

Chapter 5: Spills and Accidental Release Response

When printing materials are *spilled* or *released*, the response required by the owner or operator depends on what is spilled, where it is spilled, and the quantity released. The entities who must be informed of a spill vary as well based on the type of material spilled and location of the spill.

What is a spill?

A spill occurs when a *hazardous substance* is released to the environment and that release is not allowed by any law or permit. For example, if a container falls and solvent leaks into a floor drain in a shop floor or a gas can overflows in the facility garage and pours into a storm drain, a spill has occurred.

What is a hazardous substance?

In Wisconsin, a *hazardous substance* is any substance that could cause harm to human health or the environment because of its quantity, concentration, or physical, chemical, or infectious characteristics. Substances that are toxic, corrosive, flammable, irritants, strong sensitizers, or explosives are among those considered hazardous.

The DNR interprets the definition broadly. For instance, in Wisconsin, melted butter or milk leaking out of a factory or warehouse and flowing toward a stream or storm sewer is considered a spilled hazardous substance that is threatening the environment.

How are spills and releases regulated in Wisconsin?

Wisconsin law requires facilities to take the following actions related to spills of hazardous substances:

- Immediately report the spill to the DNR.
- Quickly and adequately stop and clean up the spill.
- Restore the environment affected by the spill to the extent practicable.

The DNR is responsible for interpreting and enforcing Wisconsin's hazardous substance spills law. Each DNR region in Wisconsin has a Spill Coordinator trained to assess threats from spills to human health, safety, and the environment. A list of DNR Spill Coordinators can be found in the Emergency Contact information in the Black Ink Room section of this workbook.

Spill Coordinators can:

- offer advice and assistance to the facility and other *first responders* regarding actual and potential environmental threats from spills
- provide advice on whether a spill is reportable, as it relates to state requirements (but not for federal or EPA requirements)
- provide information, advice, and direction about actions required to contain and clean up a spill
- take action for DNR to take over the response and cleanup of a spill (and later seek to recover expenses), if the parties responsible for a spill do not take appropriate action

Spill: any non-exempt or unpermitted discharge of a hazardous substance to the environment.

Discharge: Commonly called a "spill." Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

NOTE: The words "spill" and "discharge" are used interchangeably in this chapter, just as they are in DNR regulations.

There is a list of *hazardous substances* in the Black Ink Room section of this workbook.

First responders: people who respond to accidents, disasters, spills, etc. First responders include law enforcement personnel, firefighters, public safety agencies, emergency medical technicians, government agency staff, utility crews, and industrial health professionals, along with volunteer citizens.

Section A: Spill and Release Response

Spills of any hazardous substances that affect—or threaten to affect—public health, welfare, or the environment require immediate action. Response to spills includes stopping or containing the spilled substance, protecting human safety and the environment, cleanup, and any required reporting.

A hazardous substance has an effect requiring action when a spill may cause or significantly contribute to an increase in mortality or serious irreversible or incapacitating reversible illness, or when a spill may pose a substantial present or potential hazard to human health or the environment because of its quantity, concentration, or physical, chemical, or infectious characteristics.

If a spill or release occurs, what should I do?

When a spill or release of any hazardous substance occurs:

- take immediate action to stop or contain the spill or release
- take immediate action to **protect people**
- take immediate action to minimize harmful effects to the environment
- call emergency responders if necessary
- determine whether the spilled substance can be **cleaned up by employees** in the immediate area, **or if specially trained personnel are needed**
- assess the **amount** of hazardous substance that was spilled
- if necessary (or if in doubt), **report the spill (see SP-4)**
- clean up and restore the environment
- **document** the spill, all cleanup actions, and the outcome of those actions, and file all required reports

If you have questions about whether a substance spilled at your facility is hazardous or whether the spill should be reported, contact the toll-free hotline, **800-943-0003**, for assistance and more information.

What spill response requirements apply during spill cleanup?

Basic response requirements involve having cleanup supplies readily available and keeping records of spills and cleanup actions taken. Requirements for employee training (see below) depend on the type and size of spill.

Supplies for Cleanup

Spill control and cleanup supplies should be readily available at each work station and/or for each employee at the facility, and should be appropriate for the chemical products used in the area.

