HAMPSTEAD AREA
WATER COMPANY, INC

WATER CONSERVATION PLAN FOR THE ATKINSON CORE HAMPSTEAD AREA WATER COMPANY, INC.

IN ACCORANCE WITH WATER CONSERVATION RULES ENV-WS 390

Water System PWS ID #: 0112080

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Introduction:

The following document outlines the Hampstead Area Water Conservation Compliance Report in accordance to the requirements of Env-Ws 390, Water Conservation Rules. The portions of the Env-Ws 390 regulation that are applicable to the water system's are found mainly within section Env-Ws 390.05, Requirements For Existing Large Community Water Systems.

The Hampstead Area Water Company, Inc. is comprised of two existing large community water systems, one of which is in the process of constructing and permitting new water supply wells (Named 4E, FS1, MP2, SR3, and SR4) located in Atkinson, NH. This Conservation Plan is being submitted to the New Hampshire Department of Environmental Services (NHDES), as part of a Preliminary Hydrogeologic report that was prepared as part of the large community well siting and large groundwater water withdrawal requirements of regulations Env-Dw 302 and Env-Ws 388.

Preliminary Hydrogeologic reports prepared under either of these regulations sets must be submitted with a separate report (as prescribed in Env-Ws 390.10) on the applicant's status with respect to Water Conservation Rules. The Hampstead Area Water Conservation Rules Compliance Report follows. Note that the regulatory requirements in the following plan are italicized.

Part Env-Ws 390 WATER CONSERVATION RULES

Statutory Authority: RSA 485:61

Env-Ws 390.01 Purpose and Scope. The purpose of these rules is to establish water conservation standards as required by RSA 485:61.

Env-Ws 390.05 Requirements for Existing Large Community Water Systems.

(a) An existing large community water system shall implement the measures described in this section.

(b) Each large community water system shall install water meters within 3 years of obtaining approval for a new source of water that is subject to RSA 485:3 for all of the following:

(1) Public sector water users except firefighting;

Meters have already been installed on all Public Sector Water Users.

(2) Private water users; and

Meters have already been installed on all Private Water Users.

(3) All sources of water.

Meters are installed on the existing 14 bedrock water supply wells, and will be installed on the five new bedrock water supplies currently being permitted.

(c) The water system shall size the water meters required by (b), above, in accordance with the specifications of the manufacturer.

All water meters have been sized in accordance with the specifications of the manufacturer.

(d) In selecting, installing, and maintaining water meters, the water system shall comply with procedures and protocols described in "Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance," document identification number AWWA M6, American Water Works Association, 1999.

The Hampstead Area Water Company, Inc. water system will compile with procedures and protocols described in "Manual of Water Supply Practices, Water Meters-Selection, Installation, Testing, and Maintenance,"

document identification number AWWA M6, American Water Works Association, 1999.

(e) The water system shall read the water meters required by (b)(1) and (2), above, at least once every 90 days.

Hampstead Area Water Company, Inc. water system personnel will read the all meters installed on connections (water users) at least once every 90-days.

(f) The water system shall read the water meters required by (b)(3), above, at least once every 30 days.

The Hampstead Area Water Company water system personnel will read the all meters installed on water sources at least once every 30-days.

(g) The water system shall implement a water audit and leak detection program in accordance with "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999, within one year of obtaining approval for a new source of water.

The Hampstead Area Water Company, Inc. shall implement a water audit and leak detection program in accordance with "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999. This will be implemented within one year of obtaining approval for a new source of water.

(h) The water system shall repair all leaks identified by the activities required by (g) within 60 days of discovery unless a waiver is obtained in accordance with Env-Ws 390.09.

All leaks identified during the water audit and leak detection program will be repaired within 60 days of discovery, unless a waiver is obtained in accordance with Env-Ws 390.09.

(i) The water system shall estimate the volume and percentage of unaccounted-for water in the water system once every year using protocols and procedures described in "Manual of Water Supply Practices, Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999.

Hampstead Area Water Company, Inc. system personnel will conduct an annual estimate of the unaccounted-for water in the water system using protocols and procedures described in "Manual of Water Supply Practices,

Water Audits and Leak Detection" document identification number AWWA M36, American Water Works Association, 1999. Any backwash water incorporated into these calculations will only be used when the figures can be determined through deduction of metered raw water versus metered distributed water.

(j) The water system shall prepare and submit a response plan to the department within 60 days if the percentage of unaccounted-for water in the water system calculated pursuant to (i), above, exceeds 15% of the total volume of water introduced to the water system.

A response plan will be prepared and submitted by Hampstead Area Water Company, Inc. water system personnel if the annual estimate of unaccounted-for water exceeds 15%.

(k) The response plan prepared in accordance with (j), above, shall identify how the water system intends to reduce the percentage of unaccounted-for water to below 15% within 2 years, except for leaks that have been identified which must be repaired in accordance with paragraph (h).

The response plan will include how to reduce the percentage of unaccounted-for water to below 15% within 2 years.

