

Chapter 4: Storm Water

Storm water is runoff from precipitation, including rain, snow, and ice melt that can contain pollutants in quantities sufficient to adversely affect water quality. Printers are required to prevent pollution of storm water on their properties by eliminating contact between sources of pollutants and storm water. Storm water regulations require printers to manage these efforts by obtaining an Industrial Storm Water Discharge Permit or filing a No Exposure certification form, whichever applies. Construction, including new buildings or additions, may require a Construction Site Storm Water Discharge Permit if one acre or more of land will be disturbed.

When do I need a Storm Water Permit?

The Industrial Storm Water Discharge Permit covers the *contamination* of storm water from contact with industrial materials stored outside or activities that may result in contamination. Printers who own or lease space must obtain an Industrial Storm Water Discharge Permit from the DNR. In lieu of this permit, printers can submit a *No Exposure Certification* form verifying that no materials are exposed to storm water. Refer to the following section for more information on when a permit is needed and when the certification form can be used.

An additional permit, a Construction Site Storm Water Discharge Permit, may be required. This permit covers storm water discharge from a construction site where **one or more acres** of land are disturbed.

Section A: Industrial Storm Water Requirements

As mentioned above, printers are required to obtain an Industrial Storm Water Discharge Permit or file a "No Exposure Certification" Form.

No Exposure means all industrial materials and activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, or ice melt or runoff.

Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products.

Material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, by-product, final product, or waste product.

Question SW.1	Have you previously filed for a permit or filed a No Exposure Certification?	<input type="checkbox"/> Yes - Continue to Section B to review No Exposure criteria. <input type="checkbox"/> No. Continue with this section.
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Industrial Storm Water Discharge Permit

In order to determine if a permit is needed, printers must determine if their facilities or operations present the potential for storm water contamination.

Common sources of storm water contamination at printing operations include:

- open dumpsters used to collect trash, including chemical waste containers
- open or partially closed compactors used to collect trash, including chemical waste containers
- hydraulic lines or pumps for compactors
- open empty drums or other containers that contained inks or other chemicals
- uncovered ink-fill or wastewater drain pipes outside the facility
- outside fuel dispensing operations
- contaminated or oil-soaked pallets

- open or partially covered compactors or dumpsters (no lids or overhang roofs)
- compressor and cooling system blow down
- uncovered loading dock platforms
- uncovered aboveground storage tanks where chemicals or fuel oils are filled or dispensed
- outside storage of chemicals and/or empty containers
- visible traces of spray power or paper dust on roofs, driveways, or sides of buildings
- scrapped metal press components or other equipment stored outside or uncovered (oils and greases)
- waste materials storage areas, including uncovered dumpsters

No Exposure Certification

Most printers will be able to certify that storm water is not exposed to sources of contamination. Printers are strongly encouraged to assess their facilities and make changes if necessary to qualify for No Exposure Certification, as this greatly reduces the regulatory requirements. To request this status, a No Exposure Certification form must be completed and submitted to the DNR. Printers that DO NOT qualify for No Exposure Certification are required to apply for and obtain an Industrial Storm Water Discharge Permit.

What is No Exposure Certification?

No Exposure Certification means printers ensure that all industrial materials and activities are indoors, sheltered, or covered to prevent contact with storm water. In special circumstances, the DNR may allow temporary protective measures other than a shelter to cover materials or activities (e.g. where industrial materials or activities are infrequently located outdoors).

How do I qualify for No Exposure Certification?

Take the following steps:

- Move sources of contamination inside, provide a storm-resistant shelter, and/or dispose of unneeded materials to eliminate the potential for industrial materials and associated activities to pollute storm water.
- Obtain a No Exposure Certification form, found in the Magenta Ink Room section of this workbook.
- Complete and submit the certification form to the DNR, including representative photos of the exterior of the facility.
- On a case-by-case basis, the DNR may inspect a facility to confirm that it qualifies.

If my printing operation has materials exposed to storm water, can I make modifications to qualify for No Exposure Certification and eliminate the need to obtain an Industrial Storm Water Discharge Permit?

Yes. Eliminate all exposure to storm water by moving material indoors or protecting material inside a *storm resistant shelter*. A roofed shelter requires sides and berms to prevent storm water from running underneath the roof and becoming contaminated.

Printers can move drum storage areas (including empty drums) inside or under a protective cover to prevent storm water contact. Items such as contaminated shipping pallets, waste paper, and recyclables should also be kept under cover. Trash dumpsters should be moved under cover or equipped with tight-fitting lids to prevent precipitation from entering the dumpster. Dumpsters must also be leak-proof and have no holes or cracks. In addition, properly disposing of material that is no longer needed can reduce the potential for contamination.

