



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENVIRONMENTAL PROTECTION

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

MITT ROMNEY
Governor

KERRY HEALEY
Lieutenant Governor

ELLEN ROY HERZFELDER
Secretary

EDWARD P. KUNCE
Acting Commissioner

WATERSHED MANAGEMENT POLICY

Document Title: **Financial Security Provisions For Groundwater Discharge Permits**

Effective Date: June 23, 2003

Policy Number: BRP/DWM/WPeP/P03-1

Program Applicability: BRP, Watershed Permitting, Groundwater Discharge Program

Approved By: Glenn S. Haas, Director, Division of Watershed Management

Supersedes Policy: None

Purpose: This policy describes the requirements for financial security that the permittees identified below must follow when issued a groundwater discharge permit. The policy outlines which permittees are subject to the financial security provisions and provides guidance in determining the basis of both the immediate repair and/or replacement and the capital reserve accounts.

Applicability: This policy provides guidance to the Department and permittees regarding the financial security requirements for private sewage treatment facilities ("PSTFs") permitted by the Department pursuant to 314 CMR 5.00 (the Groundwater Discharge Permit Regulations).

Introduction and Authority for the Policy: The Department's longstanding permitting practice for groundwater discharge permits has been to require prospective permittees of PSTFs to demonstrate the ability to finance the operation, maintenance, repair, and replacement of the PSTF in the event of an emergency and on a long term basis. 314 CMR 5.10(2) authorizes the Department to establish special permit conditions, as required on a case-by-case basis, to provide for and assure compliance with the Massachusetts Clean Waters Act, M.G.L.c. 21, s.26 – s.53 (the "Act"). The Department also has the authority under the Act to specify additional permit requirements that it deems necessary to safeguard the quality of the receiving waters or to comply with pertinent provisions of state or federal law. See M.G.L. c. 21, s.43(7). The Department further considers its financial security requirements a best management practice within the meaning of 314 CMR

This information is available in alternate format. Call April McCabe, ADA Coordinator at 1-617-556-1171. TDD Service - 1-800-298-2207.

DEP on the World Wide Web: <http://www.mass.gov/dep>

Printed on Recycled Paper

5.10(8)(c)3. that is reasonably necessary to carry out the purposes and intent of the Act.

There are two components to the Department's financial security requirements in this area: (1) a financial security amount to fund the immediate repair and/or replacement of the facilities, and (2) a dedicated capital reserve account capable of accumulating sufficient funds to replace the plant within twenty years of the date of its initial operation. The immediate repair/replacement security amount is necessary to insure that adequate funds are available to correct an unanticipated problem at the treatment facility immediately so that any disruption of the operation is minimized and no violation of the GWDP occurs. The capital reserve account will insure that the treatment facility can continue operation at the end of its useful life and remain in compliance with the GWDP on an ongoing basis.

Issue

Except as otherwise provided, all groundwater discharge permits issued by the Department for PSTFs shall contain supplemental conditions requiring the establishment and maintenance of both an immediate repair and/or replacement security amount and a capital reserve account as specified below.

Repair and/or Replacement. The immediate repair and/or replacement security amount shall be determined in accordance with the following formula:

$$\text{Estimated Construction Cost} \times 0.15 = \text{Security Amount}$$

The estimated construction cost includes the cost of the wastewater treatment plant and all other mechanical equipment associated with wastewater treatment and collection, but not including land, grounds, or the disposal area. Please note that with the exception of any pumping facilities, the cost of the collection system is not included in this calculation. However, any emergency repair and replacement of the collection system will be financed by this security amount.

A permittee may satisfy the above financial security condition by means of an escrow account or a letter of credit meeting the Department's requirements. A permittee proposing to satisfy the above financial security condition by means other than an escrow account or a letter of credit must demonstrate to the Department's satisfaction (1) why the use of one these approved means is not appropriate or necessary, and (2) how the proposed alternative means is as effective and protective as an escrow account or a letter of credit.

Sample calculation.

A new wastewater treatment plant, minus the cost of the land and grounds, is estimated at \$1,000,000. The disposal area will cost \$300,000. All pumping facilities, including the pump chamber leading to the disposal area, will cost \$400,000. The collection system, minus the pumping facilities, costs \$500,000. The security amount is calculated as follows:

Estimated construction cost is \$1,400,000 (\$1,000,000 for WWTP and \$400,000 for pumping facilities).

Security amount: \$1,400,000 x 0.15 = \$210,000.

Capital Reserve Account. The capital reserve account shall accumulate sufficient capital to replace, as necessary, the wastewater treatment facility (or portions thereof) and all other mechanical equipment associated with wastewater treatment and collection, but not including land, grounds, or disposal area, within twenty (20) years from the commencement of plant operations.

The minimum requirements and timing of funding the capital reserve account are as follows. Simultaneously with the permit renewal application at year fifteen (15) following the initiation of plant operations (which typically is the third permit renewal), the permittee shall submit two (2) reports to the Department for its review and approval:

- (1) an engineering report, prepared by a registered professional engineer, that outline in sufficient detail what modifications (if any) to the facility or other changes are required to insure that the facility can remain in compliance with its GWDP and other applicable requirements through the next 5 year permit term (year 20) and beyond; and
- (2) a companion financial plan that contains the cost estimates for implementing the facility modifications or other changes identified in the engineering report, and describes and demonstrates, how and when the permittee will finance the needed facility modifications or other changes by no later than year 20.