(l) The department shall approve the response plan within 90 days if it contains recommended actions that comply with the requirements specified in (k), above.

No information required for this item.

(m) The water system shall implement the response plan in accordance with the approved schedule upon receiving approval from the department.

The Hampstead Area Water Company, Inc. will implement the response plan upon approval by the NHDES.

(n) The water system shall implement pressure reduction within one year of obtaining approval of a new source of water when:

(1) Technically feasible;

(2) Consistent with water system industry standards and regulations; and

(3) Consistent with other public health and safety considerations.

The water system personnel will implement pressure reduction within one year of obtaining approval of a new source of water when it is technically

feasible, consistent with water system industry standards and regulations, and consistent with other public health and safety considerations. Currently HAWC requires pressure reduction for any services greater that 80 psi. HAWC procedures will not allow service to be turned on until the PRV has been inspected. To date the Atkinson / Walnut Ridge Water System has three PRV's installed throughout the distribution system and approximately 50 service connections outfitted with PRV's

(o) The water system shall adopt a rate structure that promotes water conservation within 5 years of obtaining approval for a new source of water, as described below:

(1) The rate structure shall be based on:

a. A unit price of water; and

b. The amount of water used by each connection to the water system; and

(2) The unit price of water for residential customers shall:

a. Remain the same; or

b. Increase with the volume of water consumed.

The Hampstead Area Water Company, Inc. water system uses a rate structure that is based on a connection basis. The Hampstead Area Water Company, Inc. has a base charge of $100 per year and uses a rate structure of $ 3.71 per 100 cubic feet of water use.

(p) The water system shall complete a water conservation educational outreach initiative using materials prepared by the department as follows:

(1) The water system shall implement the applicable public notification and outreach requirements to municipal governments within its service area in accordance with Env-Ws 390.11; and

(2) The water system shall implement an educational outreach initiative for its customers to promote water conservation immediately upon obtaining approval for the new source.

The Hampstead Area Water Company, Inc. currently applies a seasonal water ban allowing outdoor watering only on even and odd days based on their address. Hampstead Area Water uses a website to provide conservation information to customers and visitors of the website. The website is as follows: www.hampsteadwater.com.

Every year Hampstead Area Water Company gives all their customers a Consumer Confidence Report. This report is generated by Charlie Lanza. With this report there is a water conservation section we have created that gives tips and suggestions to effectively promote water conservation. We also comply with Env-Ws 378.18 in sending out the Well Head Protection Mailings. These mailings include all of the DES required educational outreach materials.

Upon approval of the new sources Hampstead Area Water Company, Inc will comply with the educational outreach initiative for the new permitted sources.

(q) Activities completed in accordance with (b) through (p), above, shall be completed by water system personnel under the supervision of a certified operator pursuant to Env-Ws 367.

Activities outlined in this Conservation Plan will be performed by water system personnel under the supervision of a certified operator.

Env-Ws 390.11 Public Notification and Involvement.

(a) Within 7 days of submitting the report required by Env-Ws 390.10, the water user shall provide a copy of the application and report via certified mail to:

(1) The governing board of:

a. The municipality in which a proposed new source subject to Env-Ws 390.02 is located;

b. All municipalities that receive water from the water system; and

c. All wholesale customers of the water system; and

(2) The regional planning commission established in accordance RSA 36:46 for the location of a proposed new source.

Emery & Garrett Groundwater, Inc. will submit the Hampstead Area Water Company, Inc. Env-Ws Water Conservation Plan to the NHDES with a Preliminary Hydrogeologic Report and to the Town of Atkinson Town Clerk. There are no other municipalities or wholesale customers serviced by the Hampstead Area Water Company, Inc. water system.

(b) The water user shall provide the governing boards described in (a)(1), above, a summary of the requirements of Env-Ws 390, which will be prepared by the department.

The accompanying NHDES summary of Env-Ws 390 regulations will be submitted to the NHDES and Town of Atkinson Town Clerk along with the Hampstead Area Water Company, Inc. Env-Ws 390 Water Conservation Plan

(c) The water user shall request that the governing boards described in (a)(1), above, amend the site planning requirements to:

(1) Reflect the requirements of Env-Ws 390 when applicable; and

(2) Promote water conservation landscaping for new projects.

(d) Entities notified pursuant to (a), above, may provide the department with written comments regarding the application within 21 days of receiving the document from the water user.

Env-Ws 390.13 On-Going Compliance with Water Conservation Rules.

(a) The water user shall provide the following information on a form supplied by the department once every 3 years from the date of approval issued in accordance with Env-Ws 390.12:

(1) Name, mailing address, and daytime telephone number of the water user;

(2) Name, mailing address, and daytime telephone number and, if available, fax number and e-mail address of the individual responsible for maintaining compliance with Env-Ws 390 on behalf of the water user; and

(3) An explanation of how compliance with the requirements of Env-Ws 390.04 through Env-Ws 390.06 is being achieved.

(b) The department shall verify compliance with the requirements of Env-Ws 390 when conducting sanitary surveys of the water systems.