When modifications eliminate all exposure of materials and activities to storm water, printers qualify for No Exposure Certification and are not subject to regulation under an Industrial Storm Water Discharge Permit. Printers should file the No Exposure Certification form with the DNR. The No Exposure Certification needs to be confirmed by the DNR, which may include an inspection.

Again, the DNR strongly encourages printers to make any necessary adjustments to their operations to qualify for No Exposure Certification.

How do I determine whether my facility qualifies for No Exposure Certification?

To determine if your facility qualifies for the No Exposure Certification, 11 questions must be answered. Each question is a yes/no question that describes a situation where activities or materials could be exposed to storm water. If printers can answer “no” to all of the questions, they qualify for No Exposure Certification. The 11 questions are located on page SW-6.

Before proceeding with the 11 questions, the following information will prepare you to answer the questions. Note that if any listed materials or activities are exposed to precipitation, contamination of storm water is possible.

Considerations for Determining Qualification for No Exposure Certification

- Lidded Dumpsters Containing Waste Materials: Containers must be completely covered and must not leak. Contents or fluids may not drain from containers or be spilled while loading containers onto a garbage truck. Uncovered storage of industrial refuse and trash is not allowed.
- Transferring Materials/Products Between Buildings: This is allowed, provided the materials/products are protected from precipitation, leaks, and spills.
- Particulate Emissions from Roof Stacks and/or Vents: Contact between storm water and particles emitted from roof stacks or vents MAY disqualify applicants for No Exposure Certification. Printers do not commonly produce particulate emissions from roof stacks or vents. However, solid material discharged into the air from roof stacks or vents must be in accordance with the following applicable environmental protection regulations (e.g., air quality control standards):
 - particles must not come into contact with or contaminate storm water
 - deposits of particles or residuals not otherwise regulated must not be allowed to collect, move, or be swept away with storm water runoff
 - pollutants from roof stacks or vents must not be “tracked out” or carried on the tires of vehicles
- Above Ground Storage Tanks (ASTs): ASTs located outside but not filled or drained outside are generally allowed and not considered exposed.
 - ASTs may fill or drain materials outside without exposure if transfer valves are used. Transfer valves are typically used to dispense heating oil, propane, butane, chemical feedstocks, or fuels such as gasoline, diesel, or compressed natural gas.
 - EPA recommends, wherever feasible, that ASTs be surrounded by some type of physical containment (e.g., an impervious dike, berm, or concrete retaining structure) to prevent runoff in the event of a structural failure or leaking transfer valve. Note that any resulting unpermitted discharge would violate the Clean Water Act.

To be operational and qualify for no exposure, ASTs must:

1. be physically separated from and not associated with vehicle maintenance operations,
2. have no piping, pumps, or other equipment leaking contaminants that could contact storm water, and
3. have properly maintained valves without leaks or deterioration.

Is a storm-resistant shelter always required to meet No Exposure Certification standards?

A storm-resistant shelter meets No Exposure Certification standards by preventing materials and activities from contact with precipitation. However, in accordance with EPA guidance, the DNR may allow some exceptions to this standard.

For more information on No Exposure Certification review the EPA's no exposure guidance document at <https://www3.epa.gov/npdes/pubs/norexguide.pdf>

Facilities storing the following outdoors without the cover of a storm-resistant shelter may still be eligible for the No Exposure Certification exclusion:

- Drums, barrels, tanks, and similar containers, if they are tightly sealed, without operational taps or valves, are intact, and do not leak. Containers may be located outdoors for storage purposes only. Withdrawal or addition of material from unsheltered, outdoor containers will disqualify a facility from No Exposure Certification. Routine inspections are required. Open, deteriorated, or leaking containers must be immediately repaired, covered, sheltered, or replaced.
- Containers, racks, and other transport platforms (e.g., wooden pallets) used with the drums, barrels, etc., provided they are contaminant-free.
- On-site vehicles used in material handling, such as trucks, automobiles, forklifts, trailers, or other general purpose vehicles, if they are adequately maintained, not leaking, and not a potential source of contaminants. Industrial machinery is not included.
- Final products other than those that would be mobilized in a storm event (e.g., rock salt). These final products must be built and intended for outdoor use (e.g., new cars), provided they have not deteriorated or are otherwise potential sources of contaminants. Products which may oxidize, deteriorate, leak, or otherwise be a potential source of contaminants when exposed (e.g., old racking, metal, junk cars, stockpiled train rails) are not allowed.

