



The State of New Hampshire  
*Department of Environmental Services*



Michael P. Nolin  
Commissioner

April 11, 2006

Jack McKenna  
HYDROTERRA Environmental Services  
272 ½ Dover Point Road  
Dover, New Hampshire 03820

**Subject: CWS LOUDON: South Village Road; EPA ID: New System  
Proposed Bedrock Well (BRW) 1; NHDES #997029**

Dear Mr. McKenna:

The purpose of this letter is to conditionally approve your March 1, 2006 revised Preliminary Report and to approve your March 1, 2006 Water Conservation Plan. These materials were submitted to meet the requirements of New Hampshire Administrative Rule Env-Ws 378, *Site Selection of Small Production Wells for Community Water Systems* and Env-Ws 390, *Water Conservation Rules*. Approval of your Preliminary Report is subject to the conditions listed below.

**Water Conservation:**

The March 1, 2006 Water Conservation Plan (WCP) for the subject water system is approved as proposed. The Plan shall be implemented when the new well is approved and 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.

**Preliminary Well Siting Report Approval:**

**Condition:**

- The water withdrawn from the well during the pumping test must be discharged as indicated in your revised report, providing that location is at least 75' from surface water.

Within 60 days of receipt of final approval for the subject wells the water system must submit an emergency plan, in accordance with New Hampshire Administrative Rule Env-Ws 360.15. This plan must continue to be updated and submitted to New Hampshire

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Department of Environmental (NHDES) in March once every 6 years. This regulation also requires the plan be reviewed annually by the system and updated as needed. Additionally, the plan will be a checklist item during each sanitary survey and lack of one will be a survey deficiency. Guidance documents and other emergency planning information are available on our website at:

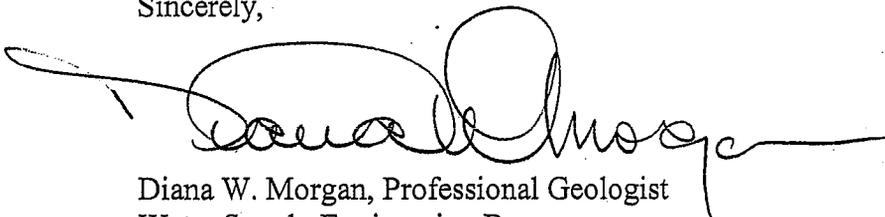
<http://www.des.state.nh.us/wseb/EmergencyPlanning/index.asp>. You may contact Johnna McKenna at 603-271-7017 or [jmckenna@des.state.nh.us](mailto:jmckenna@des.state.nh.us) for more information or assistance in completing emergency planning for your water system.

A groundwater discharge permit must be obtained from NHDES prior to conducting a pumping test. Contact Mitch Locker at 271-2858 or email him at [mlocker@des.state.nh.us](mailto:mlocker@des.state.nh.us) for more information. An application form may be found online at <http://www.des.state.nh.us/orcb/doclist/temporary.pdf>.

The Department is strongly encouraging applicants developing new sources of water for community water systems to collect a water quality sample for perchlorate from each proposed new source during the withdrawal test required by the new source approval process. New Hampshire is currently developing a health standard for this constituent. Although this is not required by law or regulations at this time, the State or USEPA may adopt standards in the future, and knowing if this chemical is present in a proposed water supply may affect your approach to developing a new source of water. Other states have recently adopted varying health standards for perchlorate in drinking water. Please note that many laboratories do not conduct perchlorate analysis. To assist you in identifying a laboratory that can complete this analysis, the New Hampshire Department of Environmental Services refers you to a list of laboratories certified by Massachusetts to complete perchlorate analyses at [www.mass.gov/dep/brp/dws/files/perclab.doc](http://www.mass.gov/dep/brp/dws/files/perclab.doc).

Please notify NHDES at least one business week, and preferably two, before the start of the pumping test. If you have any questions about this letter or any other well siting issues feel free to call me at 271-2947 or email me at [dmorgan@des.state.nh.us](mailto:dmorgan@des.state.nh.us).

Sincerely,



Diana W. Morgan, Professional Geologist  
Water Supply Engineering Bureau

Cc: Jim Gill, WSEB  
Julie Wilcox, Volunteers of America



**Report Form for  
Water Conservation Plans  
Small Community Water Systems  
October 2005\***

rec'd 3/1/06

**PROJECT NAME:** Volunteers of America – HUD Elderly Housing Project

**TOWN/CITY:** Loudon **DATE:** 2/15/05

**EPA ID #:** \_\_\_\_\_

**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](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 \_\_\_ 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: Julie Wilcox  
Address: 14 Main Street – Suite 205, Brunswick Maine  
Company: Volunteers of America  
Phone Number: (207) 373-1140

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

Name: Same as Above  
Address: \_\_\_\_\_  
Company: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

**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: **To be designated later** (will be a certified operator would be hired by the owner)  
Address: \_\_\_\_\_  
Company: \_\_\_\_\_  
Phone Number: \_\_\_\_\_

**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 - Will a HUD control Housing Development

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

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
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  (If YES, go to Sections 2.2, 2.3d and

2.3e) Is this a new source for an existing water system? YES  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.)*

**The piping from the well will be 3" dia PVC. The connection to the well pump will be metered and controlled by a system control panel located in the pump house. The meters in the pump house will be sized for 50 gpm.**

**The proposed housing development will be landowner controlled (rental units) so there will be only one service connection which will be metered and located in the mechanical room of the housing building. No separate meters will be installed in each housing unit.**

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.)* **Once a every 30 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? **NA**

YES \_\_\_ NO \_\_\_

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. **NA**

**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.)* **NA**

**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.)* **NA**

### 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.)*

**Once a year the total well flow volumes will be compared to expected water use based upon number of active housing units. This work will be performed by a certified operator.**

### 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 .)*

**Once a year, the property owner will conduct a water audit. This audit will consist of reviewing all meter flow records, an inspection of the pump house and system controls, and a re-calculation of expected water use based upon number of active housing units. This work will be performed by a certified operator.**

### 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

**The pump house control system will allow for variable pressure setting pending on time of day and demand.**

### 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

**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.)*

### **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.

### **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.)*

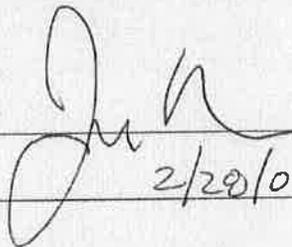
**The person who will be responsible for the education outreach and /or public posting, if required, will be the property owner - Julie Wilcox. The outreach program will consist of sending educational info to the customers. This information will included NHDES facts sheets such as the Water Efficiency Overview, Domestic Indoor and Outdoor Users, Domestic Water Audit and Water Conservation at Home. The information may also include general information on the property well site and water use. This information will be sent out every 3 years with the wellhead protection materials.**

**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: \_\_\_\_\_

  
2/28/06

**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.