

April 25, 2006

Fred Malatesta
Lakes Region Water Company, Inc.
P.O. Box 389
420 Governor Wentworth Highway
Moultonborough, NH 03254

**Subject: CWS TUFTONBORO/WOLFEBORO: Hidden Valley/Mason;
EPA ID: 2372020
New Bedrock Well 5; NHDES #996114**

Dear Mr. Malatesta:

The purpose of this letter is to conditionally approve the subject well for the Hidden Valley/Mason system in Tuftonboro/Wolfeboro. This decision is based on a review of the April 14, 2006 final well siting report and the March 16, 2006 Water Conservation Plan submitted to meet the requirements of New Hampshire Administrative Rules Env-Ws 378, *Site Selection of Small Production Wells for Community Water Systems* and Env-Ws 390, *Water Conservation Rules*.

Water Conservation Plan Approval:

The March 16, 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. The attached on-going compliance form for your system's WCP is provided to assist in tracking performance of the provisions of your WCP and reporting purposes to NHDES.

Well Siting Approval:

The new well is approved subject to the conditions listed below.

- Since the projected 180-day drawdown in BRW 5 is approximately 270 feet below the top of the casing (btoc), the permanent pump shall be installed in the well at an elevation of at least 300 feet btoc.
- Treatment for manganese, as approved by Water Supply Engineering Bureau, shall be installed upon connection of the well to the water system.
- For the first six months that this new source is connected to the distribution system, the system shall perform monthly source sampling for Total Coliform and E. Coli. See the enclosed water quality monitoring form.
- NHDES records indicate that the water system is not currently a registered water user, yet meter readings indicate total water use for your system is greater than 20,000 gallons per day (gpd) when averaged over seven days during specific times of the year; therefore, you must register and report your water use to the NHDES Water Use Registration Program. Contact Deb McDonnell at 603-271-4086 or by email at dmcdonnell@des.state.nh.us for information about registering your water use. Additional information can be found at <http://www.des.state.nh.us/factsheets/geo/geo-4.htm>.

Please note that the emergency plan must be updated to reflect the addition of the new well. This plan must continue to be updated and submitted to NHDES in March once every 6 years. The regulation (Env-Ws 360.15) requires the plan to 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 at the following website: <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 for more information or assistance in completing emergency planning for your water system.

A copy of this letter should be kept on file with the water system's records for future reference and as an aid to meeting the NHDES source water protection requirements.

Please note that the wells must be connected to a distribution system in accordance with Env-Ws 372, *Design Standards for Small Public Drinking Water Systems*. See the enclosed connection requirements fact sheet for more information.

Source Specifications:

Well Number	Well Status	Permitted Production Volume (PPV)	Sanitary Protective Area Radius	Wellhead Protective Area Radius	Source Description
BRW 5	New Well on Existing System	14,400 Gallons	150 feet	1,500 Feet	BRW 5, 2168' NE of Hidden Valley pumphouse

The previous table outlines the specifications for the new well. The Permitted Production Volume (PPV) is the maximum volume that may be pumped in any 24-hour period. The PPV for the well is as shown above. The total volume withdrawn from the well in any 24-hour period may not exceed 14,400 gallons.

The sanitary protective area for the new well is a circle, centered on the well, with the radius listed in the above table. The sanitary protective area shall remain in a natural state and under the water system's control at all times. Please note that NHDES may initiate enforcement action if the system does not maintain the SPAs in a natural state.

The Wellhead Protection Area for the new well is a circle, centered on the well, with the radius shown above. This is the area within which educational materials must be periodically distributed as part of the wellhead protection program. The first round of educational materials must be distributed within **3 months** of connection of the new source to the distribution system and every 3 years thereafter.

Chemical Monitoring Program:

Well Number	Well Status	Laboratory Name and Sample Numbers
BRW 5	New Well on Existing System	NHDES: A97676-1, 2, 3, 4 NHDES: B1434-1 A&L: 23725

The September 15, 2005, November 21, 2005 and the February 17, 2006 water quality sample results for the new well will be forwarded to the NHDES Chemical Monitoring Program. The sample identification numbers are listed in the table above. Chemical Monitoring staff will be contacting you shortly with a Master Sampling schedule. You must add a sampling tap to the new well and you must contact staff so that the schedule will accurately reflect the correct sampling locations.