Question SW.2	Do you meet all these elements, or have you made changes at your facility in order to qualify for No Exposure Certification?	<input type="radio"/> Yes. Continue with the next section. <input type="radio"/> No. Consider making changes.
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Section B: 11 Question Checklist

Answer the following questions to determine if your facility qualifies for No Exposure Certification. Check "Yes" or "No" for each question.

Are the following materials or activities exposed to precipitation at your facility now or in the foreseeable future?	Yes	No
1. Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain.		
2. Materials or residuals on the ground or in storm water inlets from spills/leaks.		
3. Materials or products from past industrial activity.		
4. Material handling equipment (except properly maintained vehicles).		

Are the following materials or activities exposed to precipitation at your facility now or in the foreseeable future?	Yes	No
5. Materials or products during loading/unloading or transporting activities.		
6. Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants).		
7. Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers.		
8. Materials or products handled/stored on roads or railways owned or maintained by the discharger.		
9. Waste material not stored in covered, non-leaking containers (e.g., dumpsters).		
10. Application or disposal of process wastewater (unless otherwise allowed).		
11. Solid particles or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) are evident in storm water outflow.		

Did you answer “Yes” to any of the 11 questions?

If you answered “yes” to any question, storm water may be exposed to potential contamination at your facility and your facility does not qualify for No Exposure Certification. You may want to consider making changes to allow you to qualify. If a facility cannot qualify, they must submit an application for Industrial Storm Water Discharge Permit. The Industrial Storm Water Permit webpage has information to help facilities apply for the permit: <http://dnr.wi.gov/topic/stormwater/industrial/>.

If you answered “No” to all the questions, you qualify and should submit an application for No Exposure using DNR form 3400-188, found here: <http://dnr.wi.gov/files/PDF/forms/3400/3400-188.pdf>.

Question SW.3	3a. Does your facility qualify for No Exposure Certification?	3a. <input type="checkbox"/> Yes. File for No Exposure <input type="checkbox"/> No. Submit an application for discharge permit.
	3b. If you previously filed for No Exposure Certification, has this evaluation revealed items that were exposed?	3b. <input type="checkbox"/> Yes. Consider making changes to continue to qualify for No Exposure, or submit application for discharge permit. <input type="checkbox"/> No. Continue with the next section.

Section C: Best Management Practices

The following best management practices are not required, but are recommended. Use the chart below to indicate where you have taken action as recommended (Done), where you might want to take action (Needs Attention), or if the area doesn't apply to your shop or operations (Not Applicable).

Shop Area or Item	Practice	Done	Needs Attention	Not Applicable
Plates & Film	Store inside on pallets or drums before pickups.			
Pallets	Do not accumulate; reuse or discard immediately. Store inside, if possible.			
Storage Tanks	Locate ink, fuel oil, and solvent tanks inside, if possible. Ensure fill pipes are covered with drip trays. If located outside, use double-wall tanks or cover with roofs.			
Empty and Full Drums & Containers	Do not store on uncovered loading dock platforms. Store inside or in a shelter. Ensure drums and containers are empty.			
Dumpsters & Compactors	Use properly fitted lids or cover with shelter.			
Loading and Unloading Chemicals	Avoid unloading or loading while it is raining if loading dock is not covered. Do not store containers on uncovered loading docks.			
Vehicle Fueling Operations	Cover dispenser and installed grooved pavement.			
Fleet Vehicle Washing	Use biodegradable washes and, if possible, only pressurized water. Do not wash fleet vehicles (10 or more vehicles) outside. Use an off-site service.			
Fleet Maintenance	Perform fleet maintenance activities inside. Do not store parts outside. Floor drain water from maintenance areas shall be connected to a municipal wastewater treatment system or stored in a holding tank for treatment elsewhere. Such water shall not be discharged to a private on-site wastewater treatment system, surface water, or storm sewer.			
Visual Inspection	Visually inspect the outside of your operation at least quarterly, monthly would be ideal. A visual inspection should: <ul style="list-style-type: none"> • assess the integrity of the storm water collection system • check for leaks, seepage, and overflows from sludge and waste disposal sites • ensure that all sources of contamination are eliminated or meet the requirements detailed in the Industrial Storm Water Discharge Permit 			

Question SW.4	Have you adopted any of the recommended BMPs?	<input type="checkbox"/> Yes. <input type="checkbox"/> No. Recommended.
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