qualified to act as an emergency coordinator.
- locations of all emergency equipment at the facility.
- evacuation plans.

Although a written contingency plan is not federally required for small quantity generators or conditionally-exempt generators, it is strongly recommended. It is also important to check with the state and local authorities for any additional contingency plan or emergency preparedness requirements.

Provide training for emergency response procedures, including regularly scheduled refresher training.

Disposal Of Waste

Some potentially hazardous waste materials may be reused on-site, such as engine coolant.

All hazardous waste must be safely stored on site until it is disposed of permanently. Permanent disposal methods include:

- on-site treatment.
- shipment to a commercial treatment, storage, or disposal facility.
- shipment to a recycling facility.

Proper recycling or disposal of hazardous waste is important to ensure personal health and safety, and environmental protection. Proper disposal of hazardous waste may be determined by local regulations. Referring to an SDS may help determine proper disposal of a waste material.

Hazardous waste must be transported off-site for recycling or disposal by a registered waste hauler to an approved disposal or recycling facility. Material shipped to licensed recycling, treatment, and disposal plants may include:

- coolant.
- transmission fluid.
- brake fluid.
- oil.
- tires.
- lead-acid batteries.

Some materials may be treated or reused on-site, for example, using:

- a solvent recycler.
- a coolant recycler.
- a special furnace to burn used oil.
- cloth towels that can be cleaned and reused. Use an industrial laundry service to clean the towels.

Proper disposal requires using the appropriate personal protective equipment to ensure protection from hazards such as:

- fumes.
- eye contact.
- skin contact.

Knowing the materials and processes that generate waste helps determine which materials can be reused, recycled, or eliminated.

Reducing hazardous waste begins by being aware of the waste that is generated in the workplace. Knowing the materials and processes that generate waste are important first steps to establish a hazardous waste reduction program.

Develop plans and implement changes that will result in waste reduction. For example, proper labeling and storage can help ensure that materials are used in a timely manner. This can help reduce waste that results from a product reaching its expiration date. Using non-toxic materials whenever possible is another way to reduce hazardous waste.

Reducing hazardous waste in the workplace can help provide a safe and healthy work environment. Reducing hazardous waste may also help in economical benefits.

Record Keeping

Maintain hazardous waste documentation.

Keep all records for the amount of time required by applicable laws and regulations. Many regulations require keeping records for at least three years. Requirements can vary, so be sure to check local and state requirements. Records may include:

- inventory lists.
- waste production.
- inspections.
- lab results.
- shipping manifests. A manifest is defined as a list or record of the cargo being transported.

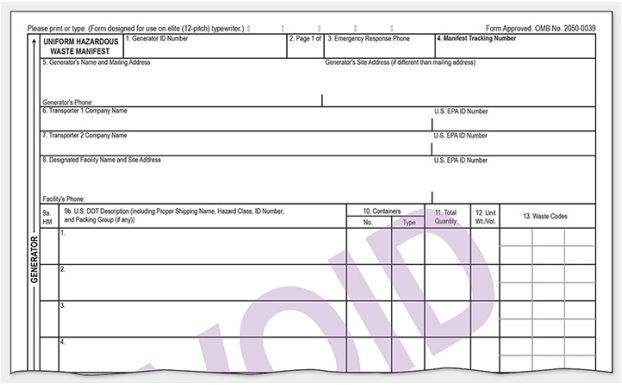
Hazardous waste storage areas and containers should be inspected weekly to ensure no problems exist.

Develop a written inspection procedure and schedule for inspections of all hazardous waste storage areas. Perform weekly inspections looking for expiration dates, leaks, spills, damaged containers, and other hazardous conditions.

Inspect hazardous wastes to ensure proper location and placement, condition of containers, quantity limits, and / or time limits. Correct any problems as quickly as possible. Document inspections and any corrective actions taken, and maintain these records.

Provide generation-to-disposal tracking information, which includes:

- type and volume of material.
- all parties involved, such as the waste generator, waste hauler, and treatment or disposal site.


Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST | 1. Generator ID Number | 2. Page 1 of | 3. Emergency Response Phone | 4. Manifest Tracking Number

5. Generator's Name and Mailing Address | Generator's Site Address (if different than mailing address)

Generator's Phone:

6. Transporter 1 Company Name | U.S. EPA ID Number

7. Transporter 2 Company Name | U.S. EPA ID Number

8. Designated Facility Name and Site Address | U.S. EPA ID Number

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1.					
	2.					
	3.					
	4.					

GENERATOR

VOID

Maintain files of hazardous waste documentation for tracking information.

For small quantity generators and large quantity generators that ship hazardous waste off-site, a Uniform Hazardous Waste Manifest must accompany each hazardous waste shipment.

Current Uniform Hazardous Waste Manifest forms may be available from a hazardous waste hauler. The manifest documents the shipment type, quantity, origin, and destination.

Shipping manifests must be kept for three years.

Conditionally-exempt generator facilities are not required to use hazardous waste shipment manifests.

Module Wrap-Up

Topics discussed in this module included:

- proper disposal of hazardous waste.
- proper hazardous waste records.