The State of New Hampshire

Department of Environmental Services

January 3, 2007

Jon Warzocha
Horizons Engineering
34 School Street
Littleton, New Hampshire 03561

Subject: CWS MONROE: Monroe Water Dept.; EPA ID: 1591010
Water Conservation Plan; NHDES #997182

Dear Mr. Warzocha:

The purpose of this letter is to conditionally approve the Water Conservation Plan for the subject water system. This decision is based on a review of your December 7, 2006 Water Conservation Plan, submitted to meet the requirements of New Hampshire Administrative Rule Env-Ws 390, *Water Conservation.* This approval is subject to the following conditions.

1. The educational outreach materials for the farms connected to the water system shall include the water efficiency fact sheet for agricultural irrigation practices, WSEB 26-5. This fact sheet can be found at the Department of Environmental Services (NHDES) website: http://www.des.state.nh.us/h2o_conservation.htm.
2. Within one year of the approval of the new bedrock well, the water system must install meters on the new well and GPW 1 [GPW 2 is already metered.] and conduct a comprehensive leak detection program in accordance with Env-Ws 390.04(g)(h) & (i). The water system must also submit a response plan to NHDES in accordance with Env-Ws 390.04(j) if the percentage of unaccounted for water exceeds 15%. The percentage of unaccounted for water can be determined by comparing the total volume of metered water discharged from the wells to the total amount of metered water consumed by customers. The water system should ensure that municipal customers who are not charged for water use (such as school or town offices) are included in the unaccounted for water survey. If these entities are not metered, the water system should estimate their water use so that an accurate unaccounted for water percentage can be determined.
3. The results of the survey outlined in (2) above must be submitted to NHDES within one year of the approval of the new bedrock well.

The water system may use the attached ongoing compliance form to document the results of the leak detection survey and unaccounted for water use.

The Water Conservation Plan shall be implemented when the new well is approved and connected to the water system. In addition to number (3) above, every three years from

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095
Telephone: (603) 271-2513 • Fax: (603) 271-5171 • TDD Access: Relay NH 1-800-735-2964
DES Web site: **www.des.nh.gov**

the date of this letter the water system shall supply 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.

Technical assistance related to water audits and leak detection, meter calibration, and/or estimating unaccounted for water may be obtained by contacting Derek Bennett at 271-4087, or dbennett@des.state.nh.us.

If you have any questions about this letter 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

Enclosure: Water Conservation Plan Ongoing Compliance Form

Cc: Jim Gill, Derek Bennett, WSEB
Robert Wormer, Monroe Water Department

horizons Engineering PLLC

RECEIVED
DEC 12 2006
DES/WSEB
By_____

LETTER OF TRANSMITTAL

To:

Diana Morgan
NHDES-WSEB
PO Box 95
29 Hazen Drive
Concord, New Hampshire 03301

From:	**Date:**	**Project Name/Proj. No:**
Sylvia Clark	December 7, 2006	Monroe/05200

Subject:

COPIES	DESCRIPTION
1	Copy of Water Conservation Plan and supporting documention
1	Copy of return receipts

For your records.
Thanks Diana,
-Sylvia

\\Fileserver\proj_2004\Prototype\DOCS\TRANSMIT\Transmittal Standard Template.doc

34 School Street
Littleton, NH 03561
Tel. (603) 444-4111
Fax. (603) 444-1343

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City, State, ZIP+4: Bethlehem NH 03574

PS Form 3800, June 2002 — See Reverse for Instructions

horizons Engineering PLLC
34 School Street
Littleton, NH 03561
(603) 444-4111

TOWN OF MONROE WELL SITING
Monroe, New Hampshire
Tax Map U-2, Lot 25A
Water Conservation Plan Receipts
Project No. 05200

NEW HAMPSHIRE DEPARTMENT OF
Environmental Services

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

PROJECT NAME ~~Town of Monroe Well Siting~~

TOWN/CITY Monroe **DATE** 11/22/2006

EPA ID # 1591010

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___ 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 Jon L. Warzocha or Sylvia A. Clark
Address 34 School Street, Littleton, NH 03561
Company Horizons Engineering, PLLC
Phone Number (603) 444-4111

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

Name Town of Monroe
Address PO Box 63, Monroe, NH 03771
Company
Phone Number (603) 638-2644

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 Paul Gibson, Water System Operator
Address PO Box 63, Monroe, NH 03771
Company Town of Monroe
Phone Number (603) 638-2644

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 xx

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

Name
Address
Company
Phone Number

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 xx 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 ____ (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___ (If **YES**, you must complete **Sections 2.2, and 3.0 through 6.0**)

2.2 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 that do not meet the definition of 2.1a or 2.1b above.)

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. www.awwa.org/bookstore)

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 Water Audit and Leak Detection Program and Estimating Unaccounted-For Water

Describe below the system's water audit and leak detection program and 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 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 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.)

2.3 Existing Small Community Water Systems, New or Existing Water Systems Owned by a Landlord Who Supplies Water to Tenants and Includes Water Service in a Rental Fee, and New or Existing Water Systems for Apartment-Style Housing

(If no further expansion of an existing small community water system is planned, or this is a new system that meets the definition in Section 2.1 (b), 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 2.3d], or
2. Conduct a comprehensive leak detection survey every two years [See section 2.3e].

If further expansion of an existing 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.)

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

YES___ NO_xx

If **YES,** your system must estimate unaccounted-for water annually, complete sections 2.3b, 2.3c and 2.3d. If you answered **NO,** your system must perform a leak detection survey every two 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. www.awwa.org/bookstore)

Individual source meters will be utilized for measuring flow from the wells. No new service connections are being proposed, however, if additional units are added, they will be equipped with individual meters. Existing service connections are equipped with individual meters. Installation and maintenance of the meter(s) will comply with procedures described in "Manual of Water Supply Practices, Water Meters" from the American Water Works Association. Three flow meters (one for each source; Well #1, Well #2, and Well #3) will be placed inside the pump house.

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.)

The source meters at the Town of Monroe Water System will be read at a minimum every thirty (30) days and the service meters will be read every ninety (90) days.

2.3d Estimating Unaccounted-For Water

Describe below the system's water audit program and 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. (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 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.)

Estimates for unaccounted-for water will be performed at the Town of Monroe Water System at least once a year using protocols and procedures described in "Manual of Water Supply Practices, Water Audits, and Leak Detection". The Water System Operator will be responsible for estimating the unaccounted-for water. This will be accomplished by comparing the total volume of usage read at the service meters with the volume read at the source meters. If the percentage of unaccounted-for water exceeds 15% of the total water introduced to the Water System, the Water System will submit a response plan to the Department within 60 days. The Water System Operator will be responsible for preparing and submitting the response plan.

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 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)

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_xx

Pressure reduction is not feasible for this system due to relatively low elevation differential, no elevated atmospheric storage, and the presence of one presure zone.

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.)

The existing system has individual service meters that are currently read every ninety (90) days. The new well is part of the existing Small Community Water System that charges users based on a cost per gallon fee. If users use more or less water, it is revealed in the amount they are charged on their quarterly bill.

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.

Please see attached.

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.)

DES fact sheets (Domestic Indoor Use & Outdoor Use) will be sent out along with the water bills to water system customers. The water system operator will be responsible for making sure the information gets sent with the bills. The water bills are sent on a quarterly basis, however, the fact sheets will be sent on a bi-annual basis, first in January and again in July.

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 Sylvia A. Clark

Date 11/22/06

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.