Frequently Asked Questions on EPA's NPDES General Permit for

New and Replacement Surface Discharging Systems in Illinois

Updated Aug. 20, 2014

1. **What is the relationship of the NPDES general permit ILG62 to construction permits for surface discharging systems issued by local county health departments prior to the February 10, 2014 effective date of the general permit?**

   The general permit authorizes a discharge (emphasis added) of pollutants from new and replacement surface discharging systems to waters of the United States, not the actual systems themselves. The following guidance regarding construction permits for surface discharging systems that will discharge pollutants to waters of the United States, issued by local county health departments prior to the effective date of the general permit is provided below.

   Local county health departments may continue to issue construction permits for surface discharging systems up until the general permit becomes effective on February 10, 2014. However, any construction permit issued by a local county health department for a surface discharging system that will discharge pollutants to a water of the United States must be installed and operational before the February 10, 2014 effective date of the general permit to avoid being classified as a discharge from a new or replacement system.

   Even though a construction permit for a surface discharging system could be approved by a local county health department prior to the effective date of the general permit, this does not mean that the system can be installed on or after the February 10, 2014 general permit effective date, thus circumventing the need for a permit to discharge.

   EPA would also like to point out that surface discharging systems that receive a construction permit prior to the effective date of the general permit but are installed on or after the effective date may not qualify for coverage under the general permit retroactively and could potentially be out of compliance with the Clean Water Act. That is because these surface discharging systems may not qualify under the technological or economic feasibility criteria of the general permit. These applicants would be faced with taking out their non-compliant surface discharging system, and installing a compliant soil-based system, or operating out of compliance with the general permit. Applicants who have received a construction permit prior to the effective date but will not have an operational system until after the effective date of the general permit should be made aware of this risk.

2. **Who is responsible for making the determination about whether a discharge of pollutants from a surface discharging system will enter waters of the United States?**

   Following is a response from the response to comments document that addresses this question and also provides additional information on waters of the United States. The response indicates that the homeowner is responsible for making the determination. EPA

expects that the homeowner will make the decision based on information provided by the person who conducts the soil investigation. The response from the response to comments document is as follows:

> Congress, in Section 502 of the CWA, defined "navigable waters" broadly as encompassing all "waters of the United States." EPA has issued a regulatory definition of the term "waters of the United States" at 40 CFR § 122.2. EPA's definition includes, among other things, traditional navigable waters, tributaries of traditional navigable waters, and wetlands that are adjacent to traditional navigable waters or their tributaries. The Supreme Court has determined the scope of Congress' intent to regulate "waters of the United States" in several opinions of the Court, most recently in the case of Rapanos v. United States, 126 S. Ct. 2208 (2006).
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> EPA has provided guidance to individuals and companies impacted by the Rapanos decision; that guidance and other materials are set forth at http://water.epa.gov/lawsregs/guidance/wetlands/CWAwaters.cfm. This guidance discusses EPA's jurisdiction over traditional navigable waters, relatively permanent non-navigable streams, non-navigable streams that are not relatively permanent, and wetlands adjacent to those waters to help EPA and the Corps of Engineers, as well as citizens, identify whether particular surface waters are "waters of the United States."
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> 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. EPA realizes, though, that the Rapanos guidance may be difficult for the average person to apply. As a common sense way of evaluating whether you are required to be covered by a permit, if you were to install a new or replacement surface discharging system on your land, would effluent or pollutants (even diluted ones) from your system end up in a water of the United States or a conveyance, such as a ditch, drainage pipe, channel, tunnel, conduit, discrete fissure or other means that leads to a water of the United States? In evaluating this question, consider that rain water, irrigation activities, lawn sprinkling systems and any other ways that water can carry pollutants to waters of the United States. If so, even though pollutants would not be carried to waters of the United States unless your area experienced an exceptionally wet season, you are still required to obtain coverage under a permit. Only if you are sure that your system would not discharge pollutants to a water of the United States or a conveyance that leads to a water of the United States should you forego obtaining a permit for a surface discharging system. If you do not obtain a permit, but actually discharge, you may be subject to an enforcement action under the CWA.

