

Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

July 5, 2002

Storm Water Phase II Guidance

COUNTY ENGINEERS/SUPERINTENDENT OF HIGHWAYS
MUNICIPAL ENGINEERS/DIRECTORS OF PUBLIC WORKS
CONSULTING ENGINEERS

#02-14

This letter transmits guidance for Phase II of the regulation titled "National Pollutant Discharge Elimination System" and known as NPDES Phase II.

NPDES Phase II rules become effective on March 10, 2003. The major impact of Phase II is all projects with one or more acres of disturbance will require a Stormwater Pollution Prevention Plan (SWPPP), a Contractor's Certification Statement, and the submittal of a Notice of Intent (NOI) to the Illinois Environmental Protection Agency (IEPA).

Any contract that will not be completed by March 10, 2003 must comply with Phase II requirements, if applicable. Accordingly, we recommend all projects on local lettings and state lettings on or after November 8, 2002 comply with the Phase II requirements. To further assist in your compliance efforts, we are providing any example of a SWPPP to each district. You may contact them for specific details.

If you are interested in the training courses mentioned in the attached guidance document, please contact your district Bureau of Local Roads. They will collect the information on the persons interested and let our Technology Transfer Center know so sessions can be scheduled.

Questions may be directed to your district office or Larry Houser, telephone 217-782-3807.

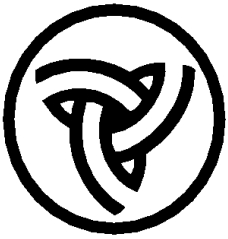
Sincerely,

A handwritten signature in black ink that reads "Darrell W. McMurray".

Darrell W. McMurray, P.E.
Engineer of Local Roads and Streets

CC/dg

Attachment



Illinois Department of Transportation

Bureau of Local Roads and Streets

Storm Water Phase II

Guidance

These guidelines have been developed to assist the local agencies in preparing for the implementation of Phase II of the regulation titled “National Pollutant Discharge Elimination System” and known as NPDES Phase II. NPDES Phase II has two general purposes: modification of existing regulations with respect to industrial discharges and addition of two new categories of regulated discharges. The new categories are certain small **municipal separate storm sewer systems** (MS4s) and discharges from **construction activity** disturbing between one and five acres.

To whom does this apply?

Operators of regulated small MS4s (primarily those located in urbanized areas) are required to implement programs and practices to control polluted storm water runoff from the area serviced by the small MS4. If the MS4 was regulated under NPDES Phase I, it remains regulated under Phase I even though the MS4 may fall into the category of a small MS4. Please review the attached MS4 Storm Water Permitting Decision Tree (Exhibit 1) to determine if your facility is a regulated small MS4.

All construction operators disturbing more than one acre and less than five acres are required to apply for an NPDES storm water permit. Construction activity disturbing five acres or more is already regulated by the Environmental Protection Agency (EPA) nationally under NPDES Phase I. For projects within Illinois, the Illinois EPA (IEPA) is the regulatory agency.

Industrial activity operated by municipalities with populations of less than 100,000 population is now regulated. These were previously exempted from permitting under the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

Definitions

NPDES (National Pollution Discharge Elimination System) is the national program for issuing, modifying, revoking, reissuing, terminating, monitoring or enforcing permits, along with imposing and enforcing pretreatment requirements, according to Sections 307, 402, 318, and 405 of the Clean Water Act.

Best Management Practices (BMPs) are schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State and United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act (Water Quality Act) Public law 92-500; 33USC 1251 et seq.; Legislation which provides statutory authority for the NPDES program. Also known as the Federal Water Pollution Control Act.

General Permit is a permit issued under the NPDES program to cover a certain class or category of storm water discharges. These permits reduce the administrative burden of permitting storm water discharges.

Illicit discharge is any discharge to a municipal separate storm sewer that is not composed entirely of storm water and is not authorized by an NPDES permit. An exception is a discharge due to fire fighting activities.

Industrial Activity is any activity directly related to manufacturing, processing, or raw materials storage areas at an industrial plant.

Municipal Separate Storm Sewer System (MS4) is a publicly-owned conveyance or system of conveyances that discharges to waters of the United States (U. S.). The conveyance is designed or used for collecting storm water, is not a combined sewer, and is not part of a publicly owned treatment works (POTW).

Pollutants are contaminants such as sediment, suspended solids, nutrients (phosphorus and nitrogen), heavy metals, pathogens, toxins, oxygen-demanding substances (organic material), floatables, and petroleum products.

