



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

March 26, 2008

Dana Arey
Pathways Consulting, LLC
P.O. Box 600
Etna, New Hampshire 03750

**Subject: Plainfield: Meriden Village Water District, EPA ID: 1921020
January 21, 2008 Water Conservation Plan**

Dear Mr. Arey:

The purpose of this letter is to conditionally approve your January 21, 2008 Water Conservation Plan (plan) for Meriden Village Water District (MVWD) in Plainfield, NH. The plan was submitted on behalf of MVWD to meet the requirements of New Hampshire Administrative Rule Env-Ws 390, *Water Conservation*. The 21-day period for public comment expired on March 19th, 2008. The New Hampshire Department of Environmental Services (Department) did not receive any comments on the plan.

MVWD currently meets the definition of a small community water system as defined by Env-Ws 390.03 (m), namely, a public water system serving less than 1000 persons at least 8 months in a calendar year. As a small community water system, MVWD is choosing to conduct a comprehensive leak detection survey of the distribution system every two years in lieu of complying with the metering and water accounting requirements for large community water systems.

The January 21, 2008 water conservation plan is approved with the following condition:

- Every three years from the date of this letter MVWD shall supply the Department with documentation of compliance with the approved plan (Env-Ws 390.13). The compliance report shall include an update on the status of instituting a service connection metering program along with a current estimate of the number of persons served by the water system. Should MVWD meet the definition of a large community water system as defined by Env-Ws 390.03 (i), MVWD shall revise its existing water conservation plan to comply with Env-Ws 390.05 *Requirements for Existing Large Community Water Systems*.

The Department strongly encourages MVWD to begin instituting a service meter installation program as soon as possible. In addition to assisting with water audits and leak detection, service meters allow for a more equitable water rate that charges

customers based on a volume of use as opposed to a flat rate for the service. Besides being more equitable, the water rate may be designed to encourage efficient use of the resource helping reduce demand on the water system.

If you have any questions about this letter or any other water conservation issues please feel free to call me at **271-6685** or email me at derek.bennett@des.nh.gov

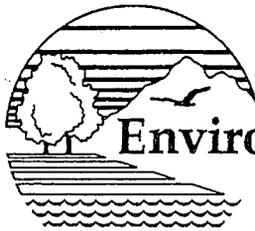
Sincerely,

A handwritten signature in black ink that reads "Derek Bennett". The signature is written in a cursive, flowing style.

Derek S. Bennett
Water Conservation
Drinking Water and Groundwater Bureau

Ec: Christine Bowman, Stephen Roy – Drinking Water and Groundwater Bureau
William Taylor – Meriden Village Water District

Cc: Planning Board, Board of Selectmen – Town of Plainfield
Upper Valley Lake Sunapee Regional Planning Commission



NEW HAMPSHIRE
DEPARTMENT OF
**Environmental
Services**

**Report Form for
Water Conservation Plans
Small Community Water Systems
December 2007**

PROJECT NAME Meriden Village Water District

TOWN/CITY Meriden **DATE** January 31, 2008

EPA ID # 1921020

PURPOSE This form provides the information needed for small community water systems to meet the reporting requirements of Env-Ws 390; *Water Conservation Rules*. Once completed, this form can fulfill the requirements of Env-Ws 390.10. You don't have to use this form. However, based on experience, the DES has found that use of a form speeds the application process. If you prefer to produce an original report, remember to provide **all the information** required under the rules. Helpful information and reminders are provided throughout the form and are printed in (parenthesis). Copies of this form, the rules, a summary of the rules, educational materials for public distribution, and other useful publications may be found at http://www.des.nh.gov/h2o_conservation.htm.

INSTRUCTIONS

A. Obtain copies of the following materials from either the DES's Public Information Center (603) 271-2975 or from http://www.des.nh.gov/h2o_conservation.htm.