3. **How does an applicant apply for coverage under the NPDES general permit ILG62? What additional information needs to be submitted with the Notice of Intent when applying for coverage?**

   Anyone who wants to apply for coverage under the NPDES general permit will need to fill out the Notice of Intent (NOI) form which can be downloaded from EPA's website http://www.epa.gov/region5/water/npdestek/surfacedischarge/. Either the applicant or his or her septic contractor can fill out the NOI and for owner-occupied residential property; the NOI must be signed by one of the adults whose name appears on the title to the property. For rental property and non-residential applicants, someone other than the contractor must sign the NOI, but it depends upon whether the owner is an individual, partnership, or corporation, etc.; the eligible signatories are defined in the permit. By signing the NOI, the owner is responsible for what the contractor writes on the NOI.

   In order to be covered under the NPDES general permit for new and replacement surface discharging systems in Illinois (ILG62), the applicant will need to demonstrate eligibility. Applicants will need to demonstrate that all alternatives to a surface discharging system are technically or economically not feasible.

   In order to be eligible, an applicant must not be precluded from coverage based on the limitations on coverage (See Part I.C, pages 5-6 of the general permit); the system must receive and process domestic sewage only; flow through the system must be less than 1,500 gallons per day; connection to a sanitary sewer must be greater than 300 feet away from the property; and all alternatives to a surface discharging system must be technologically or economically not feasible, as determined in accordance with Part I.B paragraphs 2 through 4 (soil analysis, site evaluation, and economic analysis--see pages 1-5 of the general permit).

   As indicated above, an applicant will need to demonstrate eligibility to be covered under the permit. Simply filling out the NOI and applying for permit coverage does not guarantee that an applicant will be eligible for coverage under the general permit. In order to establish coverage, an applicant will need to demonstrate that a surface discharging system is necessary. In other words, an applicant will need to demonstrate that his or her site cannot support any alternative to a surface discharging system (technically not feasible), or his or her site can support an alternative to a surface discharging system but installation of the alternative system is not affordable (economically not feasible).

   In addition to submitting the NOI, the applicant will also need to submit a technical feasibility determination. The technical feasibility determination is comprised of two parts: a soil investigation, and a site evaluation. Together, the soil investigation and site evaluation will allow the Site Evaluator to ultimately conclude whether a particular site will support any alternative to a surface discharging system. The two components (soil investigation and site evaluation) are described below.

Soil Investigation
The soil investigation must be conducted and signed by a qualified Soil Classifier. A qualified Soil Classifier means one of the following:

1. A certified professional soil classifier (CPSC) of the Illinois Soil Classifiers Association (ISCA) or a CPSC or a certified professional soil scientist (CPSS) with the Soil Science Society of America (SSSA), formerly the American Registry of Certified Professionals in Agronomy, Crops and Soils

2. Junior staff members working under direct supervision of either a CPSC or CPSS as defined in 1, above. The supervising CPSC or CPSS must accompany the junior staff member on at least 25% of the soil investigations completed by the junior staff member and must review and sign all of that person's soil investigation reports.

The soil investigation will document an array of soil properties and the loading rate that will be used by the Site Evaluator for the purpose of conducting the site evaluation.

Site Evaluation
The site evaluation must be conducted and signed by a Site Evaluator. A Site Evaluator means one of the following:

1. Illinois Licensed Environmental Health Practitioner

2. Individuals working under direct supervision of a Illinois Licensed Environmental Health Practitioner

3. Illinois Licensed Professional Engineer

4. An individual holding either the basic or advanced Certified Installer of Onsite Wastewater Treatment Systems certification from the National Environmental Health Association.

The site evaluation evaluates various treatment technologies and concludes whether a specific site can support any alternative to a surface discharging system in conjunction with the soil analysis, the PSD Code design requirements, and additional design parameters included in the permit.

If an applicant has questions on the NOI process or what information is required, you may direct them to contact Mark Ackerman by phone (312) 353-4145 or email ackerman.mark@epa.gov.

4. **If the homeowner determines that he or she will NOT discharge to the waters of the United States, does the applicant even need to contact EPA before applying for a septic construction permit from the local health department?**

   EPA has indicated that the burden whether a discharge of pollutants will enter waters of the United States is with the homeowner/system owner. If a construction permit applicant/homeowner makes a determination that his or her discharge will not discharge pollutants to waters of the United States, the applicant is not required to notify EPA. However, construction permit applicants should be encouraged to work with a soil scientist/classifier so that the applicant can make an informed decision, and be made aware that should the applicant forego obtaining coverage under an NPDES permit and actually discharge pollutants to waters of the United States, then the applicant is potentially subject to enforcement action under the Clean Water Act.