Supplies can include:

- absorbents, neutralizers, or other spill control materials and equipment
- personal protective equipment (e.g., rubber gloves and safety glasses)
- containers for the materials that have been cleaned up

Refer to the Emergency Preparedness and Workplace Safety section in Chapter 6 of this workbook for more information on this topic.

Employee Training Requirements

Wisconsin law requires that all spills be cleaned up. Employees can be trained to safely clean up incidental spills.

The Occupational Safety and Health Administration (OSHA)—the federal agency that sets standards for workplace safety and health—defines “incidental spills” as those that “can be absorbed, neutralized or otherwise controlled at the time of the release (spill) by employees in the immediate release area or by maintenance personnel.”

Employees may clean up “incidental” spills of hazardous chemicals if:

- they have received Hazard Communication Right to Know training in the safe handling and health and safety hazards of the spilled chemical or product (see HAZCOM information in Section B of Chapter 6)
- no potential safety or health hazard (e.g., fire, explosion, chemical exposure) exists

OSHA provides additional information on spill cleanup and employee training at:

https://www.osha.gov/SLTC/emergencypreparedness/hazwoper/osha_resources.html

Larger spills that are not “incidental,” or that pose a safety or health hazard, may require personnel that are specially trained in control and cleanup procedures. Employees *may* be trained as emergency responders (refer to Section C of Chapter 6 of this workbook for more information on Hazardous Waste Operations and Emergency Response (HAZWOPER)).

Printers that are Very Small Quantity Generators (VSQGs) are *not* required to train emergency responders *if* employees are evacuated from the spill hazard area and off-site emergency responders are called to control and clean up the spill. Small and Large Quantity Generators (SQGs and LQGs, respectively) must develop training on emergency procedures to the extent described in Chapter 2 - Solid and Hazardous Waste of this workbook, in section B.6. If you are unsure of your generator size, refer to Chapter 2 of this workbook, in section B.3, to determine your generator size.

Documentation

Keep records of any spills or releases that occur at your facility. Document the substance(s) released, the amount spilled, cleanup actions taken, and the outcome of the cleanup. In some cases, documenting a spill or release may involve contracting with professional scientists or engineers, collecting soil samples, and keeping records of analyses.

Keeping accurate and thorough records is essential if you have to report a spill. Section B of this chapter provides additional information and details about documenting a spill and cleanup process.

Question SR.1	Have you had a spill within the past 12 months?	<input type="checkbox"/> Yes. Continue on and answer question SR.2. <input type="checkbox"/> No. Continue with the next section to learn how to manage a spill.
----------------------	---	--

Section B: Spill or Release Reporting

Spill and release notification and reporting requirements vary, depending on the characteristics of the spill and the amount of hazardous substance(s) discharged. Responding to spills in printing facilities usually involves some decisions about whether reporting is necessary. Some examples:

- A 55 gallon drum of solvent spills inside a contained area, such as a solvent storage room, and it is cleaned up properly. This situation would not require reporting.
- The same 55 gallon drum spills on a shipping dock and the solvent flows into a stormwater sewer. This situation would be a reportable spill.

How do I determine what to report?

Follow the Spill Reporting Decision Process in Figure 2 below.