- Administrative Rule, Env-Ws 390, *Water Conservation Rules*.
- Fact sheet, *Summary of the Water Conservation Rule*.
- Any pertinent water efficiency fact sheet.
- Extra copies of this form.

B. Review the water conservation rules and guidance materials obtained above. You should use these materials to prepare your water conservation plan. It is suggested that you submit a draft plan for review prior to meeting your public notification requirements in case substantive changes to the plan are necessary. Resubmittal of the report to the public entities can be avoided if initial review is performed by the DES.

C. Complete the form by answering all questions and providing the appropriate attachments. Answer the questions from top to bottom, unless instructed to skip to another section. Helpful information and reminders are provided throughout the form and are printed in (parenthesis).

D. Before submitting, review the form to ensure all questions are answered and all attachments are included. When complete submit to:

Water Conservation Plans
Small Community Well Siting Program
NH Department of Environmental Services
Drinking Water and Groundwater Bureau
PO Box 95
Concord, NH 03302-0095

For help with this form or other water conservation planning concerns call Derek Bennett at (603) 271-6685 or Diana Morgan at (603) 271-2947.

Information contained in this form is current as of December 2007. Statutory or regulatory changes that may occur after October 2005 may cause part or all of the information to be invalid. If there are any questions concerning the status of the information please contact DES at (603) 271-6685.

Section 1.0 GENERAL INFORMATION

Well Siting

Has a Preliminary Well Siting report been submitted to the DES? (If your answer is **NO**, please contact the DES at (603) 271-2947 before you proceed further)

YES NO

1.1 Project Contacts / System Ownership

1.1a Project Contact (Person completing this form?)

Name Bill Taylor
Address Post Office Box 84, Meriden, New Hampshire 03770
Company Meriden Village Water District
Phone Number (603) 469-3486

1.1b Project Owner (Who is responsible for compliance with the water conservation plan, as approved by the DES?)

Name Bill Taylor
Address Post Office Box 84, Meriden, New Hampshire 03770
Company Meriden Village Water District
Phone Number (603) 469-3486

1.1c Person responsible for completing the activities outlined in this plan (Please note that the person completing water conservation plan activities must be a certified water system operator or water system personnel supervised by the certified operator.)

Name Bill Taylor
Address Post Office Box 84, Meriden, New Hampshire 03770
Company Meriden Village Water District
Phone Number (603) 469-3486

1.1d Will ownership of the water system be transferred at a future date from the person listed in 1.1b to a homeowner's association or other entity?

YES NO

If **YES**, indicate below the contact information for the new owner of the water system.

Name _____
Address _____
Company _____
Phone Number _____

1.2 Type of Water System

1.2a Is this a new source for a new or existing community water system owned by a landlord who supplies water to tenants and includes water service in rental fee?

YES ___ NO ___ (If YES, you must complete Sections 2.2, 3.0, 5.0 and 6.0)

1.2b Is this a new source for an **existing** community water system that does not meet the definition in 1.2a?

YES NO ___ (If YES, you must complete Sections 2.2, and 3.0 through 6.0)

1.2c Is this a new source for a **new** community water system that does not meet the description in 1.2a above?

YES ___ NO ___ (If YES, you must complete Sections 2.1, and 3.0 through 6.0)

Section 2.0 METERS, UNACCOUNTED FOR WATER, AUDITS, AND LEAK DETECTION

2.1 New Small Community Water Systems

2.1a Meter Selection and Installation

Meters must be installed on all sources of water and at each service connection on new small community water systems that do not meet the definition of 2.1a above.

Describe below the size of both the source and service connection meters to be utilized by the water system. (In selecting and installing water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

2.1b Meter Reading Frequency

Describe below the frequency in which each type of meter will be read. (Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)

2.1c Meter Maintenance / Calibration

Describe the water systems meter maintenance plan and calibration schedule. (In maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

2.1d Estimating Unaccounted-for Water

Describe how often the water system will estimate unaccounted for water. Unaccounted-for water means water for which a specific use cannot be determined due to accounting procedure errors, data processing errors, meter inaccuracies, authorized water use that does not pass through meters, leaks, seepage, overflow, evaporation, theft, unauthorized water use, or malfunctioning distribution controls. (Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15 percent, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the DES within 60 days. The water system must implement the response plan upon receiving approval from DES.)