5. **If a complaint is received by a local health department on an existing surface discharging system, does EPA get involved in the complaint investigation process?**

   EPA's involvement depends upon the definition of an existing surface discharging system. EPA considers existing surface discharging systems to be those surface discharging systems that were installed and operational prior to the February 10, 2014 effective date of EPA's NPDES general permit for new and replacement surface discharging systems in Illinois. Therefore, to the extent that a local health department receives a complaint for an existing surface discharging system as described above, those particular systems are not covered by EPA's permit, and, thus, EPA would not get involved in a complaint investigation process.

   If the complaint is for a system covered under EPA's general permit, then EPA will only get involved in a complaint investigation process to the extent that the complaint involves alleged non-compliance with the NPDES general permit. If NPDES permit non-compliance is alleged, EPA would welcome the local health department's sharing of all information that it has regarding the complaint and any information the department has as the result of its own investigation.

6. **If a property is so limited in area (due to well setback, space consumed by the building and driveways) that it is not physically possible to install any subsurface system, will a soils evaluation still be required? This could also apply to a site which is completely in a floodway. In such cases, I believe that the site evaluator could attest that there is no value to a soils evaluation being done, and therefore a soils evaluation should be waived.**

   The final general permit requires that any NOI submitted include a technical feasibility analysis which is comprised of both the site evaluation and soil analysis. Even though there may be situations as described where there is limited area, a technical feasibility determination, which includes a soil analysis, is required for anyone seeking coverage under the general permit.

7. **Does EPA see any difference between treated effluent discharged from an NSF Standard 40 treatment plant and an NSF Standard 350 treatment plant as far as NPDES requirements or monitoring?**

   The general permit has effluent limitations that dischargers must achieve regardless of what technology is used. Therefore, all permit requirements and monitoring are the same regardless of whether the effluent is discharged from an NSF Standard 40 treatment plant, NSF 350 treatment plant or any other type of treatment system.

8. **If a site contains only fill material, is a soil-based system exempted from such a site, or is the suitability totally based on the soil classifier's report?**

   The general permit would allow the use of a soil-based system at a site containing fill material only. As at all sites, the site containing fill material would have to be evaluated to determine whether it can support various soil-based alternatives through completing the technical feasibility analysis (soil analysis and site evaluation).

9. **I believe that the property owner is the legally responsible person to determine if they need coverage under the NPDES general permit ILG62. However, he or she is the least qualified to make that decision compared to a contractor, soil classifier, or site evaluator. Is the owner responsible only because that person has to be the applicant?**

   The general permit defines "Owner or Operator" to mean the owner or operator of any facility or activity subject to regulation under the NPDES program. For purposes of this permit, an "operator" means a party, including a character by demise, who

   1. Has operational control over the Surface Discharging System, including the ability to modify those activities; or

   2. Has day-to-day operational control of those activities that are necessary to ensure compliance with the permit or to hire, or direct workers to carry out activities required to comply with the permit.

   Since it will be either the Owner or Operator that applies for coverage by submitting an NOI and supplemental information, the burden as to whether there will be a discharge of pollutants to waters of the United States is with the Owner or Operator, which in most cases will be the owner of the property. EPA expects that the property owner will make his or her decision upon becoming informed by a soil scientist/classifier regarding the characteristics of the particular site.

10. **With regard to the 30 day wait period, if the applicant does not hear anything from the EPA, then the applicant knows that he or she can install a surface discharging system, and the local county health department can issue a construction/installation permit. Will the EPA call a local health department once EPA has made a decision whether to grant or deny coverage if that decision is made prior to 30 days upon EPA's receipt of the NOI?**

    Although it is not specified in the permit, and the final permit does not require it, EPA will send a coverage letter to the applicant and copy the applicable local county health department. EPA will notify both the applicant and the applicable county health department by telephone and/or email, and follow up with a formal letter regarding the decision. Should EPA reach a decision prior to 30 calendar days following receipt of an NOI, EPA will notify the applicant and applicable county health department upon reaching its decision.

11. **Some properties in our county are very small and the only choice is to install an aeration unit. In these particular instances, why is it necessary to go thru the Notice of Intent process?**

    It is the applicant's decision whether or not to apply for coverage under the general permit, but if the applicant chooses the general permit, he or she must comply with the established application/NOI process. EPA's NPDES general permit does not allow for an abbreviated application process for instances when particular sites, upon cursory inspection, appear to be inadequate to support an alternative to a surface discharging system. An abbreviated process could result in a premature decision ruling out a site's ability to support an alternative to a surface discharging system. Requiring everyone who applies for coverage under the general permit to submit a notice of intent and the required supplemental information ensures that each site, regardless of size, soil type, or other restrictive features are consistently evaluated based upon the technical and economic criteria established in the final permit.

