

**OHIO ENVIRONMENTAL PROTECTION AGENCY
FACT SHEET FOR THE DRAFT STATEWIDE GENERAL NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERING DISCHARGES
FROM SELECT HOUSEHOLD SEWAGE TREATMENT SYSTEMS (HSTS)**

I. Background

The Federal Water Pollution Control Act [also referred to as the Clean Water Act (CWA)], the Ohio Water Pollution Control Act and the Ohio Revised Code (ORC Chapter 6111) provide that discharge of pollutants to waters of the state from any point source is unlawful, unless the discharge is in compliance with an effective NPDES permit.

The purpose of issuing NPDES permits to discharges from household sewage treatment systems (HSTSs) of single, two or three family dwellings or residential dwellings or appurtenances as defined by Chapter 3701-29 of the Ohio Administrative Code is to ensure that any wastewater discharges from these facilities are in compliance with all applicable state and federal water pollution control laws and are protective of public health and safety.

Due to the common goal of protecting public health and safety and the environment, the draft HSTS general NPDES permit and the Ohio Department of Health (ODH) laws and rules governing the design and operations of HSTS refer to and rely on one another to ensure that adequate systems are designed, operated and maintained. The ODH rules and laws require operations, siting and design of HSTS to be in accordance with Ohio EPA's NPDES program while the NPDES permit relies on service contracts, operations and maintenance and design standards established by the ODH rules. Either cannot operate independently of the other.

Ohio EPA has issued a statewide general permit to provide coverage of discharges from replacement, new and/or updated HSTSs in situations where on-site dispersal of the wastewaters is not an option. Part II of the general permit provides a definition of those facilities eligible for coverage under the general permit.

The design standards included in this general permit are representative of the best available demonstrated control technology for sanitary wastewater discharges as outlined by Ohio EPA rules. The general permit is intended to cover any HSTS that meets the eligibility requirements and was designed to meet these standards and that would consequently have a minimal impact on the environment.

The conditions under the heading "eligibility" are very important because it addresses discharges that are not eligible for coverage. These include co-mingled discharge streams, HSTS discharge proposals from newly created lots, discharges to exceptional quality waters and discharges from industrial facilities.

II. Experiences in the HSTS NPDES Permitting Program and Recommended Modifications

Since the inception of the HSTS general NPDES permitting program in December 2006, Ohio EPA has granted coverage to over 20,000 individual residences. Through this experience, benefits and possible enhancements to the program to protect public health and the environment have been realized. Through implementing the program, working with ODH, working with homeowners, and discussions with local health districts it has been determined that certain enhancements are necessary to streamline permit implementation and enable homeowners and local health districts to address public health threats. The recommended enhancements to the program provided in the draft HSTS general NPDES permit will address:

- **Replacement of failing HSTS on lots platted after January 1, 2007.** Ohio Department of Health rules allow for the replacement of failing HSTS on new plots. This option only applies when all other non-discharging options have been determined infeasible. The general permit now authorizes systems in these circumstances, consistent with the Ohio Department Health requirements.
- **Accessibility of laboratories for certain annual diagnostic sampling requirements.** Local health districts raised concerns about access to laboratories for several parameters, including CBOD5. Other parameters were not reasonably evaluated using alternate measures but monitoring ammonia is adequate to demonstrate system performance for CBOD5.
- **Eliminate NOI requirements for permit renewal.** The NOI for a renewed permit does not provide additional information to the agency. Existing permits will be renewed automatically when the new permit is issued, and homeowners will be notified of the renewal. Information will be included in the notice to explain how to update any incorrect information.

III. Description of General Permit Coverage and Type of Discharges

The permit provides potential coverage for discharges from select new, replacement or updated HSTSs serving single family, two family or three family dwellings or residential dwellings or appurtenances as defined by Chapter 3701-29 of the Ohio Administrative Code to waters of the state. The permit does not cover any discharges that the Director of the Ohio EPA has determined to be contributing to a violation of a Water Quality Standard (WQS) as determined in Ohio Administrative Code Chapter 3745-01.