If you have any questions about the Chemical Monitoring requirements, contact Allyson Gourley at 271-0655 or by email at agourley@des.state.nh.us. Please note that NHDES may initiate enforcement action if the system fails to implement a chemical monitoring program that includes the new wells.

If you have any questions about this approval or any other well siting issues feel free to call me at **271-3918** or email me at sroy@des.state.nh.us.

Sincerely,

Stephen Roy, PG
Water Supply Engineering Bureau

Fred Malatesta, LRWC
Hidden Valley / Tuftonboro
April 25, 2006
Page 4 of 4

Cc: Jim Gill, WSEB

Allyson Gourley, Kevin Riel, Laurie Cullerot, Johnna McKenna, Danielle Mann,
Barbara Davis, Deb McDonnel; NHDES

Encl. WCP compliance form and cover
Conditional Water Quality Monitoring Form
Connection Requirement Fact Sheet

P.O. Box 389
Moultonboro, NH 03254

Phone: 603-476-2348
Fax: 603-476-2721

**LAKES REGION
WATER CO.**

Fax

To: Steve Roy	From: Taryn
Fax: 271-0656	Date: March 16, 2006
Phone: 271-3918	Pages: 21 including this cover page
Subj: Water Conservation Report	CC:

Comments: This is the final water conservation report that was sent out via certified mail, as you have requested.



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

PROJECT NAME Hidden Valley Proposed BRW #5

TOWN/CITY Tuftonboro **DATE** 3/01/06

EPA ID # 2372020

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 Fred Malatesta
Address PO Box 389, Moultonborough, NH 03254
Company Lakes Region Water Co.
Phone Number (603) 476- 2348

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

Name Thomas Mason Sr.
Address PO Box 389, Moultonborough, NH 03254
Company Lakes Region Water Co.
Phone Number (603) 476- 2348

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 Fred Malatesta
Address PO Box 389, Moultonborough, NH 03254
Company Lakes Region Water Co.
Phone Number (603) 476- 2348

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
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 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 Meters already exist in all residences w/in system.

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)

All service connection meters are 5/8" and they already exist.

Well source meters are 1".

The source flow of 1" meters is 3/4-50g/m.

The source flow of 5/8" meters is 1/4-20g/m.

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 are read 2X per week as part of our leak detection program.

Service meters are read every 90 days for billing purposes & maintenance.

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.)

A once per year water audit is performed calculating usage at service & source meters. If unaccounted-for water exceeds 15% a response plan would be developed in accordance with ENV-WS 390.05(J) & (K) and submitted to DES for approval.

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)

The Lakes Region Water Co certified system operator is responsible for the system leak detection program twice per week. Source meters are read and compared to previous readings taking into account seasons, vacations, etc. These readings, if exceptional trigger a field search for leaks. This field search consists of shutting street by street sections of valves to show leaks and house to house searches to find leaks. Once leaks are found they are repaired immediately.

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 reduction is not necessary due to the limited source capacity in the present system.

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.)

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 Tuftonboro Board of Selectmen

Town of Wolfeboro Board of Selectmen

Lakes Region Planning 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.)

Several meetings were held with the Hidden Valley Homeowners Association. From these meetings a plan was developed that is centered from the board sending a Spring '06 newsletter stressing conservation and by posting fact sheets at prominent places. Lakes Region Water will also send informational DES fact sheets stressing homeowner water conservation along with water bills.

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 *[Handwritten Signature]*

Date 3/1/01

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.

Waiver Application

Project Name _____ Town/City _____

Date _____

Which section of the rule are you requesting be waived? Env-Ws 390 _____
Specifically, the requirement that states:

Explain why this requirement needs to be waived. Also describe what hardship would be caused if the rule were adhered to. Provide diagrams where helpful.

Explain an alternative solution in detail. Provide diagrams where helpful.

Explain how the alternative would adequately address water conservation measures as required by the rule.