2.1e Water Audit and Leak Detection Program

Describe below who will be responsible for conducting a leak detection survey, the frequency of the surveys and a description of how those surveys will be conducted. (Surveys for existing systems that are opting out of metering service connections shall be performed at least every two years. Leaks identified by the survey must be repaired within 60 days of discovery unless a waiver is obtained from the DES. The requirements of this section of the rule must follow the standards set forth in AWWA M36, *Manual of Water Supply Practices, Water Audits and Leak Detection*, available from the American Water Works Association. www.awwa.org/bookstore). (All new small community water systems must meet this requirement.)

2.2 Existing Small Community Water Systems, New or Existing Water Systems Owned by a Landlord Who Supplies Water only to Tenants and Includes Water Service in a Rental Fee

(If this is an existing small community water system, or a new system that meets the definition in Section 2.1 (a), the water system has the choice to either:

1. Install meters on all service connections within three years of approval of the plan and estimate unaccounted-for water [see section 2.2b – 2.2e], or
- ② Conduct a comprehensive leak detection survey every two years [See section 2.2f].

2.2a Is your system choosing to install meters on your system to track unaccounted-for water?

YES _____
NO

If **YES**, your system must estimate unaccounted-for water annually, complete sections **2.2b, 2.2c 2.2d and 2.2e**. If you answered **NO**, your system must perform a leak detection survey every two years, go to section **2.2f**.

2.2b Meter Selection and Installation

Meters must be installed on all sources of water and at each service connection. Describe below the size of both the source and service connection meters to be utilized by the water system. (In selecting and installing water meters, the water system must comply with procedures and protocols described in “Manual of Water Supply Practices, Water Meters”, document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

2.2c Meter Reading Frequency

Describe below the frequency in which each type of meter will be read. (Source meters must be read at least every 30 days and service meters must be read at least every 90 days.)

2.2d Meter Maintenance / Calibration

Describe the water systems meter maintenance plan and calibration schedule. (In maintaining water meters, the water system must comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters", document AWWA M6, available from the American Water Works Association. www.awwa.org/bookstore)

2.2e Estimating Unaccounted-for Water

Describe how often the water system will estimate unaccounted for water. Unaccounted-for water means water for which a specific use cannot be determined due to accounting procedure errors, data processing errors, meter inaccuracies, authorized water use that does not pass through meters, leaks, seepage, overflow, evaporation, theft, unauthorized water use, or malfunctioning distribution controls. (Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15 percent, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the DES within 60 days. The water system must implement the response plan upon receiving approval from DES.)

2.2f Leak Detection Program

Describe below who will be responsible for conducting a leak detection survey, the frequency of the surveys and a brief text description of how those surveys will be conducted. (Surveys for existing systems that are opting out of metering service connections shall be performed at least every two years. Leaks identified by the survey must be repaired within at least 60 days unless a waiver is obtained from the DES. The requirements of this section of the rule must follow the standards set forth in AWWA M36, *Manual of Water Supply Practices, Water Audits and Leak Detection*, available from the American Water Works Association. www.awwa.org/bookstore)

The Meriden Village Water District, under the supervision of Mr. Bill Taylor, Certified Water System Operator, with assistance from the Granite State Rural Water Association, will conduct leak detection surveys in accordance with the American Water Works Association "Water Audits and Leak Detection" manual of water supply practices M36 at least every two years.

Section 3.0 PRESSURE REDUCTION

(Pressure reduction shall be implemented upon obtaining approval of a new source of water when it is technically feasible, consistent with industry standards, and consistent with public health and safety considerations. Existing small community water systems have one year after approval of the conservation plan to implement this requirement, if feasible. All pressure reduction measures must meet the requirements of Env-Ws 372, Design Standards for Small Community Public Water Systems.)