For the purpose of this permit, a new discharging HSTS is one that is to serve a new residential dwelling being constructed on a lot existing prior to 01/01/2007 only when on-site treatment is not an option as determined by OAC 3701-29: Household Sewage Treatment Rules as administered by the local board of health and meets the eligibility requirements of the general permit, including the adequate receiving stream characteristics.

A replacement HSTS is one being installed to serve an existing residential dwelling that has inadequate sewage treatment and on-site dispersal is not an option as determined by OAC 3701-29 and meets the eligibility requirements of the general permit. A clarification is made in the eligibility requirements to the proposed permit that replacement systems on lots created after January 1, 2007 with an existing on-site system that is failing are not excluded from general permit coverage, if the provisions in OAC 3701-29-06(F)(2) are met. The provisions require that other alternatives are exhausted before discharging system is considered. To date no systems have met provisions in OAC 3701-29-06(F)(2), however, as homes and onsite systems age these situations are expected.

An updated HSTS is one where an existing, discharging system has already been installed (prior to January 1, 2007) utilizing a system whose model has been approved by ODH to discharge in accordance with the terms and conditions of the previous versions of the general HSTS permits absent disinfection and/or post aeration. If such a system can be modified or updated to be identical to that approved by ODH simply by adding post aeration, disinfection and/or sampling ports then it can receive coverage under this renewal NPDES permit.

IV. Eligibility Determining Factors

- 1 Except for discharges identified under item 2 below, this permit may cover point source discharges of wastewater from select new, replacement and/or updated household sewage treatment systems (HSTS) serving an individual 1, 2 or 3 family dwelling or residential dwellings or appurtenances as defined by 3701-29-01(K) of the Ohio Administrative Code as long as the following are met:
 - a. The site evaluation documentation, established in accordance with OAC 3701-29, provides justification that it is not feasible to design an alternative system that could eliminate the need for a point source discharge.
 - b. A system to be installed is designed to meet the applicable design standards and diagnostic sampling requirements identified by the permit.

- 2 The following wastewater discharges associated with household sewage treatment systems are not eligible for coverage under this general permit:
 - a. any discharge that is mixed with another discharge before the sampling port prior to reaching the receiving waters. If the wastewater discharge from a replacement system does combine with another waste stream prior to reaching the receiving waters and the waste streams can be sampled separately the wastewater discharge may be covered by this permit;
 - b. any discharge from a new lot created after January 1, 2007; unless the conditions of OAC 3701-29-06(F)(2) are met.
 - c. any discharge from a new or existing dwelling, where any property line or structure associated with the household sewage treatment system is located within 400 feet of central sewers and it is determined that the publicly owned treatment works the sewers are tributary to has capacity to accept the connection;
 - d. any discharge from an existing household sewage treatment system, other than an adequately updated system in accordance with the provisions of this general permit;
 - e. any discharge from a household sewage treatment system, except for a replacement or updated system meeting the eligibility criteria, to outstanding state waters, superior high quality waters or outstanding national resource waters, other than Lake Erie, as defined by and identified in rule 3745-1-05 of the Ohio Administrative Code, or direct tributaries to these waters within one mile of these waters;
 - f. any discharge from a household sewage treatment system, except for a replacement or updated system meeting the eligibility criteria, to any waters of the state with a watershed drainage area of less than 5 (five) square miles at the point of the proposed discharge;
 - g. any discharge from a household sewage treatment system (MS4) area, which includes

roadside ditch, agricultural ditch, swale or other manmade waters or drainage course that is not in accordance with the local MS4 program’s illicit discharge detection and elimination plan.

V. Notice of Intent/Obtaining Permit Coverage

Notice of Intent - Single family, two family or three family dwellings or residential dwellings or appurtenances as defined by 3701-29-01 of the Ohio Administrative Code that will require the installation of a new or replacement HSTS with a discharge or the installation of additional components to adequately update the discharging HSTS as permissible in accordance with OAC 3701-29 shall work with the local health district having jurisdiction to submit a Notice of Intent (NOI) application to apply for coverage under the general permit. The U.S. EPA's regulations at 40 CFR 122.21 (a) exclude facilities covered by general permits from requirements to submit an application for an individual permit.

NOI requirements are intended to establish a mechanism that can be used to establish a clear accounting of the number of facilities covered by the general permit, their identities, locations, mailing addresses, and nature of discharge.