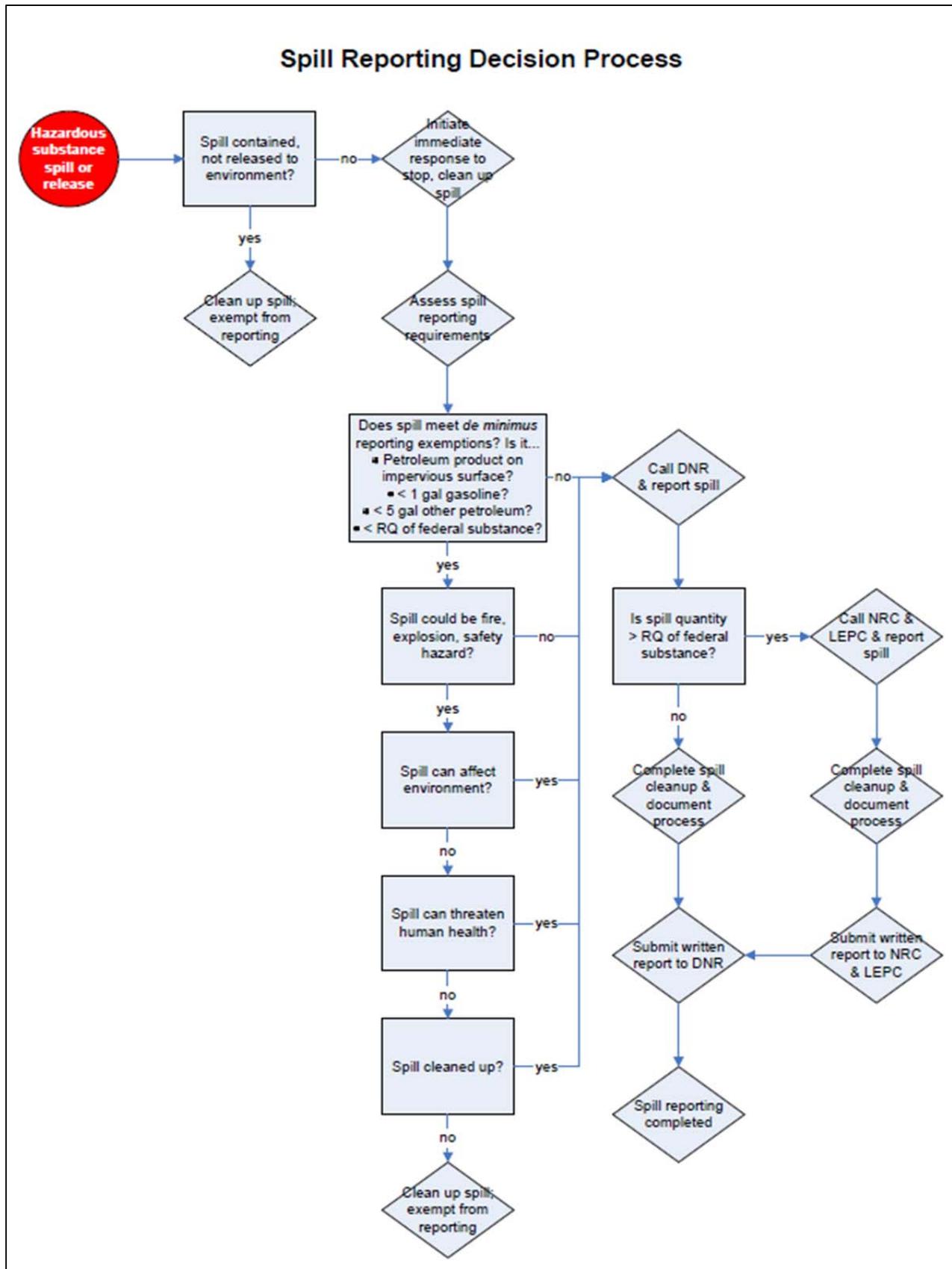


Figure 2: Spill Reporting Decision Process

After a spill, printers should follow these steps (described in detail below):

1. Determine if the spill is a reportable spill
2. Follow the appropriate spill reporting procedures
3. Submit written reports and documentation to complete the spill reporting process

Determine if the spill is a reportable spill

A hazardous substance is spilled into a secondary containment structure at my facility. Is reporting required?

Some facilities store hazardous substances in areas protected by impervious, secondary containment structures. If a hazardous substance is spilled in a secondary containment area, no reporting is required *if*:

- the containment structure completely contains the spilled substance,
- the substance is recovered, and
- the substance is not discharged to the environment.

In this case, spill cleanup is the only action required. Reporting of spills into secondary containment structures is not required because only discharges of hazardous substances "to the environment" require reporting in Wisconsin.

Do I have to report a hazardous substance spill or release that is not contained?

Wisconsin law establishes the conditions (and certain *de minimus* exemptions) that determine spill reporting requirements. The characteristics of the spill and amount of spilled substances are considered when determining reporting requirements.

De minimus exemptions are listed on page SR-6, along with a description of how they apply.