12. **When a subsurface system requires an artificial drain to lower the seasonal high water table (to achieve sufficient vertical separation), must the discharge from that drain be covered under EPA's general permit?**

    The National Pollutant Discharge Elimination System program does not regulate discharges of groundwater from artificial drainage systems (also known as perimeter drains). If the discharge from the artificial drain is made up entirely of ground water, then coverage under EPA's general permit is not required.

    However, if pollutants from the subsurface wastewater treatment system migrate into the artificial drain, discharges of pollutants from that drain that enter waters of the United States would need coverage under EPA's general permit. In other words, the artificial drain will be classified as a surface discharging system, which is defined in the general permit to mean a system that releases treated domestic sewage onto the ground, into any kind of drain or conveyance, or into surface waters.

Under certain conditions (e.g. slowly permeable soil, a drain installed at a depth that is too shallow) artificial drainage systems will not function as they are intended (i.e. they will not lower the seasonal high water table to provide the vertical separation necessary for subsurface treatment). The lack of design standards for artificial drains in the Private Sewage Disposal Code reinforces this concern. To avoid a potential discharge of pollutants via artificial drainage systems to waters of the United States in Illinois, other measures to combat challenges posed by a seasonal high water table such as at grade or mound systems should be considered.

If it is determined that an artificial drain will act as a conduit for discharge of pollutants from a wastewater treatment system to waters of the United States in Illinois, then the applicant must seek coverage under the general permit. It is the homeowner's responsibility to make this determination. In making this determination the homeowner should utilize information provided by his or her soil scientist/classifier, and contractor. The same application process described in response to question 3 above will apply.

The Clean Water Act makes it unlawful to discharge pollutants to waters of the United States without an NPDES permit. Therefore, it is important that homeowners considering installation of a subsurface waste water treatment system in combination with an artificial drain diligently explore options available to address their needs.

References to the following studies are included to provide information about the likelihood of pollutants from wastewater treatment systems migrating into, and being discharged through artificial drainage systems, and the effectiveness of artificial drains to lower the water table:

1. Assessment of the Use of Selected Chemical and Microbiological Constituents as Indicators of Wastewater in Curtain Drains From Home Sewage Treatment Systems in Medina County, Ohio, Denise H., Dumouchelle, United States Geological Survey Scientific Investigations Report 2006-5183. http://pubs.usgs.gov/sir/2006/5183/pdf/SIR_2006_5183.pdf

2. Seasonally High Water Tables and Septic Systems, Brad Lee, Don Franzmeier, Phillip Owens, and Don Jones, Department of Agronomy and Department of
3. Agricultural and Biological Engineering Purdue University. https://www.extension.purdue.edu/extmedia/henv/henv-12-w.pdf

4. High Water Tables and Septic System Perimeter Drains, Brad Lee, and Don Franzmeier, Department of Agronomy Purdue University. https://www.extension.purdue.edu/extmedia/RW/RW-1-W.pdf

13. **An aeration treatment unit meeting the requirements for a 2/3 seepage field was installed and the seepage field failed. If the property does not have enough area available to replace the seepage field and must convert the system to a surface discharging system, does the homeowner need to obtain coverage under EPA's general permit?**

    If the aeration treatment unit with a 2/3 seepage field was installed and operational prior to February 10, 2014 (the effective date of EPA's general permit), then the homeowner will not need to obtain coverage under EPA's general permit if the system is converted to a surface discharging system. The reason for not requiring permit coverage in this instance is because prior to the effective date of the general permit, the homeowner could have installed a surface discharging system without having to apply for EPA's general permit since it wasn't available.

    If the aeration treatment unit with a 2/3 seepage field was installed or operational on or after February 10, 2014, then the homeowner will need to obtain coverage under EPA's general permit if the treatment system will discharge pollutants to waters of the U.S. in Illinois. Discontinued use of the seepage field due to failure, and being unable to replace the field due to site restrictions or other factors will cause it to be characterized as a replacement system. This is due to the fact that the zero discharge system is being replaced with a surface discharging system. If the seepage field were being replaced instead of abandoned, the system would be considered a replacement system under the definitions set forth in the general permit.