To apply for coverage under the provisions of this general permit, the applicant should submit an NOI established by the Ohio EPA specific to this HSTS general NPDES permit and the applicable \$200 fee for initial coverage. The HSTS general NPDES permit NOI will include site specific information relative to the permittee/homeowner such as address, homeowner name, homeowner contact information, etc. The NOI will also outline a section that can be used by the local health district to verify and recommend permit coverage as being appropriate based upon a local health district review conducted under the provisions of ORC 3718 and OAC 3701-29. This recommendation by the local health district is necessary to ensure that a project meets the established eligibility criteria in the permit and a discharge is appropriate and necessary.

Type Coverage Requested	Fee
Initial Coverage	\$200

Renewal under this General Permit will not require a notice of intent based on the provisions in OAC 3745-38-02(F). There are currently greater than 20,000 household sewage treatment systems covered under the general permit. These facilities are all similar in nature discharging treated sewage from domestic sources at quantities less than 1000 gallons per day. Ohio EPA shares the authority to manage these discharges with the Ohio Department of Health and local health districts. The treatment systems are approved by the Ohio Department of Health to meet the conditions of this permit. Submitting a notice of intent would not provide any additional information to Ohio EPA that is necessary to renew coverage and there is no fee associated with the renewal. In lieu of a notice of intent the existing permits will be renewed upon permit issuance and the homeowners will be notified of the renewal. In the notification information will be included to instruct homeowners how to update any inaccurate information associated with the permit via a transfer form.

VI. Design Standards and Diagnostic Sampling

The design standards established in the draft HSTS general NPDES permit for total suspended

solids, ammonia-nitrogen, CBOD₅, dissolved oxygen and total residual chlorine are the same as those that have been applied throughout the HSTS permitting program and are based on Water Quality Standards and best available demonstrated control technology for new sanitary wastewater discharges as outlined by OAC 3745-1-05.

The draft HSTS general NPDES permit maintains the annual sampling requirements established in previous versions of the permit. The annual sampling requirements are continued as a diagnostic tool rather than simply a compliance tool. Annual grab sampling provides a representation of discharge levels at the specific time the sample is collected and may not provide a true example of HSTS operations and performance. The draft HSTS general NPDES permit emphasizes that the diagnostic sampling be utilized in concert with provisions that the HSTS is operating under the provisions of an Operation and Maintenance Service Contract from a certified service provider in accordance with OAC 3701-29 and being overseen by local health district programs.

One change is proposed to the annual sampling requirements. The draft HSTS general NPDES permit removes CBOD₅ as a requirement for annual sampling. The accessibility of testing for CBOD₅ for both the homeowner and local health departments is limited. Sampling for ammonia sufficiently demonstrates adequate operation of the treatment system because organic oxidation precedes nitrification in the treatment process. An additional table was added to separate the design standards from the annual sampling requirements. Frequency and type of sample were added to the annual sampling table.

VII. Permit Justification—Antidegradation Review

The potential exists to authorize new or altered discharges to waters of the state as a result of the issuance of this general permit. The initial HSTS general NPDES permit No. OHK000001 was subject to the review, intergovernmental coordination, public participation and prohibitions of Ohio's Antidegradation Rules (OAC 3745-1-05) and included most facilities included in this renewal HSTS general NPDES permit No. OHK000004. The renewal permit expands coverage to replacement systems for homes built on lots created after January 1, 2007 when the on lot discharge has failed resulting in environmental degradation. Homes on these lots have no feasible option for sanitary waste other than treatment and discharge to be eligible for this permit. Connection to sanitary sewer or other soil absorption or dispersal alternatives must be deemed infeasible. OAC 3745-01-05(D)(1)(j) excludes general NPDES permits from the submittal and review requirements listed in paragraphs (B)(3)(e) to (B)(3)(h) and (C)(5) of the rule, or generally, the alternatives analysis and socioeconomic justification. The nature of the discharge is comparable to the discharges currently covered under OHK00003. All other provisions of the draft HSTS general NPDES permit No. OHK000004 continue to provide the necessary prohibitions, siting and design standards and program initiatives. To fulfill the necessary public participation requirements the draft permit requires a public hearing.