To determine if reporting is required, evaluate a spill or release using these four criteria:

1. The spill was cleaned up or evaporated immediately.
2. The spill has *not* affected (or threatened to affect) human health (e.g., people that are injured, overwhelmed by vapors, or evacuated).
3. The spill has *not* affected (or threatened to affect) the air, lands, or waters of the state.
4. The spill does *not* pose (or threaten to pose) any safety hazards (e.g., fire hazard, explosion, slippery road surface).

Any spill or release that **does not** meet all the four criteria above is a reportable spill, regardless of the quantities of chemicals involved. Proceed with spill cleanup and spill reporting.

Does the spill meet the exemption criteria above?

Wisconsin statutes allow *de minimus* exemptions for small quantity spills that meet the four criteria mentioned above. Even if a spill meets **all** the criteria above, it still may need to be reported if the amount of hazardous substances involved is over the *de minimus* level.

If you have any questions on whether the spill will have an effect requiring reporting, it is best to contact DNR. Because both EPA and DNR can issue a fine for not reporting a spill, it is better to err on the side of caution and report a spill. If you later learn the spill was not reportable, you can call and withdraw the report.

If a spill occurs that meets all the criteria above:

- Proceed with spill cleanup.
- Assess the amount of hazardous substance(s) discharged.
- Determine whether the amount of the spill is over the *de minimus* level, thereby making it a reportable spill.

Is the spill above *de minimus* exemption levels?

For accurate spill reporting, determine the quantity of hazardous substance(s) discharged. Wisconsin law allows *de minimus* exemptions for certain spills, including:

- gasoline or other petroleum products completely contained on an impervious surface (e.g., asphalt or cement)
- < 1 gallon of gasoline spilled onto a pervious surface or runoff onto an impervious surface
- < 5 gallons of other petroleum product spilled onto a pervious surface or runoff onto an impervious surface
- < 250 pounds of dry fertilizer
- < 25 gallons of liquid fertilizer
- < 1 acre of land coverage of pesticide applied according to label instructions
- less than the specified *Reportable Quantity (RQ)* of a federally listed hazardous substance spilled in any 24 hour period

What are Reportable Quantity (RQ) thresholds for hazardous substances?

Each hazardous substance has a chemical-specific Reportable Quantity (RQ), which is the threshold amount that triggers particular reporting requirements. EPA publishes a list of these hazardous substances, along with the RQs, in the “Title III List of Lists: Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act, as Amended.”

- This “list of lists” is available online from both EPA and WEM (see Section BI-2 in the Black Ink Room section of this workbook).
- The Black Ink Room also contains examples of some hazardous chemicals that are found in printing facilities and their associated RQs.

Any spill that meets these *de minimus* exemptions **and** the four criteria on page SR-5 is exempt from reporting in Wisconsin. If you are in doubt about the quantity spilled, reporting is recommended, because penalties exist for failing to provide notice of reportable spills.

Question SR.2	If you had a spill, was the amount of the spill above reportable quantities?	<input type="checkbox"/> Yes. Answer SR.3. <input type="checkbox"/> No. Continue with the next section to learn about spill reporting requirements.
----------------------	--	--

Follow the appropriate spill reporting procedures**Report to the DNR by telephone immediately**

Any spill that does not meet all the *de minimus* exemptions **and** the four criteria above must be reported. Reporting requirements depend on the type of hazardous substance(s) and the amount spilled.

At a minimum, reporting the spill to the DNR is required. Report the spill immediately to the DNR by calling the 24-hour hotline, 800-943-0003, which is maintained by the DNR and Wisconsin Emergency Management specifically for this purpose.

What constitutes “immediate” reporting?

The regulations do not specify any time limits but, in practice, notification should occur as soon as safely possible. The DNR’s regulations contain the following general guidance:

- “In uncomplicated spill situations, responsible parties are expected to provide notice to the department within a matter of a few minutes after they learned of the spill.”
- “In other situations, especially where emergency action of some kind is being taken by the

responsible party or where the responsible party does not have access to a telephone, notification may not be possible for several hours, but would still be considered 'immediate' if promptly given."

