

Yellow Ink Room

Solid and Hazardous Waste Chapter Addendums

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YI – 1 Waste Inventory Sheets

Instructions

These instructions will help you inventory and categorize your wastes on your Waste Inventory Sheets. Print out all of the tables that follow. (You may need to make extra copies of the Waste Inventory Sheets, depending on how many wastes you have.) When conducting a waste inventory at your business, please consider **all** your current and expected wastes.

Include each waste whether or not it is:

- normally generated on a recurring basis,
- hazardous or non-hazardous
- being recycled or disposed (materials being reused are optional)

Three different Waste Inventory Sheets are provided:

1. recurring materials;
2. unused materials; and
3. unknown materials

The first step is to walk through your facility and write the name of each waste on the Waste Inventory Sheets. During your walk through, fill in as much information as possible for each waste. You will want to update the information based on changes such as replacing or substituting materials, selecting different disposal methods, or changing how you store wastes.

Your suppliers should provide a safety data sheet (SDS) for each chemical and most other materials used in your business. The SDS describes hazards of the material and will be helpful in determining how to categorize and manage wastes generated from the chemicals and materials in each production process. If you are missing an SDS, request it from your supplier or the manufacturer.

In some instances, testing of the waste will be necessary to properly classify it. Only individuals trained in the hazards and necessary precautions should open the container or take a sample.

1) Recurring Materials

Include each waste that you normally have on a recurring basis, such as the following:

- office paper, cardboard, and plastic, metal and glass food and beverage containers;
- food wastes from cafeteria or break room operations;
- used engine oil, anti-freeze, batteries, and similar wastes generated from fork lifts, cars and trucks;
- wastes associated with heating and air conditioning systems and building maintenance;
- material left-overs and cut-offs from production and packaging; and
- spent process chemicals, sludge from process tank clean-outs, and other wastes generated from production processes.

2) Unused Materials

Include each unused chemical or other unused material you may have that is no longer needed or usable at your business. The material may be unusable to you for any of the following reasons:

- expired shelf life;
- off specification for the process it was intended for;
- no longer needed due to production process changes – resulting from a change in business products or material substitution.

In many cases, these unused materials can still be used, or recycled into a new product. Contact the product supplier or manufacturer to see if they can take back the unused material. Review material exchange webpages: <http://www.bmex.org/> and <https://www.uwgb.edu/shwec/>. When negotiating a price you may receive for the material, or an amount you may pay for alternate processing, consider both the value of the material as a product and how much it will cost you to dispose of it as a waste.

3) Unknown Materials

Include anything you may have at your facility that you cannot positively identify, such as an unlabeled container. Containers should be examined, opened and sampled by a qualified individual.

- Open metal containers only with non-sparking tools, in case contents are flammable. Don't smell unknown chemicals, and take precautions to prevent contact with eyes and skin.
- If the container is in poor condition, or damaged in any way, seek expert advice before moving or touching the container. A barrel with the top or sides pushed out, for example, may indicate the contents are under pressure, and opening it could be dangerous.
- If the container is not in good condition, make plans to over pack the original container into another larger container. If you are not familiar with over packing safety procedures, consult with a waste handling company for assistance.

Be sure to record pertinent information you can find out about the material, such as:

- a description of the container and where it is located;
- former use of the material and who may have further information.

It is recommended to assign a number and place a label on the container. The word "caution" can also be included on the label, and the name of the person that should be contacted if the container needs to be moved. For example, the first unknown material would be labeled:

"Unknown Material #1, CAUTION: Contact J.P. Smith Prior to Moving".

As more information is learned about the unknown material, it can be added to the label.

For unknown materials, the Small Business Web Pages will probably not be of significant assistance to you in making a waste determination. You will need to contact an environmental laboratory or waste business to have each unknown waste tested and obtain expert advice to help you make the waste determination.