Storm Water Pollution Prevention Plan (SWPPP) is a plan to describe a process whereby a facility thoroughly evaluates potential pollutant sources at a site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in storm water runoff.

Total Maximum Daily Load (TMDL) is the maximum amount of pollutants allowed for release into a water body without adversely affecting the water quality of that water body.

What is a regulated small MS4?

A regulated small MS4 is a small MS4 that is located within the boundaries of an “urbanized area” (UA) as delineated by the Bureau of the Census based on the latest decennial census. This includes municipal operators of small MS4s, universities, highway departments, or other operators of a storm sewer system that is located fully or partially within a UA. Only the portion of the MS4 located within the UA is regulated. A listing of Governmental Entities located fully or partially within a UA in Illinois can be found at http://www.census.gov/geo/www/ua/ua_state_corr.txt. The listing as of July 1, 2002 was:

Alton, IL
Beloit, WI--IL
Bloomington--Normal, IL
Champaign, IL
Chicago, IL--IN
Danville, IL
Davenport, IA—IL
Decatur, IL
DeKalb, IL
Dubuque, IA--IL
Kankakee, IL
Peoria, IL
Rockford, IL
Round Lake Beach--McHenry--Grayslake, IL--WI
St. Louis, MO--IL
Springfield, IL

A small MS4 located outside a UA boundary may be designated as regulated if the IEPA determines the small MS4’s discharges cause or have the potential to cause an impact on water quality.

What permit types are for regulated small MS4 operators?

NPDES Phase II allows three types of permits for regulated small MS4s:

1. General Permits

General permits are drafted by the IEPA for all applicable permittees. A Notice of Intent (NOI) serves as the application for the general permit.

2. Individual Permits

Individual permits are not recommended by EPA for Phase II because of the requirement for a more comprehensive permit application than an NOI.

3. Modification of an Existing Phase I Individual Permit

Modification of an existing Phase I Individual permit is also known as a Co-Permittee option. A regulated small MS4 could participate as a limited co-permittee in a neighboring Phase I MS4’s storm water management program through a modification of the existing Phase I individual permit. Under this option the regulated small MS4 would

comply with the applicable terms of the modified Phase I individual permit rather than the minimum control measures in the Phase II Final Rule. A formal agreement should be executed between the Phase I MS4 and the small MS4. Co-Permitting is also available between two regulated small MS4s. The operators may jointly submit a NOI or individual permit application identifying who will implement which minimum measures.

What should the regulated small MS4 be doing prior to December 9, 2002, the anticipated date of the adoption of the Final Version of the General Permit?

It is anticipated that on December 9, 2002, the General Permit for Phase II will be finalized giving the agency with a regulated small MS4 until March 10, 2003 to file their Notice of Intent (NOI) with the IEPA. The first thing the agency should do is determine if the small MS4 is within the coverage of a large or medium MS4 which has been permitted in Phase I. If the small MS4 is within the jurisdiction of a large or medium MS4, they should obtain a copy of the permit and determine if co-permitting is practical. They should begin negotiating with the agency with a large or medium MS4 to prepare an agreement to indicate the requirements of the co-permit. If the small MS4 is not within a previously permitted entity, they should begin formalizing the elements of their NOI.

What elements of the NOI can be prepared now?

The following elements of information are required to be submitted with your NOI:

- Measurable goals for each minimum control measure (list below)
- Estimated schedule when actions to implement each measure is to occur including milestones and frequency (when applicable)
- The person(s) responsible for implementation and coordination
- Best management practices (BMPs) for the six minimum control measures:

1. Public education and outreach on storm sewer impacts

Example: Distribute brochures and post fliers to advise against carelessly discarding trash on the ground or allowing cars to leak oil or antifreeze in outdoor parking areas.

2. Public participation and involvement

Example: Provide notices of the storm water management plan development. Invite the public to meetings to voice their ideas and opinions about the plan.

3. Illicit discharge detection and elimination

Example: Develop a map of the existing storm sewer system. Perform dry weather visual monitoring of outfalls to determine if the system is receiving any non-storm discharges. If dry weather flow is found, trace the source and stop the discharge.

4. Construction site storm water runoff control

Example: Require the implementation of erosion and sediment controls and control of construction waste.

5. Post-construction storm water management in new developments or re-developments

Example: Require post-construction storm water controls.

6. Pollution prevention and good housekeeping for municipal operations

Example: Train staff to use pollution prevention techniques whenever possible. Techniques such as: pick up trash/litter from maintenance areas, use less salt on the parking lots in winter, and keep dumpster lids closed. Break out the portion of your annual budget for storm sewer maintenance and show as a line item.

