

## Fact Sheet/Briefing Memo

### **General Permit to Discharge Domestic Wastewater To Groundwater via a Subsurface Soil Absorption System**

WPDES Permit No. WI-0062901-1

September, 2004

#### **A. Introduction**

Section 283.35, Stats., authorizes the Wisconsin Department of Natural Resources (WDNR) to issue a general permit (GP) for discharges from specific categories or classes of point sources. Once a GP is issued, WDNR grants coverage to point sources that meet the applicability requirements of the permit. Any discharger that meets the applicability criteria of the general permit will be required to submit a Notice of Intent to be covered by the permit. General permit coverage may be withdrawn and an individual permit issued if the point source is a significant contributor of pollution or the point source is not in compliance with the terms and conditions of the general permit.

#### **B. General Description of Operations Covered Under This General Permit**

General WPDES permit No. WI-0062901-1 applies to facilities that discharge domestic wastewater to subsurface soil absorption systems. "Domestic wastewater" is defined in NR 205.03(14), Wis. Adm. Code, means the type of wastewater normally discharged from the plumbing in private dwellings or commercial domestic establishments and includes, but is not limited to, sanitary, bath, laundry, dishwashing, garbage disposal and cleaning wastes. Additionally, this permit may only be used to cover those systems that have a design capacity of more than 12,000 gallons per day, or if they serve 85 or more residential bedrooms (see NR 200.03(3) and (4), Wis. Adm. Code).

A facility meeting the applicability criteria for this permit, but which treats wastewater consisting of a mixture of domestic and non-domestic wastewater, may on a case specific basis be determined by the WDNR as eligible for coverage under this general permit. Coverage of systems treating mixed wastewater may be granted by the WDNR when it is demonstrated that the mixed wastewater is substantially equivalent to domestic wastewater.

The subsurface soil absorption systems potentially subject to this general permit may be owned by a municipality or by a private or other non-municipal entity. A subsurface soil absorption system may also be considered to be a "Privately Owned Wastewater Treatment System" (POWTS) and be subject to the regulations of the Department of Commerce (DComm) under chapter Comm 83, Wis. Adm. Code, and other related chapters.

#### **C. Plan Review and Requirements to Qualify for the General Permit**

Coverage under this permit requires that an owner obtain an approval of plans for the system from either the WDNR in accordance with ch. NR 108 and 110, Wis. Adm. Code, or DComm in accordance with ch. Comm 83, Wis. Adm. Code, as applicable. The WDNR and DComm have established a joint plan review procedure for "Large POWTS" (i.e., POWTS that are subject to WDNR permitting under s. NR 200.03(3)). Under this procedure, DComm issues the plan approval, but must receive WDNR concurrence that the system design will enable compliance with and is eligible for coverage under this

permit.<sup>1</sup>

In general, the plan review process requires the submittal of information by the applicant to provide design, site, and other general information for a proposed system. The site information includes the location of the proposed system relative to property boundaries, any existing water supply wells, and other wastewater systems. Information on soils, depth to groundwater and bedrock, and groundwater characteristics is also provided. The system design must achieve compliance with the requirements of this general permit. A primary emphasis of plan review will be to ensure that proposed treatment systems will employ technology capable of removing nitrogen to the extent that is technically and economically feasible.

As part of the plan review, the Department will check information available from the Wisconsin Source Water Assessment Program (SWAP). This database covers approximately 11,500 public water systems in the state. Source water assessments include:

- (a) Identification of land areas that contribute to public drinking water supply wells (source water areas);
- (b) an inventory of significant potential sources of contamination within the area; and
- (c) a pollutant susceptibility determination for public water supply wells, accounting for geology, well construction, monitoring results, and potential pollutant sources.

On a case specific basis, the Department may not grant coverage under this permit for a land disposal system proposed to be located in a source water protection area for a public water system, or any other specific area where the Department determines the proposed wastewater system may potentially result in a damaging effect on groundwater or surface water quality or adversely impact the protection of public health or welfare.

In some instances, the plan review also includes a determination that the proposed project will not conflict with recommendations from Areawide Water Quality Management Plans. This will apply in planning areas designated under the authority of chapter NR 121, Wis. Adm. Code, or in communities larger than 10,000 population with regional sewer service area plans. Typically, a Regional Planning Commission or other applicable planning agency will be contacted with regard to this determination.

#### **D. Operation and Performance Requirements**

**Management Plan.** The General Permit requires the permittee to implement all provisions contained in the approved management plan. A permittee that receives a construction plan approval from DComm must conform to the management plan requirements established by that agency. For permittees that receive plan approval from WDNR, system operation and maintenance shall be in conformance with the WDNR plan approval. Whenever significant operational changes are needed, the approved Management Plan must be amended by submitting a written request for modification of the plan to the Department.

**Operation and Maintenance.** The permittee is required to, at all times, properly operate and maintain all facilities and systems that are installed or used to achieve compliance with the requirements of the

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<sup>1</sup> The Memorandum of Understanding between WDNR and DCOMM states that the system will be subject to plan review by WDNR if Clean Water Fund assistance is provided for construction of the system, or if the system owner is a municipality.

permit. This provision requires the operation of back-up or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit. To assure continuing compliance with the provisions of the permit, the permittee must operate and maintain the system to achieve optimal and effective performance, including nitrogen and other pollutant removal according to the design criteria for the system. The permittee must also provide adequate funding for operation and future needs, assure adequate operator staffing and training and have in place adequate process controls.

**Operator Requirements.** A subsurface soil absorption system owned by a municipality is required to operate under the supervision of a state certified operator as required in ch NR 114 and s. NR 108.06(2), Wis. Adm. Code. A large POTWS that receives a DComm construction plan approval will be operated in accordance with the requirements of that agency.

**Septage/Sludge.** Typically, wastewater in these systems is treated to remove settleable solids and floating scum and to reduce biodegradable material prior to discharge to the subsurface disposal system. Septage, sludge and scum removed from the treatment system may be transported to a publicly owned wastewater treatment works or disposed directly by land application. Land application of septage must be performed in accordance with ch. NR 113, Wis. Adm. Code. If the system produces sludge, as defined in NR 204, Wis. Adm. Code, then land application of that sludge must conform to the requirements of NR 204 under a WPDES permit that allows such landspreading

#### E. **Reporting Requirements**

**Compliance Maintenance Annual Report.** All subsurface soil absorption systems subject to this permit shall complete a Compliance Maintenance Annual Report (CMAR) using information regarding the wastewater treatment and conveyance system obtained over each calendar year. The CMAR shall be submitted in accordance with NR 208, Wis. Adm. Code, using a report form or other process provided by the Department. The CMAR report will request information on management, staffing and operation of a facility, and is used to identify any potential compliance problems.

**Bypass or Overflows.** Unscheduled bypasses or overflows out of the sewage collection system or treatment facility are prohibited except under extenuating circumstances as defined in the permit. Any unscheduled or scheduled bypass or overflow must be reported to the Department within 24 hours of the event.

**Department of Commerce Monitoring or Reporting Requirements.** Any required reporting of information to the DComm for a Large POWTS must also be provided to WDNR unless WDNR indicates in writing that the submittal of information is not necessary.

Respectfully submitted,

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Bureau of Watershed Management