The State of New Hampshire
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

**Thomas S. Burack, Commissioner**

January 2, 2008

Neil W. Helberg
Lewis Engineering, PLLC
44 Stark Lane
Litchfield, New Hampshire 03052

**Subject: CWS PLAISTOW: Sweet Hill Estates; EPA ID: 1932200**
**Water Conservation Plan; NHDES #998170**

Dear Mr. Helberg:

The purpose of this letter is to approve your December 4, 2007 Water Conservation Plan for the Sweet Hill Estates Water System in Plaistow, NH. The plan was submitted to meet the requirements of New Hampshire Administrative Rule Env-Ws 390, *Water Conservation*.

The December 4, 2007 Water Conservation Plan (WCP) for the subject water system is approved as proposed. Every three years from the date of this letter the water system shall supply the New Hampshire Department of Environmental Services (NHDES) with documentation of compliance with the plan. This information shall be supplied on a form provided by NHDES and shall include contact information for the water system owner and the person responsible for carrying out the tasks of the plan, all data relating to meter reading, water audits, leak detection, public outreach, and the dates these tasks were performed.

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,

Derek S. Bennett
Water Conservation
Drinking Water and Groundwater Bureau

Ec: Diana Morgan, Jim Gill - DWGB
Donald Ware, Christopher Countie - Pennichuck Water Works, Inc.

Cc: Cliff Sinnott - Rockingham Regional Planning Commission
Jason Hoch - Town of Plaistow, NH

Received via email on 12/4/2007
from Neil Helberg

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

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

| | |
|---|---|
| **PROJECT NAME:** | **Sweet Hill Estates CWS Well No. 1 and Well No. 2** |
| **TOWN/CITY:** | **Plaistow, New Hampshire** |
| **DATE:** | **December 2007** |
| **EPA ID #** | **NEW SYSTEM** |

**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 and the DES recommends that you use this form as a checklist to help ensure your report is complete. 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
DES, Water Supply Engineering Bureau
Post Office Box 95
Concord, NH 03302 -0095

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

Information contained in this form is current as of February 2006. 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) 271-2947.

## 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_X__ NO___

(The section below asks you to identify the people and companies responsible for the water conservation plan application. This information will help ensure clear communication during the application process.)

### 1.1 Project Contacts / System Ownership

**1.1a** Project Contact (Person completing this form?)

| | |
|---|---|
| Name: | **Neil W. Helberg, P.E.** |
| Address: | 44 Stark Lane, Litchfield NH 03052 |
| Company: | **Lewis Engineering, PLLC** |
| Phone Number: | 603-886-4985 |

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

| | |
|---|---|
| Name: | **Donald Ware, P.E.** |
| Address: | P.O. Box 1947, Merrimack, NH 03054-1947 |
| Company: | **Pennichuck WaterWorks, Inc.** |
| Phone Number: | 603-913-2330 FAX: 603-913-2344 |

**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: | **Christopher Countie** |
| Address: | P.O. Box 1947, Merrimack, NH 03054-1947 |
| Company: | **Pennichuck WaterWorks, Inc.** |
| Phone Number: | 603-913-2372 FAX: 603-913-2379 |

**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_X__

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

## Section 2.0 METERING AND LEAK DETECTION

(This information is needed to help ensure the water conservation plan will meet the intended purpose and that the plan is designed appropriately.)

### 2.1 Water System

**2.1a** Is this a new source for an **existing** community water system?
YES_ X __ NO___ (If **YES**, you must complete **Sections 2.3, 3.0, 5.0** and **6.0**)

**2.1b** 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, or a new or existing community water system for apartment-style housing that includes water service in a housing fee?
YES ____ NO __ X __ (If **YES**, you must complete **Sections 2.3, 3.0, 5.0** and **6.0**)

**2.1c** Is this a new source for a **new** community water system that **does not** meet the description in (a) or (b) above?
YES___ NO_ X __ (If **YES**, you must complete **Sections 2.2, and 3.0 through 6.0**)

