

The State of New Hampshire
Department of Environmental Services

Thomas S. Burack, Commissioner

*Celebrating 25 Years of Protecting
New Hampshire's Environment*



WATER CONSERVATION PLAN APPROVAL

April 19, 2012

Marian Spahn, President
Hadleigh Wood Adult Community Condo Assoc
19B Hadleigh Rd.
Windham, NH 03087

**RE: Windham– Hadleigh Woods Condominium Association (PWS ID: 2542160)
Water Conservation Plan, March 16, 2012, NHDES # 999629**

Dear Ms. Spahn:

On March 16, 2012, the New Hampshire Department of Environmental Services (“DES”) Drinking Water and Groundwater Bureau received a water conservation plan (the “Plan”), dated March 1, 2012, for Hadleigh Woods Condominium Association located in Windham, NH. Pursuant to RSA 485:61 and Env-Wq 2101, community water systems seeking permits from DES for new sources of groundwater shall submit a water conservation plan to DES. Based on review of the Plan, DES has determined the Plan complies with Env-Wq 2101.06, *Requirements for Existing Small Community Water System*.

Pursuant to Env-Wq 2101.11, the Town of Windham and the Rockingham Planning Commission were provided the opportunity to comment on the Plan from March 23, 2012, the date of public notification, through April 13, 2012. DES received no comments.

On **April 23, 2015**, and every three years thereafter, the water system shall submit a detailed and completed compliance report form to DES documenting compliance with the Plan. Required information includes contact information for the water-system owner and for the individual responsible for carrying out plan tasks; dates tasks were performed; and data relating to meter reading, water audits, leak detection, and public outreach. A copy of the *Water Conservation Plan Ongoing Compliance Form* may be located by going to the DES website, www.des.nh.gov, clicking on the “A-Z List” in the top right corner of the page, and scrolling down to Water Conservation.

Hadleigh Woods Condominium Association shall report to the DES Water Use Registration and Reporting Program. DES has assigned **WUID 20934** to the facility. The total monthly volume withdrawn from each source shall be reported to DES on a quarterly basis. The first quarter report is due **May 1, 2012**. Hadleigh Woods Condominium Association shall register as a data provider and utilize the DES Onestop reporting tool to submit water use data. Instructions for using the tool are enclosed with this letter. If you have any questions about Water Use

www.des.nh.gov

29 Hazen Drive • PO Box 95 • Concord, NH 03302-0095

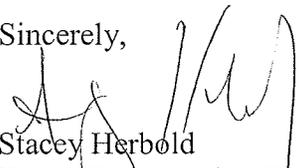
Telephone: (603) 271-2513 • Fax: (603) 271-5171 • TDD Access: Relay NH 1-800-735-2964

Registration and Reporting or registering as a data provider please contact Derek Bennett at 271-6685 or derek.bennett@des.nh.gov.

Revisions to the Plan shall not be implemented without further approval from DES.

Please feel free to contact me with any questions at (603) 271-6989 or via e-mail at stacey.herbold@des.nh.gov.

Sincerely,



Stacey Herbold
Water Conservation Program
Drinking Water and Groundwater Bureau
Department of Environmental Services

cc: Dianna Morgan, NHDES
Cliff Sinnott, Rockingham Planning Commission
Charlie Lanza, Lewis Builders
Selectman, Town of Windham

RCVD 3/16/2012



LEWIS BUILDERS
DEVELOPMENT, INC.

**PROPOSED HADLEIGH WOODS
WATER CONSERVATION PLAN**

**Lewis Builders Development, Inc.
Hadleigh Woods Replacement Well
Town of Windham, New Hampshire
EPA ID: 2542160**

Prepared for:

**MARIAN SPAHN, PRESIDENT
HADLEIGH WOODS CONDOMINIUM ASSOCIATION
21 HADLEIGH ROAD
WINDHAM, NH 03087**

Prepared by:

**CHARLES LANZA, PROJECT MANAGER
LEWIS BUILDERS DEVELOPMENT, INC.
54 SAWYER AVENUE
ATKINSON, NH 03811**

WATER CONSERVATION PLAN

HADLEIGH WOODS COMMUNITY

WATER SYSTEM

EPA ID: 2542160

Windham, New Hampshire

March 1, 2012

Reason for New Source

Over the past 8-10 years the backwashing of brine discharge from the existing water softener in the Hadleigh Woods Pumphouse has caused various secondary contaminant levels to exceed the secondary MCL's. This new well is being proposed to supplement the existing two wells and provide water quality that meets all drinking water secondary MCL standards.

System Overview

The Hadleigh Woods Community Water System (HWCWS) is a condominium owned water system and consists of 62 active adult (2) bedroom units. The existing system is comprised of two bedrock wells, the pumping and treatment station, and consists primarily of 4" PVC water mains and HDPE service lines to each residence. Water is pumped from the wells and softened at the pumping station before it enters a 25,000 gallon atmospheric storage tank. Water is booster from the atmospheric tank to the distribution system via (2) 7.5 hp booster pumps. The system operates on a demand basis. A pressure transducer controls well pump operation and pressure controls control booster pump operation.

Both of the two active bedrock wells were installed in 2002. Well 1 is a 6" diameter bedrock well and is 145' deep. Well 2 is also a 6" diameter bedrock well and is 125' deep. Both wells are equipped with a 20 gpm submersible pump and motor. Both wells yielded 19.5 gpm during their pumping test and were permitted for 19.5 gpm each.

The average daily water use is approximately 6,000 gallons per day and with irrigation is approximately 18,000 gallons per day.