Waste Inventory Sheets – Recurring Materials

On Site Information						Off Site Information		Waste Determination		Comments
Waste Material	Monthly Quantity	Process / Activity	Dept. / Area	Waste Storage Location	SDS	Transport	Disposition	Type	Basis	
Example: Lead acid vehicle batteries	Approx. 10 batteries	Delivery trucks	Fleet Services	Inside, Fleet Services. Place batteries right side up on a pallet. Do not stack batteries or pallets.	Yes	WeHaul Waste Transport. Call for pick-up when 1 pallet is full of batteries.	Not sure – check with WeHaul.	_ solid X hazardous _ universal	_ Testing _ Generator Knowledge	Lead acid batteries are exempt from hazardous waste rules if properly recycled. Are batteries being properly maintained for full life? Are other types of batteries available?
Example: Fluorescent lamps	Approx. 50 per year	General lighting fixtures	Through-out building	Inside, Maintenance Shop. Place lamps into emptied new lamp package marked “used”.	No – ask supplier	Ideal Electric. Used lamps returned when box is full & new lamps are delivered.	Not sure – check with Ideal.	_ solid X hazardous _ universal	_ Testing _ Generator Knowledge	Fluorescent lamps are exempt from hazardous waste rules if properly recycled.
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	

Waste Inventory Sheets – Recurring Materials

On Site Information						Off Site Information		Waste Determination		Comments
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								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	
								_ solid _ hazardous _ universal	_ Testing _ Generator Knowledge	

Waste Inventory Sheets – Unused Materials

On Site Information						Off Site Information		Waste Type	Comments
Waste Material	Quantity	Process / Activity	Dept. / Area	Waste Storage Location	SDS	Transport	Disposition		
Example: 1,1,1 trichloroethane	(2) 55 gallon steel drums, appear to be full & unopened	Was used for parts cleaning	Degreasing Area	Shipping area. The 2 drums are on a pallet.	Yes	Contact transporter to see if they will transport it back to supplier or to another user.	Contact supplier to see if they will take it back.	_ solid X hazardous Manifest if shipped as a waste.	1,1,1 trichloroethane has been replaced by a non-toxic citrus-based solvent
								_ solid _ hazardous	
								_ solid _ hazardous	
								_ solid _ hazardous	
								_ solid _ hazardous	
								_ solid _ hazardous	

Waste Inventory Sheets – Unknown Materials

On Site Information						Off Site Information		Waste Type	Comments
Waste Material	Quantity	Process / Activity	Dept. / Area	Waste Storage Location	SDS	Transport	Disposition		
Example: Unknown #1. Clear liquid	Approx. ½ gal. in a 1 gal. white plastic jug	Was likely used in Bindery	Jug from Bindery was picked up by Maint.	Stored in Maintenance Supervisor's office	Don't know	To be determined	To be determined	_ solid _ hazardous _ To be determined	Ask Bindery Supervisor for help in determining what this stuff is.
								_ solid _ hazardous _ To be determined	
								_ solid _ hazardous _ To be determined	
								_ solid _ hazardous _ To be determined	
								_ solid _ hazardous _ To be determined	
								_ solid _ hazardous _ To be determined	

YI – 2 List of Common Printer Hazardous Wastes

One method to learn whether wastes contain these hazardous contaminants is using EPA's TCLP (toxicity characteristic leaching procedure) test. Learn more on TCLP at <https://www.epa.gov/hw-sw846/sw-846-test-method-1311-toxicity-characteristic-leaching-procedure>.

Contaminant	Regulatory level (mg/L)
Metals	
arsenic	5.0
barium	100.0
cadmium	1.0
chromium	5.0
lead	5.0
mercury	0.2
selenium	1.0
silver	5.0
Pesticides	
chlordane	0.03
2,4-D	10.0
endrin	0.02
heptachlor (and its epoxide)	0.008
lindane	0.4
methoxychlor	10.0
toxaphene	0.5
2,4,5-TP (silvex)	1.0
Semi-volatiles	
o-cresol	200.0
m-cresol	200.0
p-cresol	200.0
cresol	200.0
1,4-dichlorobenzene	7.5
2,4-dinitrotoluene	0.13
hexachlorobenzene	0.13
hexachlorobutadiene	0.5
hexachloroethane	3.0
nitrobenzene	2.0
pentachlorophenol	100.0
pyridine	5.0
2,4,5-trichlorophenol	400.0
2,4,6-trichlorophenol	2.0
Volatiles	
benzene	0.5
carbon tetrachloride	0.5
chlorobenzene	100.0
chloroform	6.0
1,2-dichloroethane	0.5
1,1-dichloroethylene	0.7
methyl ethyl ketone	200.0
tetrachloroethylene	0.7
trichloroethylene	0.5
vinyl chloride	