Development and implementation of the BMP program must be completed within five years after issuance of the permit (see page 4 of Exhibit 3). The IEPA can require changes in the mix of chosen BMPs and measurable goals if found to be inconsistent with the provisions of the Phase II Final Rule which is due out on December 9, 2002. Likewise, the MS4 can change the mix of BMPs if a determination is made that the mix is ineffective.

What changes does Phase II make for construction operations?

Land disturbance refers to exposed soil resulting from activities such as clearing, grading, and excavating. Land disturbance of five acres or more is covered in Phase I. Phase II now reduces the acreage to one acre but less than five acres. Less than one acre disturbance may also require a permit if it is a part of an overall development that will be greater than one acre.

A decision tree (Exhibit 2) is included to help determine if a permit is necessary. The operator of a construction site is the person(s) responsible for obtaining coverage under an NPDES storm water permit for construction activity. This person is also defined as having either:

Operational control of construction project plans and specifications, or day-to-day operational control of those activities at a project site which are necessary to ensure compliance with a storm water pollution prevention plan (SWPPP).

There may be one or more parties at the site responsible for land disturbance. Each party is required to apply for a permit for their respective tasks.

The Bureau of Design and Environment manual offers guidance on erosion control in Chapter 59 titled "Landscape Design and Erosion Control." The current guidance in Chapter 59 was written with projects greater than five acres in mind. It is our recommendation to consult it for one to five acre disturbances until the Bureau of Local Roads and Streets issues its erosion and sediment control policy. It is anticipated that the final rule for Phase II will be similar to the Phase I rule regarding construction project disturbances. Waivers of the permitting process are considered applicable only to those sites that are unlikely to have a negative effect on water quality. Such factors as distance from water resources and sensitivity of the receiving waters should be considered by the operator of the construction activity.

What permit types are for small construction activity?

Phase II offers two permitting options similar to Phase I:

- General Permit
- Individual Permit

General permits are strongly encouraged by IEPA for small construction activity. General permits are drafted by the IEPA. The NPDES Construction General Permit (CGP) will most likely be similar to the sample General Permit attached as Exhibit 3. A Notice of Intent (NOI) serves as the application for the general permit. IEPA may deny coverage under a general permit and may require the operator to submit an individual permit application. The individual application requirements can be found in the Code of Federal Regulations at 40CFR subsection 122.26(c)(1)(ii).

The NPDES CGP is currently the only EPA permit available for construction activity operators. The CGP has four main elements:

- Notice of Intent (NOI)
- Storm Water Pollution Prevention Plan (SWPPP)
- Incident of Non-Compliance (ION)
- Notice of Termination (NOT)

A NOI must be postmarked at least two days before commencement of any work on site. If the site is the result of a developer, we suggest that the local agency make the developer signatory to the NOI for projects disturbing more than one acre.

The most important requirement of the CGP is the SWPPP. The SWPPP must be developed before the submission of the NOI but is not submitted to the IEPA. The permit requires the following to be shown on a site map: drainage patterns; approximate slopes before and after major grading; vehicle entrance and exit locations and controls for those areas; areas of soil disturbance; location of major structural and non-structural controls; areas where stabilization practices are expected to occur; surface waters; and locations of storm water discharges. (See Exhibit 4. We are recommending the SWPPP be included in the construction plans. The SWPPP must be available for viewing during business hours at the project site.

An ION must be completed and submitted to the IEPA if, at any time, an erosion or sediment control device fails.

When all permanent erosion control measures are in place with a 70 percent establishment rate of vegetation, the local agency will complete and submit the NOT to the IEPA.

What training is offered?

The Bureau of Local Roads and Streets' Technology Transfer Unit will be offering classes on erosion and sediment control. This course will be very beneficial to further assist the local agency in understanding and meeting the NPDES requirements. Participants will also receive the EROSION AND SEDIMENT CONTROL—NPDES booklet.

Important Dates

November 8, 2002: State letting date. Recommend all projects on the November 8, 2002 and later include a SWPPP in the bidding documents.

