

Fact Sheet for Ground Water Discharge General Permit for
Discharges of Treated Effluent From
Small **Privately** Owned Wastewater Treatment Facilities

I. INTRODUCTION

Pursuant to the Massachusetts Clean Waters Act, M.G.L. c. 21, §§ 26-53, and the Ground Water Discharge Permit Program Regulations, 314 CMR 5.00 (the “Ground Water Regulations”), the Department of Environmental Protection (the “Department” or “MassDEP”) is reissuing a general permit for small **privately** owned wastewater treatment facilities that are designed to provide and do provide secondary treatment to less than 50,000 gallons of sewage per day (the “General Permit”) and the discharge of effluent to the ground water from said facilities. This fact sheet provides the principal facts and the significant legal and policy questions considered in the development of the General Permit for such facilities. This fact sheet also identifies the type of entities eligible for coverage under the General Permit and the procedure for requesting coverage under the General Permit.

II. COVERAGE OF GENERAL PERMITS

(A) The Ground Water Regulations, 314 CMR 5.00, establish the program whereby discharges of pollutants to the ground waters of the Commonwealth are regulated by MassDEP pursuant to the Massachusetts Clean Waters Act, M.G.L. c.21, § 43. In addition to regulating these discharges, the Massachusetts Clean Waters Act, M.G.L. c.21, §§ 26 through 53, also requires that MassDEP regulate the outlets for such discharges and any treatment works associated with these discharges. Through the Ground Water Regulations, 314 CMR 5.00, MassDEP regulates the discharge of pollutants to the ground waters of the Commonwealth to protect the ground waters for use as an actual or potential source of potable water, to protect surface waters for their existing and designated uses, and to assure the attainment and maintenance of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00.

(B)The Ground Water Regulations at 314 CMR 5.13 authorize the issuance of general permits for one or more categories or subcategories of discharges. Pursuant to 314 CMR 5.13, MassDEP may issue a single general permit for a category of facilities whose discharges warrant similar pollution control measures because they:

- (1) Involve the same or substantially similar types of operations;
- (2) Discharge the same types of wastes;
- (3) Require the same effluent limitations or operating conditions;

(4) Require the same or similar monitoring requirements; and

(5) In the opinion of the Department, are more appropriately controlled under a general permit than under individual permits.

III. BASIS FOR THE GENERAL PERMIT

(A) Based on the factors set forth above, MassDEP reissues the General Permit. As more fully set forth below, the General Permit is intended to cover facilities that are below the threshold established pursuant to the Massachusetts Environmental Policy Act (MEPA) for requiring an Environmental Notification Form, that discharge effluent to the ground water as a result of the secondary treatment of sewage, and that are located outside water supply protection areas and outside other sensitive environmental areas. These privately owned wastewater treatment facilities generally involve the same types or substantially similar types of operation, discharge the same type of wastes, and have the same potential environmental impacts. As a result, these facilities require the same type of effluent limitations, operating conditions and monitoring requirements.

(B) MassDEP has determined that operation of such facilities in accordance with all the terms and conditions set forth in the General Permit protects the ground water as an actual or potential source of potable water and surface waters for their existing and designated uses. By granting coverage under the General Permit to such facilities, the Department can devote less time to permit issuance and more time to monitoring permit compliance. MassDEP has therefore concluded that such facilities are more adequately controlled under the General Permit than under an individual permit.

IV. ELIGIBILITY

Small Privately Owned Wastewater Treatment Facilities are eligible for coverage under the General Permit provided that all of the following conditions are met:

(A) The discharge is from a treatment works that:

(1) Discharges effluent as the result of the secondary treatment of sewage;

(2) Does not treat any wastewater other than sewage;

(3) Does not treat wastewater from industrial sources; and

(4) Is designed to receive and that actually receives less than 50,000 gallons of sewage per day.

(B) The discharge is not located within:

- (1) The Zone I, Zone A, Zone II, or Interim Wellhead Protection Area of a public water supply;
- (2) A private water supply area;
- (3) A sole source aquifer;
- (4) 100 feet of an Outstanding Resource Water designated in 314 CMR 4.00, a Special Resource Water designated in 314 CMR 4.00, a cold-water fishery as defined in 314 CMR 9.02, a bathing beach as defined in 105 CMR 445.000, or a shellfish growing area as defined in 314 CMR 9.02;
- (5) A nitrogen sensitive area as designated by the Department in accordance with 310 CMR 15.215; or
- (6) An area where the Department has determined based on a Total Maximum Daily Load or other technical report that more stringent effluent limits than those set forth in the General Permit are required to achieve or maintain compliance with the Massachusetts Surface Water Quality Standards, 314 CMR 4.00.

