

## Illinois General NPDES Permit for Septic Systems with Surface Discharge

### Summary

The National Pollutant Discharge Elimination System (NPDES) is a permit system for regulating point sources of water pollution. The Illinois General NPDES Permit (General Permit) for septic systems with surface discharge became effective on February 10, 2014. The General Permit is administered by the U.S. Environmental Protection Agency (EPA).

Surface discharges from new and replacement septic systems which discharge to waters of the United States or to conveyances that discharge to waters of the United States must be permitted either under the General NPDES Permit or an Individual NPDES Permit obtained from the Illinois Environmental Protection Agency (IEPA). An Individual NPDES Permit is a permit specifically tailored for an individual discharger or situations that require individual consideration.

The NPDES requirement is only for **new** and **replacement** systems. Any septic system that was not installed and operational before the February 10, 2014, effective date is considered a new or replacement system. **Current owners of existing systems will not require a permit for the discharge of their current systems.** However, if and when that system needs to be replaced, if this occurs within the five years that this General Permit is in effect, any replacement system that would discharge to waters of the United States would have to be evaluated under the criteria in this General Permit.

The General Permit is intended for locations where individual surface discharging systems are necessary due to unavoidable site restrictions (e.g., prior platted small lots, high groundwater, or restrictive soils) and other factors.

The General Permit includes an economic feasibility component, so households that cannot afford a subsurface system will be able to replace a failing surface discharging system with another surface discharging system either under the provisions of this General Permit or through an individual permit from Illinois EPA.

After the effective date of the General Permit, local health departments should not issue construction permits for surface discharging systems unless the potential permittee can demonstrate compliance with the General Permit, and the health department has received notice that coverage has been granted. When coverage under the General Permit is granted, EPA will notify both the homeowner and the health department by telephone and follow up with a formal letter.

It is the responsibility of the potential discharger to determine whether or not his or her system might discharge to a water of the United States. Guidance may be found at:  
<http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm>

Permits are issued to the discharger for a specific time period (not to exceed 5 years) with a provision for reapplying for further permit coverage prior to the expiration date.

The general permit covers New and Replacement Surface Discharging Systems with discharges that enter Waters of the United States provided that:

- 1) The Surface Discharging System receives and processes only domestic sewage;
- 2) Flows through the Surface Discharging System are less than 1,500 gallons per day;

- 3) Connection to a sanitary sewer is greater than 200 feet away from the residential or non-residential property (NOTE: Illinois Code requires the connection to be greater than 300 feet away); and
- 4) All alternatives to a Surface Discharging System are technologically or economically infeasible as determined in accordance with general permit section Part I.B.2 through Part I.B.4.

### **Exclusions**

The General Permit does not cover:

- Discharges from New Surface Discharging Systems located in lots legally recorded 6-months or more after the effective date of the permit;
- Any discharge that is already covered by a different NPDES permit;
- Discharges to waters listed as impaired under section 303(d) of the Clean Water Act due to unnatural growths of algae or aquatic plants, bacteria, chlorine, low dissolved oxygen, or suspended solids;
- Discharges that are mixed with material other than Domestic Sewage;
- Any discharge inconsistent with a plan or plan amendment approved under section 208(b) of the Act;
- Discharges from more than one home, or other structure;
- Discharges from New or Replacement Surface Discharging Systems when a residential or non-residential property is within 200 feet of a sanitary sewer (NOTE: Illinois Code says within 300 feet);
- Government owned or operated discharges for which one or more alternatives to a Surface Discharging System are technologically feasible (e.g., parks, campgrounds, rest stops, etc.);
- Discharges to waters listed in 35 IAC § 303.206 list of outstanding resource waters; or
- Discharges from businesses for which one or more alternatives to a Surface Discharging System are technologically feasible.

### **Technological and Economic Feasibility Analyses**

Permit coverage is available to eligible Surface Discharging System Owners or Operators who submit an administratively complete Notice of Intent (NOI) to be covered by the general permit, including the technological and economic feasibility analyses. A summary of these analyses is included below:

Technological Feasibility Analysis: A written determination that concludes that there is no individual or clustered soil-based wastewater system which is feasible for the site in question under the system design procedure described in this fact sheet, and specifying the reason(s) for this conclusion. The written determination must be based on a soil investigation analysis conducted by a Soil Classifier AND a site evaluation conducted by a Illinois licensed environmental health practitioner, Illinois licensed professional engineer, or an individual holding either the basic or advanced Certified Installer of Onsite Wastewater Treatment Systems certification from the National Environmental Health Association (NEHA).