YI – 3 Different ID Numbers Facilities Must Have

I. How do I get an EPA ID number?

EPA IDs are 12 digit numbers issued to companies who are required to manifest their hazardous waste or used oil. EPA IDs function like social security numbers, to help regulatory agencies keep track of these waste streams. The EPA ID number is required to be used in completing a hazardous waste manifest or other shipping paper for hazardous wastes that are removed from the facility.

If you are a SQG or LQG of hazardous waste you are required to have an EPA ID number. To get your EPA ID number you must complete an EPA Form 8700-12 “Notification of Regulated Waste Activity”—<https://www.epa.gov/hwgenerators/instructions-and-form-hazardous-waste-generators-transporters-and-treatment-storage-and>—and submit it to the DNR. These forms are available from your regional DNR waste management Environmental Program Associate: <http://dnr.wi.gov/topic/Waste/EPAs.html>.

The notification form includes detailed instructions. Be aware of the following:

- List your business’s full name first, then any appropriate division or section
- Your location address is the actual physical location of where the hazardous waste is being generated
- Your mailing address can be either a post office box number or your location address
- In the ownership section, note your company’s legal owner
- In section VIII, mark all appropriate boxes
- In section IX, fill in the correct hazardous waste codes. Three hazard waste code areas exist and each refers to a different type of hazardous waste.

EPA has a webpage with links to different codes needed for the forms:
<https://rcrainfo.epa.gov/rcrainfoweb/action/modules/main/glossary/view>

II. What is the difference between the Wisconsin Facility Identification Number (FID) and the EPA ID number?

All facilities in Wisconsin are required to have a FID number. The number is utilized as a tracking tool and is issued to companies when they are required to interact with the Department of Natural Resources (DNR).

How is one obtained and what is the difference between the numbers?

All facilities issued a permit or otherwise regulated by DNR will be issued an FID. If you do not know your FID, contact a DNR representative.

YI – 4 **Emergency Preparedness and Contingency Plan Requirements**

The DNR Waste program has LQG contingency plan elements in their inspection checklist, in Section 5 & 6 of the document: <https://dnr.wi.gov/topic/Waste/documents/haz/lqg.pdf>. Only LQG are required to develop a contingency plan, while SQG should have a plan in case of emergencies.

The following are checklists that can be used to develop your facility plan.

Preparedness and Prevention

The following is a checklist both SQG and LQG can use to ensure they are prepared for emergencies.

1. Does the generator have ALL of the following equipment, unless the equipment is not necessary for the types of wastes handled?
 - Device to summon emergency assistance (e.g., telephone, 2 way radio).
 - Internal communications and alarm systems.
 - Portable fire extinguishers.
 - Fire control equipment, including special extinguishing equipment.
 - Spill control equipment.
 - Decontamination equipment (e.g., eyewash, shower).
 - Water at adequate volume and pressure to supply water spray systems.
2. Is all of the above emergency equipment tested and maintained to assure its proper operation in an emergency?
3. Is there immediate access to internal or external alarms or an emergency communication device in hazardous waste handling areas?
4. Has the generator made necessary arrangements with the following emergency organizations?
 - Primary and support roles have been defined if multiple police and fire departments could respond to an emergency.
 - Familiarize police, fire and emergency response teams with the site layout, hazards of the waste handled, places where personnel work, entrances and roads in the site and possible evacuation routes.
 - Agreements with emergency response contractors and equipment suppliers.
 - Familiarize local hospitals with the properties of wastes handled and the potential resulting injuries or illnesses.
5. Is aisle space provided throughout the facility to allow for the unobstructed movement of personnel and all emergency equipment?