Provide the necessary information to DNR

When reporting a spill to the DNR, be prepared to provide the following information:

- your name, address, and telephone number
- name, address, and telephone number of the discharger or owner/operator (the "responsible party")
- date, time, location, and duration of the spill
- the type of substance and amount of the substance discharged
- hazardous and/or toxicological characteristics of the substance spilled
- cause of the discharge
- immediate actions being taken to stop the release/minimize the impact to the environment
- source, speed of movement, and destination of the spilled hazardous substance
- actual or potential impacts to human health or the environment
- weather conditions at the spill site
- other agencies on-scene during the spill

After receiving a telephone notification, the DNR will begin a process to track the spill through the completion of cleanup activities. The DNR will complete a "spill report form," which is a form solely for the DNR's use. At the end of the cleanup process, DNR staff will sign off on this form to indicate the incident has been closed out.

Determine if additional reporting is required

Certain spills trigger the federal Emergency Release Notification requirements described in section 304 of the *Emergency Planning and Community Right-to-Know Act* (EPCRA; refer to Chapter 7 - Emergency Planning of this workbook).

Additional reporting is required if you experience a spill that:

- involves any of the hazardous substances defined in the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), **and**
- exceeds the Reportable Quantity (RQ) of the substance

EPCRA: the federal Emergency Planning and Community Right-to-Know Act. The Act requires printers that store or use chemicals in quantities that exceed specific threshold levels to report their inventory, use, and release amounts. It also requires printers to report accidental spills and releases.

Report by telephone to additional organizations if required

To report a spill that exceeds the RQ of a federally listed hazardous substance, make the following three telephone calls:

- Wisconsin Hotline, 800-943-0003 (as above)
- National Response Center, 800-424-8802
- LEPC, at your county Emergency Management Office (http://emergencymanagement.wi.gov/counties/county_directors.asp)

Chapter 7, the Emergency Planning chapter of this workbook, contains additional information about reporting spills that exceed the RQ of a hazardous substance according to the EPCRA requirements.

Submit written reports and documentation to complete the spill reporting process**After I notify the appropriate regulatory agencies by telephone, what other spill reporting is required?**

After your telephone notification, file a written report to complete the spill reporting procedure. Submit the report to the DNR **within 45 days** of your original spill notification. The written documentation should describe:

- the immediate actions taken at the site or facility, and
- the outcome of those actions.

For reports called in to the National Response Center, federal regulations require that written follow-up documentation be submitted to the NRC and LEPC **as soon as possible**.

What should the written report contain?

The written documentation submitted to the DNR must include:

- the purpose of the report submission and the response desired from the DNR
- name, address, and telephone number of the responsible party
- location of the facility or spill
- any reporting information not provided previously (see telephone notification section above)
- engineering controls and/or treatment and effluent quality of any licensed or permitted discharge
- type, amount, and final disposition of the spilled hazardous substances and any contaminated materials generated during the cleanup (e.g., manifests, receipts, and other documents)

If you complete your spill response within the 45-day period, submit your written documentation as a “*final* report for completed immediate action” (as opposed to just reporting on immediate actions undertaken). When submitting a final report within the 45-day limit, you can also include a “letter of compliance” in addition to the report to document that the immediate response action is complete and that no further action is necessary to respond to the hazardous substance spill. If cleanup will **take longer than 45 days**, two separate submittals will be needed.

You may be fined for failure to report a spill. As the length of time increases between the date of the spill and when you report, the severity of fines and/or penalties will also increase.

What happens after I submit the written report?

The DNR will review the spill report and documentation provided and will evaluate whether the cleanup was adequate. The DNR’s response depends on the spill and the actions you request. If additional cleanup or remediation is required by the DNR, you will receive a “responsible party letter” from the DNR within 30 days.

If the spill and the environment have been adequately cleaned up, the DNR Spill Coordinator will sign the internal “spill report form,” indicating that the incident is concluded. If you want a copy of this determination for your facility files, two options are available:

- You can request a “No Further Action Letter” from the DNR. There is a \$250 fee for this letter, and the fee must be submitted with your written request.
- You can request a photocopy of the signed “spill report form,” indicating that the incident has been closed. There is no fee for the photocopy.

Question SR.3	If you had a spill above reportable quantities, did you follow all the proper reporting requirements summarized above?	<input type="checkbox"/> Yes. <input type="checkbox"/> No. Report to the DNR (and, if necessary, other organizations) as soon as you realize the lapse.
----------------------	--	--