

Chapter 4: Storm Water

Storm water is rain, snow, or snowmelt. Printers are required to prevent pollution of storm water on their properties by eliminating contact between pollutants and storm water. Regulations require printers to document these efforts by obtaining an Industrial Storm Water Permit or filing a No Exposure Certification form.

Construction, including new buildings or additions, may require a Construction Site Storm Water Discharge Permit.

When do I need a Storm Water Permit?

The Industrial Storm Water Permit covers the *contamination* of rain, snow, or snowmelt runoff from outside storage of industrial materials or activities.

Printers who own or lease space must:

- obtain an industrial storm water permit from the Department of Natural Resources (DNR) or
- submit a *No Exposure Certification* verifying that no materials are exposed to storm water

The Construction Site Storm Water Discharge Permit covers storm water discharge from a construction site where **one or more acres** of land are disturbed.

Section A: Industrial Storm Water Requirements

Printers are required to apply for an Industrial Storm Water Discharge Permit coverage or file a “No Exposure Certification” Form.

	<p>Question SW.1: Have you previously filed for a permit or filed a No Exposure Certification?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No - Submit RTCP</p>
---	---	--

Printers must determine whether their facility or operations present potential for storm water contamination.

Common sources of storm water contamination at printing operations include:

- uncovered ink-fill or wastewater drain pipes outside the facility
- outside fuel dispensing operations
- onsite fleet vehicle maintenance shops
- 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

Stormwater Discharge is rainfall, snow, or snowmelt runoff from land and impervious areas such as paved streets, parking lots, and building rooftops. Stormwater discharge often contains pollutants in quantities that could adversely affect water quality.

Contamination means contact between stormwater and any pollutant resulting in pollution of storm water.

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.

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

Surface Water is water that sits or flows above the earth, including lakes, oceans, rivers, streams and wetlands.

Groundwater is the water beneath the earth's surface that flows through soil and rock openings in an aquifer. Often serves as a primary source of drinking water.

Storm resistant shelters include completely roofed and walled buildings or structures. Structures with a top cover but no side coverings are allowed, provided material under the structure is not subject to any run-on and subsequent runoff of storm water.

- 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)

Our facility has a holding pond. What are the requirements?

If runoff does not enter *surface waters* or *groundwater*, pollutants are not discharged to waters of the state. A facility where this is true may still be eligible for No Exposure Certification. However, any pond that has overflow, an overflow spillway, or other relief outlet is not eligible. Pollutant migration into the groundwater must also be prevented or an Industrial Stormwater Discharge Permit must be obtained.

NO EXPOSURE CERTIFICATION

It is expected that most printers will certify that storm water is not exposed to sources of contamination. In these cases, a No Exposure Certification form must be filed with the DNR. Printers filing a No Exposure Certification form are not required to apply for an Industrial Storm Water Discharge Permit.

What is No Exposure Certification?

No Exposure Certification means printers verify that all industrial materials and activities are sheltered or covered to prevent contact with rain, snow, snowmelt and/or runoff. In special circumstances, the DNR may allow temporary protective measures other than a shelter to cover materials or activities (e.g. a facility under construction where a permanent shelter will be constructed or where industrial materials or activities are infrequently located outdoors).

How do I qualify for No Exposure Certification?

- provide a storm-resistant shelter to protect industrial materials and activities from exposure to storm water
- certify that no storm water discharges from the site are or could be contaminated by physical contact with industrial materials and/or activities
- obtain a No Exposure Certification form, found in the Magenta Ink Room of this workbook
- complete and submit the certification form to the DNR

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 may also require 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.

When modifications eliminate all exposure of materials and activities to storm water, the printer is no longer subject to regulation under an Industrial Storm Water Permit. Instead, a No Exposure Certification form should be filed.

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

No Exposure means storm water is not exposed to sources of contamination. To determine whether your facility qualifies for the No Exposure Certification, 11 questions must be answered. Each question describes a situation where activities or materials could be exposed to precipitation (rain, snow, or snow melt). The 11 questions are located on page SW-6.

If any listed materials or activities are exposed to precipitation, contamination of storm water is possible. Use the following information to help you answer the 11 questions.

What information should I know to answer the 11 questions?

- Lidded dumpsters containing waste materials. Containers must be completely covered. Contents or fluids may not drain from container or be spilled while loading onto a garbage truck. Uncovered storage of industrial refuse and trash is not allowed.
- Transferring materials/products between buildings is allowed provided the materials/products are protected from precipitation, leaks, and spills.
- Particulate Emissions From Roof Stacks and/or Vents: 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 with 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
 - contact between storm water and particles emitted from roof stacks or vents MAY disqualify applicants for No Exposure Certification.
- 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: 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
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 the United States Environmental Protection Agency (EPA) guidance, the DNR may allow some exceptions to this standard.

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 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 facility from No Exposure Certification. Routine inspection 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., can be stored outside providing they are contaminant-free.
- On-site vehicles used in material handling such as trucks, automobiles, forklifts, trailers, or other general purpose vehicles if 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., junk cars; stockpiled train rails) are not allowed.

For more information on No Exposure Certification visit the United States Environmental Protection Agency's no exposure guidance document at <http://www.epa.gov/npdes/pubs/noxguide.pdf>

	<p>Question SW.2: Have you made changes at your facility, according to the above list, in order to qualify for No Exposure Certification?</p>	<p><input type="checkbox"/> Yes.</p> <p><input type="checkbox"/> No.</p>
---	--	--

Section B: Do I qualify for the No Exposure Certification? The 11 Question Checklist

Answer the following questions to determine if your facility qualifies for the 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	Questions
		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).
		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. If so, your facility does not qualify for No Exposure Certification.

	<p>Question SW.3: 3a. Does your facility qualify for No Exposure Certification?</p>	<p>3a. <input type="checkbox"/> Yes. <input type="checkbox"/> No. Answer 3b.</p>
	<p>3b. If you previously filed for No Exposure Certification, has this self-inspection revealed items that were exposed?</p>	<p>3b <input type="checkbox"/> Yes. <input type="checkbox"/> No.</p>

Section C: Best Management Practices

The following best management practices are not required, but are recommended. Please 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 doublewall tanks or cover with roofs.			
Empty and Full Drums & Containers	Do not store on 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 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 offsite 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			
Visually inspect the outside of your operation at least quarterly, monthly would be ideal	A visual inspection should include: <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 Stormwater Discharge Permit 			


Question SW.4:

Have you adopted any of the recommended BMPs?

 Yes.

 No. Recommended.