Because many permittees may have difficulty in accumulating the necessary funds to make the needed facility modifications or other changes during years 16-20, all permittees shall set aside a minimum of 25% of the construction cost (not including lands, grounds, disposal area, and sewers) of the wastewater treatment and pumping facilities. The 25% construction cost amount shall be set aside by the permittee in equal portions according to the following schedule:

- a. For new permits, accumulate the funds during years 1-15
- b. For existing permit at first renewal, accumulate the funds during years 6-15
- c. For existing permit at second renewal, accumulate the funds during years 11-15
- d. For existing permit at third renewal, complete the above referenced engineering and financial plan reports and accumulate the necessary funds to complete the modifications by year 20, but in no case shall such permittees accumulate less than 25% of the construction cost.

Sample calculation.

As in the example for the security amount, the estimated construction cost is \$1,400,000 for the wastewater treatment plant and pumping facilities. The useful life of the facility is 20 years.

$$\$1,400,000 \times 25\% = \$350,000$$

Yearly payments are as follows:

- a. Years 1-15 (New permit): $\$350,000/15 = \$23,333$ per year*
- b. Years 6-15 (Existing permit – 1st renewal): $\$350,000/10 = \$35,000$ per year*
- c. Years 11-15 (Existing permit – 2nd renewal): $\$350,000/5 = \$70,000$ per year*

If, following the preparation of the report at year 15, the cost of the modifications is less than the accumulated funds, then the balance will remain in the account and form the basis of the capital reserve account for the next 20-year cycle.

After the completion of the necessary modifications at year 20, the Department's assumption is that the facility will be capable of operating for another 20 years in compliance with its GWDP. Accordingly, the permit renewal at year 20 will be treated the same as a new permit, and the permittee will be required to set aside funds yearly in a similar manner until another report detailing necessary modifications is prepared at year 35.

Accumulated interest. All accumulated interest must be accrued to its respective account. However, if funds are withdrawn from the immediate repair and/or replacement security to perform the necessary work, then the fund only has to be replenished up to the original calculated security amount. As an example, the calculated security amount was \$50,000 but an interest of \$5,000 has raised the present-day total to \$55,000. A figure of \$20,000 was expended for emergency repairs leaving a remaining fund of \$35,000. The permittee must reimburse the security amount \$15,000 to bring the total back to \$50,000. In the case of the capital reserve account, the accrued interest must remain in the account and be used to adjust for inflation and future treatment requirements.

Transfer of ownership. Typically, the project developer will establish and make the initial contributions to the financial security accounts. If ownership of the permitted facility is thereafter transferred to another entity, such as a condominium association, the Department shall not approve a transfer of the permit pursuant 314 CMR 5.13(3) until and unless the transfer agreement addresses and provides for the new owner's compliance with the financial security requirements to the satisfaction of the Department.

Policy: The following permit conditions and the requirements of this Policy shall apply to all groundwater discharge permits issued by the Department for PSTFs, except PSTFs serving carwashes and laundromats (which are not subject to this Policy because of their relatively small sized PSTFs and discharges). In addition, Publicly Owned Treatment Works (“POTWs”) serving municipalities or state and federal facilities are not subject to this Policy. The Department on a case-by-case basis will evaluate any other proposed exceptions.

Permit Conditions

1. The facility shall maintain a financial security amount in the sum of at least \$____. This source of funding shall be used by the permittee solely for the immediate replacement and/or repair of any failing wastewater treatment units. Such security shall be provided by means of an interest-bearing escrow account and/or a letter of credit from a financial institution having a place of business in Massachusetts and be in a form satisfactory to the Department. The permittee and/or its successors shall replenish and maintain the required dollar amount thereof in full within ninety days of any disbursement.

2. The facility shall establish and maintain a capital reserve account in order to accumulate sufficient capital to make any necessary modifications to the wastewater treatment facility and other related equipment or changes within 20 years from the date of commencement of plant operations. The permittee shall make annual contributions in equal installments of \$____ to accumulate the necessary funds within the 20-year period. Such funding shall be provided by means of an interest bearing account and/or a letter of credit from a financial institution having a place of business in Massachusetts and be in a form satisfactory to the Department.

Simultaneously with the permit renewal application at year fifteen (15) following the initiation of plant operations, the permittee shall submit two reports to the Department for its review and approval:

1. an engineering report, prepared by a registered professional engineer, that outlines in sufficient detail what modifications (if any) to the facility or other changes are required to insure that the facility can remain in compliance with its GWDP and other applicable requirements through the next 5 year permit term (year 20) and beyond; and

2. a financial plan that contains the cost estimates for implementing the facility modifications or other changes identified in the engineering report, and describes and demonstrates, how and when the permittee will finance the needed facility modifications or other changes by no later than year 20.

3. Permittees shall submit an annual financial report, prepared in accordance with generally accepted accounting principles, to the Department on January 31 of

each year. This report shall, as a minimum, identify the initial and current balances of both the security amount and the capital reserve account and confirm the continuing availability of the funds for the purposes described in the Permit.