Contingency Plan and Emergency Procedures - LQG

The following is a checklist for developing the full contingency plan required for LQGs.

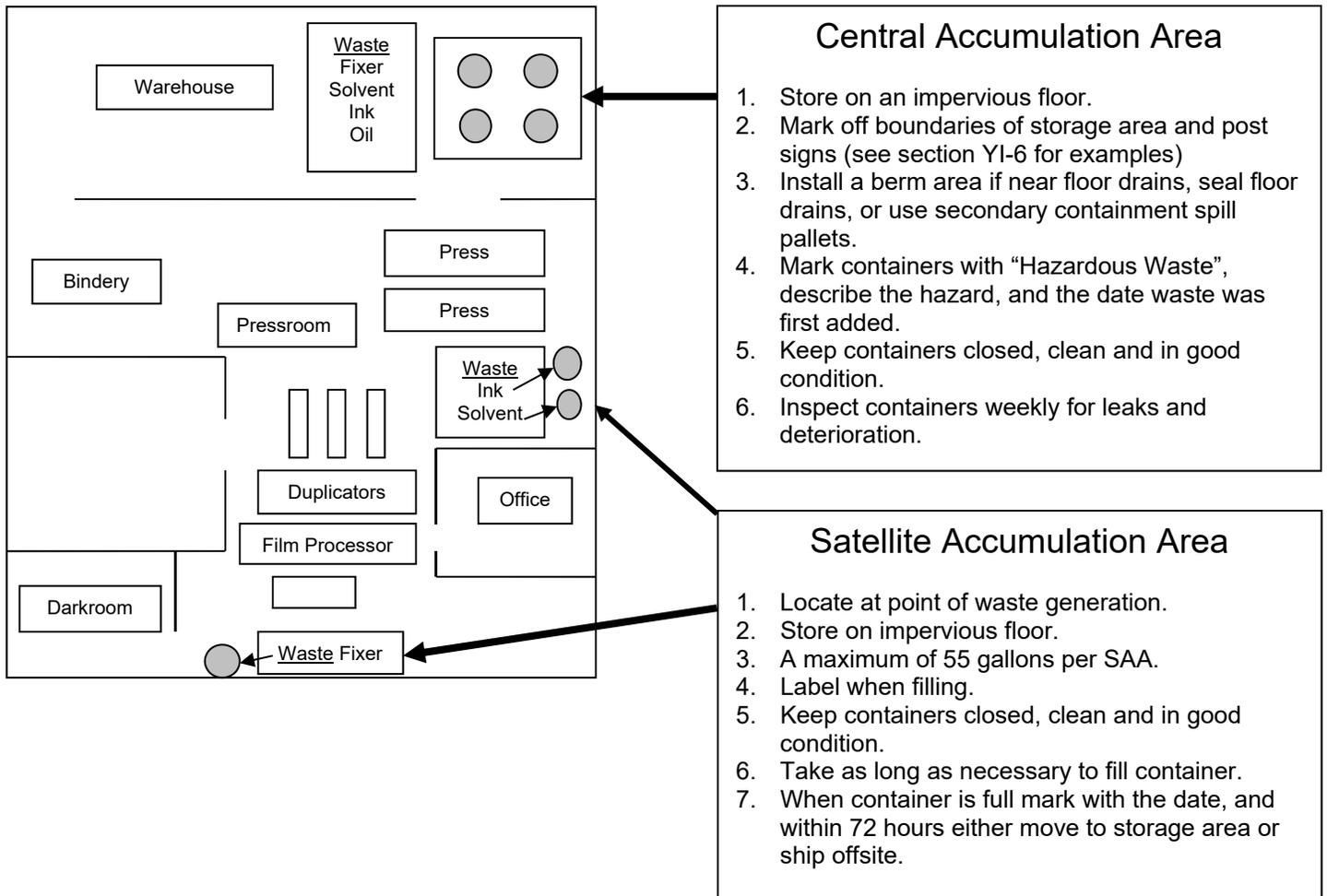
1. Does the generator have a written contingency plan that will be implemented immediately in the event of a fire, explosion or hazardous waste discharge?
2. Has the generator amended a SPCC plan or other emergency plan so it sufficiently incorporates hazardous waste management provisions?
3. Have copies of the contingency plan and all revisions been made available to ALL of the following?
 - Police Fire Hospital Emergency response teams
4. Does the contingency plan need to be amended due to any of the following?
 - Contingency plan failed in an emergency.
 - Change in site design, construction, O&M, or other circumstances which affect emergency response.