### 2.3 Metering of Existing Small Community Water Systems

*(If no further expansion of an existing small community water system is planned the water system may either install meters on all service connections within 3 years of approval of the plan and estimate unaccounted-for water[see section 2.3d], or the system may opt to conduct a comprehensive leak detection survey every 2 years and repair all leaks identified by the survey [See section 2.3e]. If further expansion of the system is proposed, meters must be installed on all new services, regardless of whether the system opts to conduct a leak detection audit rather than metering. Meters are also required on all sources of water for existing small community water systems.)*

**2.3a** Is your system choosing to install meters on your existing system to track unaccounted-for water or is your system adding new service connections to your existing system?

YES_ X __ NO___ Meters are installed at all water customers

If **YES,** your system must estimate unaccounted-for water annually, go to sections 2.3b, 2.3c and 2.3d. If you answered **NO,** your system must perform a leak detection survey every 2 years, go to section 2.3e.

**2.3b** Describe below the size of both the source and service connection meters to be utilized by the water system. *(In selecting, installing, and 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.)*
**Pennichuck Water follows the above AWWA procedures and protocols in the installation and maintenance of water meters.**

**2.3c** 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.)*
**Source meters (well meters and pump station discharge meter) are read at least twice at month. Service meters are read monthly. Source meters are read on the same day as the service meters are read.**

**2.3d Estimating Unaccounted-For Water**
Describe below how the water system will estimate the volume and percentage of unaccounted-for water. Also note how often the water system proposes estimating unaccounted-for water. *(All new small community water systems and all existing small community water systems opting for metering and water accounting, or existing small community systems that are adding new connections, must meet this requirement. Estimates of unaccounted-for water must be performed at least once a year. If unaccounted-for water exceeds 15%, the system shall develop a response plan in accordance with Env-Ws 390.05(j) and (k), and submit it to the Department within 60 days.)*

If the percentage of unaccounted- for-water vs. pumped water exceeds 15%; the certified operator or qualified water professional shall implement a water audit and leak detection program in accordance with "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999. The water system shall have an ongoing water audit and leak detection program in order to keep the amount of unaccounted-for-water as low as possible. The certified operator will calculate the percentage of unaccounted-for-water at least once per year. Unaccounted- for- water is the difference between the total water pumped from the pump station, and the customer metered usage. A response plan shall be submitted to the DES for approval within 60 days. Upon NHDES DWGB approval of the response plan, any leaks located by the leak detection survey shall be repaired within 60 days.

**2.3e 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 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 Department. 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.)*
**N/A**

## 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_ X __

Pressure leaving the pump house is 65+/- psi.
The pressure at the highest unit is 50+/- psi.

## Section 4.0 CONSERVATION RATE STRUCTURE

(All new small community water systems and existing small community water systems that are adding new service connections 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.)

Water rates for the Sweet Hill water system are subject to the approval of the New Hampshire Public Utilities Commission (NHPUC). Any increases or decreases in the rates charged to the customers must be approved by the NHPUC. The following schedule shows the present rates (12/07) for each category of service:

**MONTHLY GENERAL METERED RATE**

| METER | RATE |
|---|---|
| 5/8" | $15.36 |
| 3/4" | $22.11 |
| 1" | $35.61 |
| 1 1/2" | $69.39 |

In addition to this standard customer charge, the monthly volumetric charge is:
$2.40 per 100 Cubic Feet
100 Cubic Feet = 748 gallons

## 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.

| | |
|---|---|
| Jason Hoch<br>Town Manager<br>Town of Plaistow<br>145 Main Street<br>Plaistow, NH 03865 | Cliff Sinnott<br>Executive Director<br>Rockingham Planning Commission<br>156 Water Street<br>Exeter, NH 03833 |

## 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.)

**Educational Outreach fact sheets will be distributed yearly with the Consumer Confidence Report. Educational outreach materials will be obtained from the NHDES WSEB and distributed to customers.**

**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 _____

Date _____

**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.