There are no connections that use more than 20,000 gpd within this system.

Project Contacts:

Project Contact

Name: Charlie Lanza

Address: 54 Sawyer Avenue Atkinson, NH 03811

Company: Lewis Builders Development, Inc.

Phone Number: 603-362-5333

License/Certification Type & Number: Licensed Water Operator Grade II 2861

Project Owner.

Name: Marian Spahn, President

Address: 21 Hadleigh Road Windham, NH 03087

Company: Hadleigh Woods Condominium Association

Phone Number: 603-898-2540

Certified Operator.

Name: Richard Bibeau
Address: 54 Sawyer Avenue Atkinson, NH 03811
Company: Lewis Builders Development, Inc.
Phone Number: 603-362-5333
License/Certification Type & Number: Licensed Water Operator Grade II 2601

Water Meters

Source meters are installed on each of the previously approved sources. The existing meters are 1" Neptune T-10 positive displacement meters. They are original to the station and were installed in the 2002-2003 time frame.

There is also a 3" Neptune turbine meter on the outgoing line of the station. This is also original to the station.

All meters are read monthly and will be continued to be read at least every 30 days.

- Meters will be installed on all new sources prior to connection to the water system.
- Meters will be tested or replaced every 4 years per AWWA standards. As existing meters have not been tested/calibrated for 9 or 10 years, meters will be calibrated upon approval.
- Meters will be selected, installed and maintained as described in "Manual of Water Supply Practices, Water Meters Selection, Installation, Testing and Maintenance", document identification number AWWA M6, 1999 as required by EnvWq 2101.04 (d).

The 62 residential homes on the water system do not have individual consumption meters in place and do not have the resources to meter individual connections. Irrigation is also not metered.

The water system will perform leak detection to comply with Env-Wq 2101.06(b) rather than performing a water audit.

Leak detection Program

Overall the HWCWS is in good operating condition as it is only 10 years in age. Run times on the booster pumps are regularly checked for indications of leakage and the storage tank is above ground and located within the pumping station. The tank is regularly inspected for its overall condition.

A comprehensive leak detection survey will be conducted every two years, utilizing the services of a local leak detection company. LBDI will perform visual leak detection of the service connections, around and near the distribution system on a monthly basis. Detected leaks will be repaired within 60 days of discovery unless a waiver is obtained in accordance with Env-Wq

2101.09.

Leak detection will be conducted in accordance with procedures and protocols described in Chapter 3 and 4 of the “Manual of Water Supply Practices, Water Audits and Leak Detection” document identification number AWWA M36, American Water Works Association, 1999.

Consumption Management

Water consumption is not metered or billed.

The educational materials “Water Efficiency Practices for Domestic Indoor Water Use”, “Water Efficiency Practices for Outdoor Water Use” and “An Introduction to Water Use Management and Water Efficiency Practices” located at:

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-26-1.pdf>

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-26-2.pdf>

<http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/documents/dwgb-26-3.pdf>

These materials will be distributed annually and to all new members of the Hadleigh Woods Water Committee.

At the annual association meeting, board members will present water conservation and water use updates to keep residents informed of what is going on with the water system, including water use trends, needs for conserving water, etc.

Pressure Management

The water system was designed consistent with water system industry standards and regulation and consistent with other public health and safety considerations in regards to minimum and maximum operating pressures as required by (EnvWq 2101.04 (n)). Pressures in the system range from 50 to 80 psi.

Water Use Restrictions/Actions

The HWCWS implements water restrictions as needed. For example if there is a leak or over consumption where the storage tank is depleted the Board of Directors disseminate information and restrict water as needed.

The Hadleigh Woods Community is currently in the process of assessing their existing irrigation operation process, and during the coming irrigation season many processes are expected to be revised to ensure water conservation is achieved. Some of the changes currently being assessed are as follows:

- The current water irrigation schedule operates from April 15th to October 15th during 6 days per week. The HWCWS is currently looking at irrigating less frequently, such as twice per week. The new plan will look at irrigating based on lawn moisture, grass browning, and precipitation measurements to conserve as much water as possible.
- The HWCWS is looking into eliminating certain zones such as areas in the rear of units and areas that are “non-essential”. This will ultimately be decided based on field results and the ability to physically zone off certain areas of the irrigation system.
- The HWCWS is also looking at implementing various recommendations based on a meeting between the Hadleigh Woods Association and Derek Bennett of the NH DES. The implementation of these recommendations will be based on budget allowances and will be subject to the Condominium Association approving the measures.

NH DES Water Conservation Report

The water system will submit a form supplied by DES once every three years documenting how compliance with the requirements of Env-Wq 2101 is being achieved.

Activities outlined in this water conservation plan will be completed by the contracted water operator at the time of completion.

Public Notification

Within seven days of submitting the conservation plan to DES, the applicant shall provide a copy of the application and report via certified mail to the Town of Windham Administrator, and the Rockingham Planning Commission located in Exeter. The Town of Windham and the Rockingham Regional Planning Commission may provide the NHDES with written comments regarding the application within 21 days of receipt.

The information provided to the Town of Windham will include a summary of the requirements of Env-Wq 2101 and will request that the Town of Windham amend local site planning requirements to reflect the requirements of Env-Wq 2101 or to promote water efficiency.

Signed copies of the Certified Mail Return Receipts (the green card) will be forwarded to NHDES.

I certify that I have read this Water Conservation Plan, understand the responsibilities of the water system as referenced in the plan, and that all information provided is complete, accurate, and not misleading.

Signature Owner Name (print): MARIAN SPANX

System Owner Signature: Marian Spanx Date 3/14/12