- Emergency coordinators changed.
- Emergency equipment changed.
- 5. Does the plan identify an emergency coordinator who meets ALL of the following?
 - Available or on call to coordinate emergency response measures.
 - Familiar with all aspects of site activities and the contingency plan.
 - Has authority to commit the resources needed to carry out the contingency plan.
- 6. Does the contingency plan include ALL of the following?
 - Designation of the primary emergency coordinator, with alternates listed in the order of assuming responsibility.
 - Name, address and phone number, office and home, for each emergency coordinator.
 - Description of the arrangements agreed to by the police, fire, hospitals and emergency response teams to coordinate emergency services.
 - Evacuation plan for personnel including signal(s) to be used in the event of evacuation and alternate routes.
 - Actions facility personnel will take in response to a fire, explosion, or hazardous waste discharge.
 - List of emergency equipment at the site, including location, description and capabilities of each item.
- 7. Does the plan require the emergency coordinator to do ALL of the following in the event of a fire, explosion, or discharge of hazardous wastes?
 - Activate internal alarms or communication systems.
 - Notify appropriate authorities, if their help is needed.
 - Identify the character, source, amount, and extent of discharged hazardous materials.
 - Assess hazards to human health and the environment.
 - If the incident threatens human health or the environment outside the facility, notify local authorities that evacuation may be necessary and notify the national response center (800-424-8802) and the division of emergency government (800-943-0003).
 - Take all reasonable measures necessary to ensure fires, explosions and discharges do not occur, reoccur, or spread.
 - Monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes, or other equipment if the site stops operation.
 - Provide for treating, storing, or disposing of recovered waste, contaminated soil, surface water, or other material.
 - Ensure wastes that are incompatible with the released material are not treated, stored or disposed until cleanup is completed.
 - Ensure that emergency equipment is clean and fit for use prior to resuming operations.
 - Notify the department and appropriate state and local authorities before resuming operations.
 - Submit an incident report to the department within 15 days.

Emergency Procedures – SQG

1. Has a person been identified as an emergency coordinator who is responsible for coordinating all emergency response measures and on the premises or able to reach the site within a short period of time?
2. Is ALL of the following information posted next to the telephone?
 - Name and telephone number of the emergency coordinator.
 - Location of fire extinguishers, spill control material and, if present, fire alarm.
 - Telephone number of the fire department unless the generator has a direct alarm.
3. In the event of an emergency, will the emergency coordinator take the following actions?
 - In the event of a release, telephone the division of emergency management (800-943-0003) and comply with NR 706.
 - In the event of a fire, call the fire department or attempt to extinguish the fire, if appropriate.
 - In the event of a spill, contain the flow of hazardous waste to the extent possible and clean up the hazardous waste and contaminated materials or soil.
 - If there is a release that could threaten human health outside the facility or if a spill reaches surface water, immediately notify the national response center (800-424-8802).
4. Are all employees thoroughly familiar with proper waste handling and emergency procedures relevant to their responsibilities during normal operations and emergencies?

YI – 5 Waste Storage and Accumulation Diagram



YI – 6 *Waste Signs*

Feel free to copy and post these signs as appropriate.

Hazardous Waste Storage Area

Hazardous Waste

Hazard _____

Accumulation Start Date: _____

Excluded Solvent- Contaminated Wipes