



The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES



Thomas S. Burack, Commissioner

October 25, 2010

Mr. William S. Stack, PE
Steven J. Smith & Associates, Inc.
Pondside Place, 6 Lily Pond Road
Gilford, NH 03249

RE: The Village Homes at West Wynde, Moultonborough, New Hampshire (EPAID: New System)
Revised Draft Water Conservation Plan, September 9, 2010, NHDES #999393

Dear Mr. Stack:

The New Hampshire Department of Environmental Services (“Department”) has completed its review of a water conservation plan submitted by Steven J. Smith & Associates, Inc. on behalf of the Village Homes at West Wynde (VHWW) in Moultonborough, New Hampshire. The plan was received on September 22, 2010 and submitted to fulfill the requirements of Env-Wq 2101, *Water Conservation Rules*.

Public notification was completed on September 29, 2010 and recipients had an opportunity to provide comment until October 20, 2010. The Department did not receive any comments specific to the plan.

The purpose of this letter is to approve the Water Conservation Plan dated September 22, 2010.

Every three years from the date of approval, the water system shall supply the Department with documentation of compliance with the plan. This information shall be supplied on a form provided by the Department 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 meter reading, water audits, leak detection, public outreach, and the dates these tasks were performed.

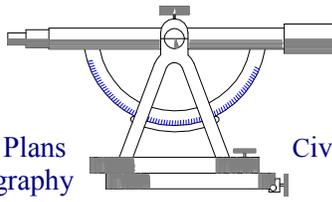
If you have any questions about this letter or any other water conservation issues please feel free to call me at **271-0659** or email me at ernst.kastning@des.nh.gov

Sincerely,

Ernst H. Kastning
Drinking Water and Groundwater Bureau

Cc: Derek Bennett and Diana Morgan, NHDES-DWGB

Steven J. Smith



& Associates, Inc.

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Subdivisions * Topography

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NHDES
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September 22, 2010
Job #10020

The purpose of this letter is to provide a revised Draft Water Conservation Plan for The Village Homes at West Wynde in Moultonboro, New Hampshire per your comments on the draft plan:

System Overview

Reason for new source: **Conversion of existing 14 retirement community residential units to 14 condominiums**

Number of residential connections: **14**

Description of any connections that receive more than 20,000 gpd: **None**

Water use trends with supporting data: **Existing Development – new community – weekly/monthly water use records available**

- Maximum day yield of existing sources based on 24 hour pumping: **Pending**
- Average daily water use: **4,200 gpd – design, 1031 average**
- Maximum daily water use: **4,400 pgd at irrigation**
- Seasonal trends in water use: **Irrigation adds to water use June – September**
- Minimum hourly flows (if available): **N/A**

Population Trends: **No change anticipated**

- Seasonal fluctuation: **N/A**
- Anticipated growth: **N/A**

System Side Management

Source Meters

Name designation of each water source:

- **The Source meter is installed and maintained in compliance with “Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing and Maintenance,” document identification number AWWA M6, American Water Works Association, 1999. The meter is a “Neptune 1” T-10 dated 03/99 #2925.**
- Last meter test date (if already installed) for each source: **N/A**

Frequency that source meters will be tested:

- **Once a year**

Frequency that source meters will be read:

- **Every 30 days (min) – currently read weekly**

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Service Meters

No individual unit service meters are proposed.

Breakdown of unmetered connections for each of the following customer classes:

- **Residential only – unmetered**

Proposed time frame for installing meters on unmetered connections:

- **Residential only – N/A**

Proposed rate of testing/change out by customer class (or distinguish by meter size):

- **Residential only – N/A**

Frequency that service meters will be read:

- **N/A**

Description of all methods used to read service meters:

- **N/A**

Estimating Unaccounted for water (non-revenue water)

As an existing small water system, West Wynde is choosing to conduct leak detention in lieu of water accounting and service meters are not proposed.

Most recent estimate of unaccounted for water and the year it was estimated:

- **N/A**

Frequency that unaccounted for water will be estimated:

- **N/A**

A response plan will be prepared and submitted to NHDES within 60 days if the percentage of unaccounted for water in the water system exceeds 15 percent of the total water introduced to the water system. The plan will identify how the water system intends to reduce the percentage of unaccounted for water to below 15 percent within two years.

Water Audit

The water system will have an ongoing water audit and leak detection program in order to keep the amount of “unaccounted for” water as low as possible. The certified operator or qualified professional shall implement the water audit once every 2 years.

Water audit will be calculated in accordance with “Manual of Water Supply Practices, Water Audits and Leak Detention” document identification number AWWA M36, American Water Works Association, 1999. Any leaks located by the leak detection survey shall be repaired within 60 days.

Most recent water audit differentiating between apparent and real losses:

- **N/A**

Frequency that water audit will be conducted:

- **N/A**

Leak Detection

Leak detection will be conducted in accordance with “Manual of Water Supply Practices, Water Audits and Leak Detention” document identification number AWWA M36, American Water Works Association, 1999. Leaks will be repaired within 60 days of discovery unless a waiver is obtained in accordance with Env-Wq2101.09.

Summary of findings for the most recent leak detection surveys:

- **None Completed**

Is it anticipated that future surveys will be conducted by an outside contractor:

- **Gilford Well and Pump Company**

Summary of distribution system: **Existing system – piping/pump house for the existing 14 residential connections was installed in 1998-1999, metered in pump house only.**

- Are pipe locations known? **No – A pipe location survey will be conducted prior to or in conjunction with the 1st leak detection survey and a distribution plan will be provided upon completion.**
- Breakdown of pipe material, age and length: **4” DI & ¾” Copper type “K”, 11 -12 year old**
- Availability of contact points and adequacy of spacing: **N/A**

Description of leak detection method (if in house): **N/A**

Percent of distribution system to be covered each year: **50 percent unless greater frequency is necessary**

Will zone meters be installed to assist with leak detection identification and location? **No**

Pressure Management

Existing minimum distribution pressure: **35 psi**

Existing maximum distribution pressure: **55 psi**

Intentional Water Loss

Are there “bleeders” used within the system at dead ends to improve water quality or prevent freeze up and if so what looking opportunities exist?

- **There is one blowoff valve that is periodically flushed at the end of the line. This line can not be reasonably looped back into end the distribution system.**

Are storage tanks intentionally allowed to overflow because of system hydraulics or water quality concerns and if so what opportunities exist for the installation of altitude valves or tank mixing systems?

- **There will be no storage tank overflows**

Consumption Side Management

Conservation Rate Structure

- **To be Determined – the NHDES will be notified once a rate structure has been developed**

Description of existing rate structure:

- **N/A**

Plan and timeframe to adopt rate structure in accordance with Env-Wq 2101 (within 5 years for existing systems):

- **To be Determined – a rate structure will be adopted prior to startup**

Current and proposed billing frequency:

- **To be Determined – the NHDES will be notified once a frequency is determined**

Will separate irrigation meters be installed?

- **Yes irrigation system is planned for development/ No separate metering proposed**

Will a seasonal rate structure be utilized in addition to the general rate structure?

- **No**

Educational Outreach Initiative

Materials that will be used:

- **The outreach program will consist of sending educational info to the customers. This information will include 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 at least once a year.**

Compliance

- **The water system will submit a form supplied to NHDES once every three years documenting how compliance with the water conservation plan is being achieved. Also all system maintenance and water conservation activities will be completed under the supervision of a certified system operator.**

If you have any questions regarding this submittal, please call me at 603-524-1468.

Sincerely,

William S. Stack, PE
Steven J. Smith & Associates, Inc.