(C) The discharger:

- (1) Is an entity that meets the requirements of 314 CMR 5.15(1);
- (2) Pursuant to 314 CMR 5.10(9), is not requesting effluent limits different from those in the General Permit;
- (3) Has submitted a Hydrogeological Report that has been prepared by a Massachusetts Registered Professional Engineer with a concentration in civil, sanitary or environmental engineering in accordance with the Department's Guidelines, and a scope of work approved by the Department that includes documentation that the discharge is eligible for coverage under the General Permit set forth above;
- (4) Has applied for and received from the Department authorization to file a Notice of Intent requesting coverage under the General Permit; and
- (5) Has submitted a complete Notice of Intent requesting coverage under the General Permit.

V. Requirements for a Complete Notice of Intent Requesting Coverage Under the Ground Water Discharge General Permit for Discharges of Treated Effluent From Small Privately Owned Wastewater Treatment Facilities

(A) A complete Notice of Intent includes the following:

(1) The information concerning Privately Owned Wastewater Treatment Facilities required by 314 CMR 5.15(1) and, if applicable, 314 CMR 5.15(2);

(2) A description of the flows and loadings associated with the proposed wastewater treatment facility and documentation that:

(a) the proposed flow will not exceed the volume specified in the Department's authorization to file a Notice of intent requesting coverage under the General Permit;

(b) the privately owned wastewater treatment facility will discharge an effluent that results from the secondary treatment of sewage;

(c) the facility will not treat wastewater other than sewage; and

(d) the facility will not treat wastewater from industrial sources.

(3) A site plan showing the layout and major components of the wastewater treatment facility designed to provide secondary treatment for the proposed flow, the proximity to public water supply wells, private water supply wells, Outstanding Resource Waters designated in 314 CMR 4.00, Special Resource Waters designated in 314 CMR 4.00, cold-water fisheries as defined in 314 CMR 9.02, bathing beaches as defined in 105 CMR 445.000, shellfish growing areas as defined in 314 CMR 9.02, nitrogen sensitive areas designated by the Department in accordance with 310 CMR 15.215, and surface waters listed on the most recent Integrated List of Impaired Waters;

(4) A certification from a Massachusetts Registered Professional Engineer with a concentration in sanitary, civil or environmental engineering that:

(a) Construction, operation, and maintenance of the proposed wastewater treatment facility shown on the site plan in accordance with 314 CMR 5.00, 314 CMR 12.00 and the General Permit will enable the discharge to meet all the terms and conditions of the General Permit including without limitation the effluent limits set forth therein;

(b) There is no information in the Hydrogeological Report submitted to the Department along with the request for authorization to file a Notice of Intent requesting coverage under the General Permit that would make the discharge ineligible for coverage under the General Permit; and

(c) Since the date of the authorization to file a Notice of Intent requesting coverage under the General Permit, there are no changes in the information presented in Hydrogeological Report that would make the discharge ineligible for coverage under the General Permit.

(5) A statement from the person requesting coverage under the General Permit that s/he will not appeal a decision denying or granting coverage under the General Permit, and that if coverage is denied, and the person requesting coverage decides to proceed with the discharge, the applicant will apply for an individual permit or coverage under an alternative general permit as directed by the Department;

(6) The permit application fee established by the Department; and

(7) The signature of a person specified in 314 CMR 5.14(1) along with the certification required by 314 CMR 5.14(3).

(B) The Notice of Intent must be sent by certified mail return receipt requested to the Regional Office that issues permits for discharges located within the municipality where the permittee's discharge is located. A copy of the Notice of Intent must be sent to the Program Director, Wastewater Management Program, Department of Environmental Protection, One Winter Street, 5th Floor, Boston, MA 02108.

VI. DATE COVERAGE UNDER GENERAL PERMIT TAKES EFFECT.

(A) At the end of the public comment period following submission of the Notice of Intent Requesting Coverage under the General Permit, the Department shall provide written notice to the person requesting such coverage that the Department has received the Notice of Intent. Said notice shall also include one of the determinations set forth below.

(1) The Department has determined that it needs additional information to assess whether the proposed discharge may be adequately and appropriately controlled under the General Permit.