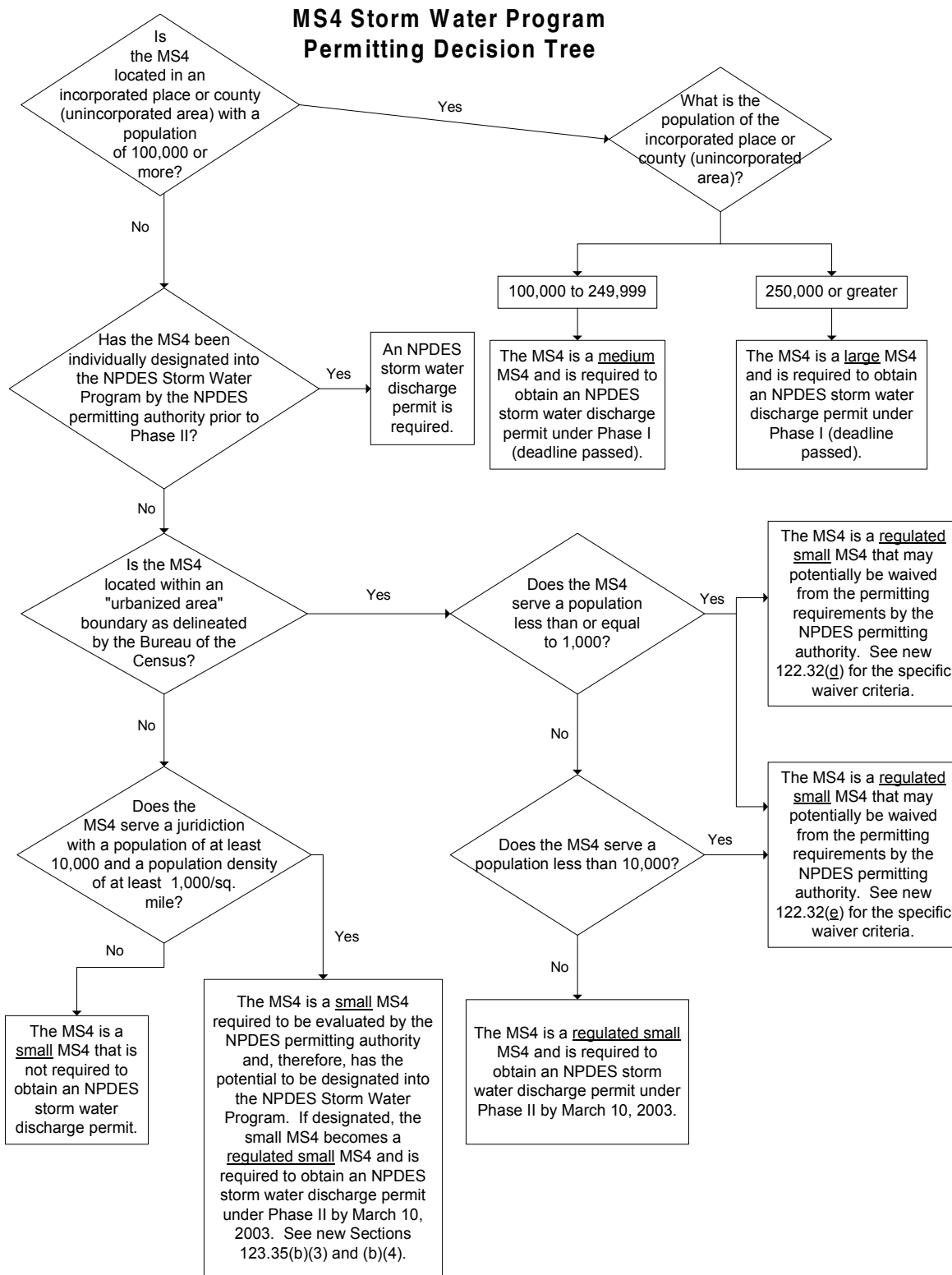
December 9, 2002: Anticipated Final General Permit date. Begin sending the NOI into the IEPA.

March 10, 2003: Deadline for agencies with MS4s to submit their NOI to IEPA.