Economic Feasibility Analysis: Documentation that the annualized cost to purchase, install, operate, and maintain any appropriate subsurface treatment system would exceed 2.0% of the applicant's annual household adjusted gross income, as averaged over the three most recent full calendar years. The economic feasibility criteria exclude discharges from businesses and governments, and are only available for homeowners. This is based on the presumption that businesses should be able absorb the cost to install any alternative to a Surface Discharging System if it is technologically feasible. Businesses or governments that will discharge from a New or Replacement Surface Discharging System should apply to the Illinois EPA for an NPDES individual permit.

### **Operation and Maintenance Requirements**

All wastewater treatment systems with discharges authorized under this permit must be operated and maintained in accordance with the printed operation and maintenance manual or guide prepared for the system. The manual or guide must be kept on file with other permit documents (e.g., NOI, past inspection reports, copy of this permit) and retained at the wastewater system site by the permittee for the duration of the permit coverage. All Surface Discharging Systems with discharges authorized under this permit must be operated and maintained in the following manner:

- Maintain the system so that it meets the numeric and narrative effluent limitations required under this permit;
- Perform the operation and maintenance procedures and tasks recommended by the treatment system manufacturer and the manufacturer(s) of components of the system, or the system designer and installer, in accordance with the recommended schedule;
- Use manufacturer-specified treatment system components or supplies (e.g., pumps, valves, piping, replacement parts, fixtures, chlorine tablets, ultraviolet tubes, etc.);
- Conduct the inspections, monitoring, effluent sampling, reporting, records retention, and other tasks described in this permit; and
- Address needed system adjustments, operational modifications, repairs, parts replacement, pumping of residuals, and other conditions that cause or might cause violations of the effluent limits.

Operation and maintenance tasks must be performed by a qualified individual with sufficient training or experience to ensure that permit requirements are met. The permittee is responsible for assuring that this provision is fulfilled.

### **Inspection, Monitoring, and Reporting Requirements**

The General Permit sets discharge limits and requires periodic inspection, monitoring, and reporting. Permitted systems must be inspected semi-annually by a qualified individual with sufficient training to ensure that permit requirements are met. Qualified inspectors include trained and experienced wastewater treatment plant operators, licensed environmental health practitioners, NEHA or Illinois licensed installers, and Illinois licensed professional engineers.

The table on the following page summarizes the sampling requirements and effluent limits. Note that surface discharges within 100 feet of a lake, pond, or impoundment have more stringent requirements. In addition, some alternate sampling parameters that are available for surface discharges not within 100 feet of a water body cannot be used when sampling surface discharges that are within 100 feet of a water body.

Effluent monitoring results must be reported to the EPA within 10 days after receipt of the analytical test results using the discharge monitoring report (DMR) in the general permit. A copy of the signed DMR form must also be sent to the local health department.

Follow-up sampling is required within 30 days of the date when any parameter fails to meet its effluent limitation or benchmark. Sampling must continue monthly after that until the relevant effluent limitation, or benchmark, is met.

Completed semi-annual inspection reports must be signed by the inspector and permittee in accordance with the signatory requirements in the general permit. The inspector must also include his or her qualifications in the inspection report. Properly completed and signed inspection reports (including visible inspection log) must be

retained by the permittee for three years after the inspection, and kept at the treatment system site (i.e., in the home served by the treatment system).

**Sampling Requirements and Effluent Limits for Surface Discharges under the Illinois General NPDES Permit**

Parameter	Maximum Daily Effluent Limitations for Surface Discharges		Monitoring Frequency
	<i>No lakes, ponds, or impoundments within 100 feet of surface discharge</i>	<i>Surface Discharge is within 100 feet of a lake, pond, or impoundment</i>	
Biological Oxygen Demand (BOD <sub>5</sub> )	45 mg/L	20 mg/L	Grab sample every 6 months
Chemical Oxygen Demand (COD) (as an alternative to BOD <sub>5</sub> )	55 mg/L	N/A	Grab sample every 6 months
Total Suspended Solids (TSS)	45 mg/L	24 mg/L	Grab sample every 6 months
Turbidity (as an alternative to TSS)	15 Nephelometric Turbidity Units	N/A	Grab sample every 6 months
Dissolved Oxygen	4.0 Minimum	N/A	Grab sample every 6 months
Total Coliform	400 Colony Forming Units per 100 mL		Grab sample every 6 months
Total Residual Chlorine (TRC)	0.038 mg/L		Grab sample every 6 months
pH	6.0 to 9.0 Standard Units		Grab sample every 6 months
Flow Level	Less than or equal to system capacity, and must be less than 1,500 gallons/day		Estimate every 6 months
Oil, Odor, Color, Floating Debris	None detectable in the discharge or caused by the discharge in the receiving water		Observe every 6 months

N/A = Not applicable

Questions? Refer to <http://www.epa.gov/region5/water/npdestek/surfacedischarge/>  
 Or call EPA toll-free at 800-621-8431, 8:30 a.m. – 4:30 p.m. Central time, Monday through Friday.