The State of New Hampshire
Department of Environmental Services

Michael P. Nolin
Commissioner

February 28, 2006

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

Subject: CWS WINDHAM: PEU/W & E; EPA ID: 2542030
New BRW 6; NHDES #996092

Dear Mr. Helberg:

The purpose of this letter is to approve the water conservation plan for the subject well for PEU/W & E in Windham. This decision is based on a review of materials submitted to meet the requirements of New Hampshire Administrative Rules Env-Ws 390, *Water Conservation Rules*.

The February 8, 2006 Water Conservation Plan (WCP) for the subject water system is approved as proposed. The Plan shall be implemented when the new well is connected to the water system. 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 leak detection, water use audits, and meter reading, if applicable, and the dates these tasks were performed.

If you have any questions about this approval or any other well siting issues feel free to call me at **271-2947** or email me at dmorgan@des.state.nh.us.

Sincerely,

Diana W. Morgan, Professional Geologist
Water Supply Engineering Bureau

Cc: Don Ware, PWW
Jim Gill, NHDES

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-3139 • Fax: (603) 271-5171 • TDD Access: Relay NH 1-800-735-2964
DES Web site: **www.des.nh.gov**

NEW HAMPSHIRE DEPARTMENT OF
Environmental Services

Report Form for Water Conservation Plans Small Community Water Systems February 2006*

PROJECT NAME:	**W&E CWS - Well No. 6**
	Lakeview Farm
TOWN/CITY:	**Windham, New Hampshire**
DATE:	**February 2006**
EPA ID #	**2542030**

PURPOSE: This form will provide 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 Department 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 Department 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 *italics.* Copies of this form, the rules, a summary of the rules, educational materials for public distribution, and other useful publications may be found at the following website: http://www.des.nh.gov/h2o_conservation.htm.

INSTRUCTIONS:

A. Obtain copies of the following materials from either the Department's Public Information Center (603) 271-2975 or by direct download from the above website.

- Administrative Rule, Env-Ws 390, *Water Conservation Rules.*
- The 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 Department.

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 *italics.*

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
Water Supply Engineering Bureau
29 Hazen Drive, 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 October 2005. 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 Department? *(If your answer is **NO**, please contact the Department at 603-271-2947 before you proceed further.)*

YES **X** NO Final Well Siting Report Completed

(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**
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 Department?)*

Name:	**Donald Ware, P.E.**
Address:	P.O. Box 1947, Merrimack, NH 03054-1947
Company:	**Pennichuck East Utilities**
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.

Name:	
Address:	**N/A**
Company:	
Phone Number:	

Section 2.0 Metering & 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 *(All systems must complete Sections 3.0-6.0)*

Is this a new water system? YES____ NO_ **X** __ (If **YES**, go to Sections 2.2, 2.3d and 2.3e)

Is this a new source for an existing water system? YES_ **X** __ NO___ (If **YES**, go to Section 2.3)

2.2 Metering of New Small Community Water Systems

(Meters must be installed on all sources of water and at each service connection on new small community water systems.)

2.2a 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.)*

2.2b 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.)*

2.2c 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.)*

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.)*

Pennichuck Water Operations will calculate the percentage of unaccounted-for-water percentage at least twice a year. Unaccounted- for- water is the difference between the total water pumped from the pump station, and the customer metered usage. One calculation will be during a winter month and the other during the month of May, June, July or August. If the percentage of unaccounted- for-water vs. pumped water exceeds 15%; Pennichuck Operations will develop a response plan (with a leak detection survey) to be submitted to the NHDES WSEB 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 possible 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 80+/- psi. The pressure at the highest home will be 40 +/- psi. The lowest unit with the highest pressure is the pump house. The pressure leaving the pump house is adjustable using the booster pump controller.

Section 4.0 Conservation Rate Structure

(Unless a small community water system is owned by a landlord who supplies water only to tenants and includes water service in a rental fee, all new small community water systems must adopt a rate structure, and existing systems that either add new service connections or choose to meter existing service connections as part of leak monitoring must adopt a rate structure , as described in Env-Ws 390.04 & .05.)

4.1 Is this system owned by a landlord who supplies water only to tenants and includes water service in a rental fee? If **YES**, go to section 5.0; if **NO**, go to section 4.2.

YES___ NO_ **X** __

4.2 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.)*

Pennichuck East Utility Water Rates

SCHEDULE GM-B SYSTEM RATES APPROVED BY THE NHPUC

The New Hampshire Public Utilities commission (NHPUC) approved a 9% temporary rate increase for service rendered effective June 16, 2005. The following schedule shows the rates for each category of service:

MONTHLY GENERAL METERED RATE

Service Area: Town of Litchfield including the Sawmill service area.

METER	RATE
5/8	$ 15.15
3/4"	$ 29.17
1"	$ 45.65
1 1/2"	$ 92.79
2"	$ 149.61
3"	$ 291.65
4"	$ 456.42
6"	$ 912.82
8"	$1,140.07
10"	$1,291.58

In addition to the standard customer charge, the monthly volumetric charge is:

$4.68 per 100 Cubic Feet
100 Cubic Feet = 748 gallons

MONTHLY PRIVATE FIRE PROTECTION

The charge shall be determined by the size of the pipe entering the property as follows:

SIZE	CHARGE
1-1/2" connection	$ 7.31
2" connection	$ 13.01
3" connection	$ 29.29
4" connection	$ 52.07
6" connection	$117.18
8" connection	$208.30

For each private hydrant, whether connected directly to the Company's mains, or to the customer's private fire protection distribution system...$84.62 monthly

Customers may direct any questions concerning rates or service to Pennichuck at its company's Customer Service Department, PO Box 1947, Merrimack, NH 03054-1947, by calling 603-882-5191 or 1-800-553-5191or via email at customer-service@pennichuck.com. Customers may also contact the NHPUC at their offices at 21 S. Fruit Street, Concord, NH 03301, or by phone at 1-800-852-3793.

Section 5.0 Public Notification

(Within 7 days of submitting the final water conservation plan for review by the Department 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 on the website noted at the beginning of this form. 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 Department and provide them with Department 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.

Mr. David Sullivan Town Administrator Town of Windham P.O. Box 120 Windham, NH 03087-0120	Cliff Sinnott Executive Director Rockingham Planning Commission 156 Water Street 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 the Department website. 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 or with monthly water bills. Educational outreach materials will be obtained from AWWA or NHDES WSEB.

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: 2/8/06

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.