Sources

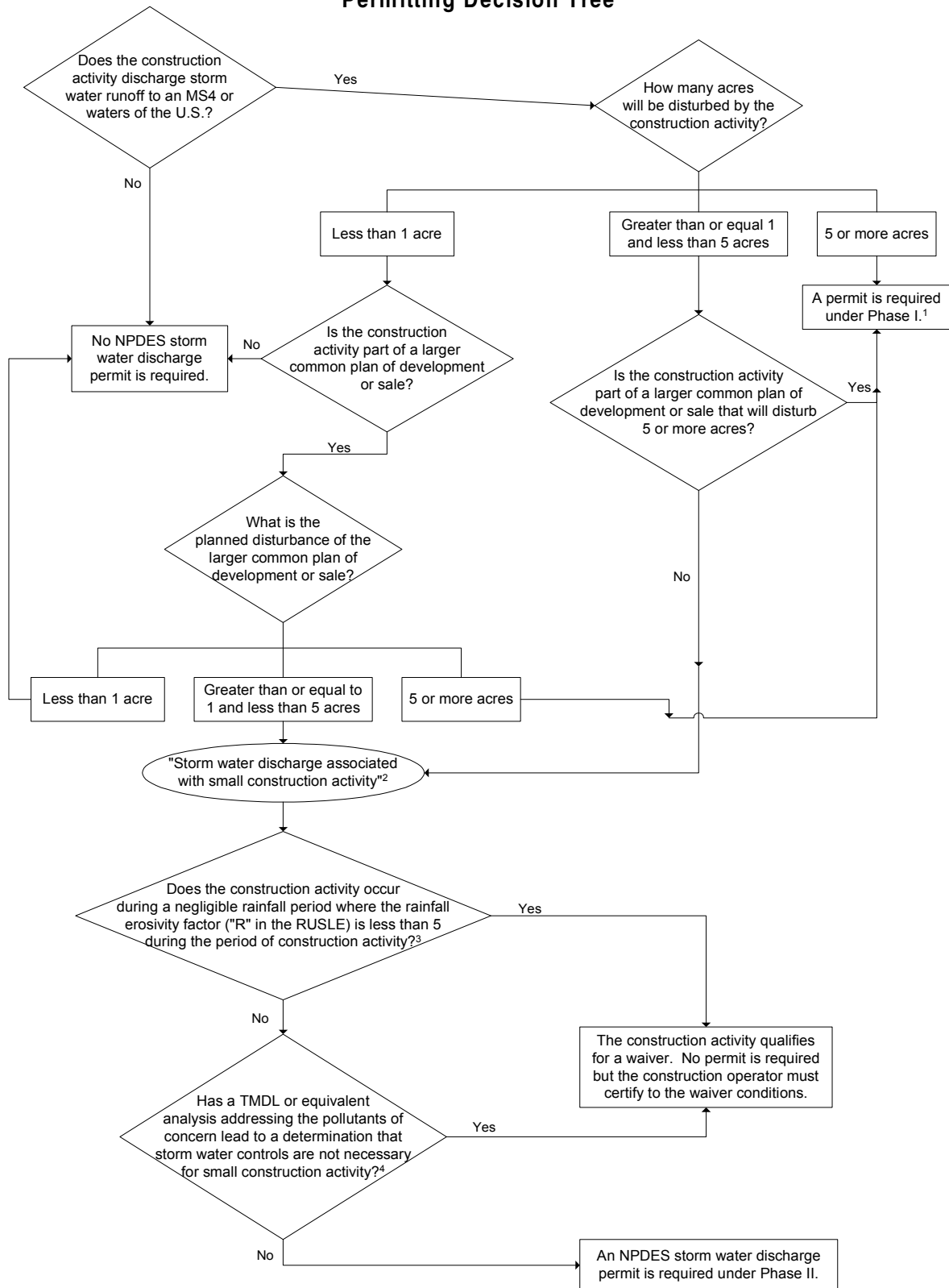
Much of the information provided is from the “[Storm Water Phase II Compliance Assistance Guide](#)” published by the United States Environmental Protection Agency, Office of Water, (EPA 833-R-00-002, March 2000). Information from the [EPA Web site for Phase II](#) information was also utilized.

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1. See Appendices F, G, H, and I to Part 122 (as revised by the Phase II Final Rule) for the list of incorporated places and counties (unincorporated areas) with a population of 100,000 or greater. If the MS4 is located in a listed entity, then the answer to this question is "Yes" and the MS4 is covered under the Phase I MS4 program as a medium or large MS4.

**Construction Activities Storm Water Program
Permitting Decision Tree**



1. Construction activity disturbing, or part of a planned disturbance of, five or more acres is a "storm water discharge associated with industrial activity" under category (x). See 40 CFR 122.26(b)(14)(x).
 2. See new 122.26(b)(15) for the definition of "storm water discharge associated with small construction activity."
 3. See new 122.26(b)(15)(i)(A) for more details.
 4. See new 122.26(b)(15)(i)(B) for more details.

EXHIBIT 3

The General NPDES Permit for Phase II is currently being drafted by IL EPA. Once this document has been finalized it will be added to this web page.