Is pressure reduction technically feasible for this system? If **YES**, explain below how it will be accomplished for the system. If **NO**, explain why below.

YES ___ NO

The maximum water system operating pressure is approximately 92 pounds per square inch (PSI). Very few customers are located within the maximum pressure area. The majority of the customers are located where the water system pressure is approximately 45 PSI. The New Hampshire code of Administrative rules ENV-Ws 372 allows a maximum pressure of 100 PSI without requiring pressure reduction.

Section 4.0 CONSERVATION RATE STRUCTURE

(All new small community water systems must adopt a rate structure as described in Env-Ws 390.04.)

Describe below the conservation rate structure the water system proposes adopting, or if not practical or feasible for the system, describe below how the water system will manage water service fees to meet the intent of the rule and promote water conservation. (You will need to fill out a waiver application form found at the end of this document.)

Section 5.0 PUBLIC NOTIFICATION

(Within seven days of submitting the final water conservation plan for review by the DES a small community water system must provide a copy of this report via certified mail to the governing board of the municipality in which a proposed source is located, to all wholesale customers [if any], and to the regional planning commission for the location of the proposed source. The water system shall supply the governing boards with a copy of a summary of the requirements of Env-Ws 390. This document can be found at http://www.des.nh.gov/h2o_conservation.htm. You must also note in your correspondence to the above-mentioned governing boards that a copy of the Well Siting Application is available for their review at the DES and provide them with DES contact information. The water system shall request that the governing boards amend any site plan submitted to them for review so that it reflects the requirements of Env-Ws 390 and promotes water conservation landscaping principals.)

List the names and addresses of the governing boards receiving public notification. Attach a copy of the cover letter sent to the governing boards and a copy of the certified mail receipts when available. List the educational/outreach materials that the system is providing to the municipalities for review.

Town of Plainfield Selectman's Office
Town of Plainfield Planning Board
Upper Valley Lake Sunapee Commission

Section 6.0 EDUCATIONAL OUTREACH INITIATIVE

(Such an initiative may be achieved in many ways, but must be implemented immediately upon approval of the conservation plan and should include the pertinent water efficiency fact sheets that can be found at the website listed at the beginning of this report. These educational mailings can be included with wellhead protection program educational mailings as required by Env-Ws 378.18 or with the water system service bills. Other acceptable outreach initiatives include water system or homeowner's association newsletters, posting of water conservation fact sheets in public areas used by water system customers, or any other initiative that meets the intent of the rules.)

Provide a brief description of your educational outreach initiative. Include implementation procedures, the person responsible for the initiative, the content of educational mailings proposed (if any), and the wording of any newsletter insertions or public postings. (There is no need to provide copies of educational outreach materials that you are acquiring from DES. Only provide copies of educational outreach materials generated by the water system.)

The Meriden Village Water District will include educational information to customers with the annual/semi-annual water bills. The educational outreach material will be the NHDES fact sheets WD-DW6B-26-1, 26-2, 26-3, 26-4, 26-5, 26-9, 26-10, 26-12, 26-13, and 26-17. Each billing cycle will include two of the fact sheets.

↓ PWS
↓ launory
↓ aquaculture
↓ Inst.

Before submitting, thoroughly check this form to be sure all applicable questions are answered, all information is provided, and all necessary attachments are included. Incomplete submittals will significantly slow the approval process.

If strict compliance with any of the requirements of Env-Ws 390 is not feasible, the small community water system may apply for a waiver to a specific portion of the rule. A waiver application form is provided at the end of this document for your convenience.

Preparer's Signature Dana Aray

Date 11/30/08

As a reminder, have you included the following?

- Educational outreach initiative documentation and materials created by the water system.
- Public notification documentation (certified mail receipts).
- Public notification cover letters and pertinent documents.
- Other pertinent or supportive materials.