(2) Based on a TMDL developed by the Department or otherwise, the Department has determined that the proposed discharge will not be appropriately or adequately controlled under the General Permit, that more stringent limits than those required by the General Permit are necessary to

achieve or maintain compliance with the Massachusetts Surface Water Quality Standards, to protect the ground water as an actual or potential source of potable water, and/or to protect the public health, safety, welfare or the environment. In that event the Department shall provide written notice to the person requesting coverage under the General Permit that coverage is denied and an application for an individual permit shall be submitted and/or corrective action is required in accordance with a deadline set forth in the notice. The Department's notification will include a brief statement of the reasons for the Department's action, the applicable form, a statement setting a deadline for the permittee to file the application for an individual permit or submit the notice of intent requesting coverage under the alternative general permit. The Department may grant additional time to submit the application or notice of intent upon request of the applicant.

(3) The Department has determined that the proposed discharge will be appropriately or adequately controlled under the General Permit and coverage under the General Permit is granted and shall take effect on the date of receipt of the notice.

(B) The person requesting coverage under the General Permit is not authorized to construct the privately owned wastewater treatment facility shown on the site plan, or discharge the effluent from said treatment facility to the ground water in accordance with the General Permit, 314 CMR 5.00 and 314 CMR 12.00, unless and until the Department has issued a written notice that coverage under the General Permit is granted as set forth in subparagraph VI(A)(3) above.

VII. CONDITIONS OF THE GENERAL PERMITS

(A) Statutory and Regulatory Requirements

(1) The Massachusetts Clean Waters Act makes it unlawful to discharge pollutants without a permit.

(2) For dischargers not requesting special effluent limits in accordance with 314 CMR 5.10(9), the Ground Water Regulations, 314 CMR 5.10, provide that permits for the discharge to the ground of effluent that results from the secondary treatment of sewage at a wastewater treatment facility shall require the effluent to meet the more stringent of the water quality based effluent limitations defined in 314 CMR 5.10(3) and/or the technology based effluent limitations defined in 314 CMR 5.10(4). To assess compliance with these limits, the Ground Water Discharge Permits issued by the Department identify certain parameters that MassDEP uses to monitor compliance with the more stringent of the water quality based limits and/or the technology based limits. MassDEP establishes effluent limits for those parameters in accordance with 314 CMR 5.10(3) and (4),

and lists these limits as special conditions in its permits. Applying this approach to the category of discharges eligible for coverage under the General Permit, the Department has determined that the following effluent limits shall be listed as special conditions in the General Permit:

<u>Effluent Characteristic</u>	<u>Discharge Limitation</u>
Biochemical Oxygen Demand (5 day at 20°C)	30 mg/l
Total Suspended Solids	30 mg/l
Nitrate Nitrogen	10 mg/l
Total Nitrogen (NO ₂ , NO ₃ , and TKN)	10 mg/l
Oil and Grease	15 mg/l

(3) The Department has further determined that if the effluent goes to an open sand bed prior to discharge to the ground water:

(a) The effluent shall be disinfected to meet an effluent limitation of no more than 200 fecal coliform organisms per 100 ml; and

(b) If chlorine is used for disinfection, the chlorine residual in the effluent shall not exceed 1.0 mg/l.

For purposes of this requirement, an open sand bed is a disposal system where effluent is spread onto the surface of the disposal area having a sand media so that the effluent may percolate through the sand media and then through the soil and the unsaturated zone before entering the ground water.

(4) Monitoring and Reporting Requirements

The dischargers covered by the General Permit are required to submit to MassDEP a monthly discharge monitoring report (DMR) containing effluent and monitoring well data. Monitoring requirements have been established in 314 CMR 5.10(6) and the General Permit.

(B) FINANCIAL ASSURANCE MECHANISM REQUIREMENTS

The Ground Water Regulations, 314 CMR 5.10(8)(l) and 314 CMR 5.15(4) and (6), require that permittees that operate privately owned wastewater treatment facilities that treat at least some wastewater from residential uses, hospitals, nursing or personal care facilities, residential care facilities, and/or assisted living facilities, or other facilities as required by the Department, establish and maintain a financial assurance mechanism that provides for the continued availability of an immediate repair and replacement

account to be used by the permittee solely for the immediate repair and replacement of any failing components of the privately owned wastewater treatment facility. Consistent with these regulatory provisions, the General Permit requires the establishment and maintenance of these financial assurance mechanisms for such facilities.

(C) TERM OF THE PERMIT

The General Permit is in effect for a period of five years from the date of issuance. Coverage under the General Permit is subject to renewal 180 days prior to the expiration date of the General Permit regardless of the date coverage was granted.