Env-Ws 390.02 Applicability.

(a) Pursuant to RSA 485:61, II, these rules shall apply to applicants for permits and applications for water withdrawal subject to the provisions of RSA 485:3, RSA 485:48, RSA 485-C:21, and section 401 of the federal Clean Water Act, including:

(1) New sources of groundwater for community water systems;

(2) New sources of groundwater for bottled and bulk water operations;

(3) New sources of groundwater that exceed 57,600 gallons over any 24-hour period; and

(4) New surface water sources of water supply associated with projects that require a water quality certification pursuant to Section 401 of the federal Clean Water Act.

(b) Pursuant to RSA 485:61, II, these rules shall apply to consecutive water systems receiving water from wholesale water systems subject to the requirements in (a), above.

(c) These rules shall not apply to consecutive water systems described in (b), above, if the consecutive water system is no longer adding additional connections to the water system.

(d) These rules shall not apply to new sources of water developed after the effective date of these rules that are replacements for existing sources of water, provided:

(1) The replacement source withdraws either less than or the same amount of water the existing source has historically been demonstrated to withdraw; and

(2) The existing source being replaced is abandoned in accordance with the requirements of We 100-1000.

Env-Ws 390.03 Definitions.

(a) "Agriculture water user" means all entities using water for operations at a farm as defined by RSA 21:34-a.

(b) "Automatic irrigation system" means an interconnected network of pipes, pumps, valves, and emitters designed to provide water to growing plant material, that is operated by a remote control valve controlled by a mechanical or electronic clock programmed to operate at specified times.

(c) "Bottled water" means water that is placed in a sealed container or otherwise packaged and offered for sale for human consumption or other consumer uses.

(d) "Bulk water" means water intended for potable uses which is transported in containers greater than 10 gallons for the purpose of treatment, packaging or human consumption.

(e) "Community water system" means "community water system" as defined in RSA 485:1-a, I, namely "a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents."

(f) "Consecutive water system" means a public water system that buys or otherwise receives some or all of its finished water from one or more wholesale systems for at least 60 days per year.

(g) "Groundwater" means "groundwater" as defined in RSA 485:C:2, VIII, namely "subsurface water that occurs beneath the water table in soil and geologic formations."

(h) "Industrial, Commercial, and Institutional" (ICI) water users means all water users that are not:

(1) Serviced by a community water system; or

(2) An agriculture water user.

(i) "Large community water system" means a public water system serving a population that exceeds 1,000 persons at least 8 months in a calendar year.

(j) "Large groundwater withdrawal" means any seasonal or year-long withdrawal from a wellhead installed after July 1998, not associated with a temporary, short-term use such as contaminated site management or construction de-watering, where the maximum 24-hour withdrawal is 57,600 gallons or more.

(k) "Loam" means a loose friable topsoil that combines relatively equal parts of sand, clay, and silt and that is generally free from stones, lumps, stumps, roots, weeds, or similar objects larger than 2 inches.

(l) "Public water system" means "public water system" as defined in RSA 485:1-a, XV.

(m) "Small community water system" means a public water system that is not a large community water system.

(n) "Surface water" means "surface waters of the state" as defined in RSA:485-A:2, XIV.

(o) "Unaccounted-for water" means water for which a specific use cannot be determined due to accounting procedure errors, data processing errors, meter inaccuracies, authorized water use that does not pass through meters, leaks, seepage, overflow, evaporation, theft, unauthorized water use, or malfunctioning distribution controls.

(p) "Water conservation" means "water conservation" as defined in RSA 485:1-a, XIX namely, "any beneficial reduction in water losses, waste, or use."

(q) "Wellhead" means the conveyance or conveyances through which, and location where, groundwater reaches the land surface such as the well casing, well field collector, or spring collection box.

(r) "Wholesale system" means a public water system that treats source water and then sells or otherwise delivers finished water to another public water system.

Env-Ws 390.09 Waivers.

(a) The rules contained in this part are intended to apply to a variety of conditions and circumstances. It is recognized that strict compliance with all rules prescribed herein might not fit every conceivable situation. Thus, persons subject to these rules may request a waiver of specific rules outlined in this part in accordance with this section.

(b) All requests for waivers shall be submitted in writing to the department and ~~shall~~ include the following information:

> *(1) The name, mailing address, and location of the water system requesting the waiver;*
>
> *(2) The name, daytime telephone number and, if available, fax number and e-mail address of the individual at the water system who is knowledgeable about the request;*
>
> *(3) A description of the facility or site to which the waiver request relates, including the population served by the water system;*
>
> *(4) A reference to the specific section of the rules from which a waiver is being sought;*
>
> *(5) A full explanation of why a waiver is necessary, including the hardship that will be suffered if a waiver is not granted;*

(6) A full explanation with supporting data of the alternative(s), if any, proposed to be implemented or used in lieu of the section's requirements; and

(7) A full explanation of how the proposed alternative(s), if any, is consistent with the intent of RSA 485:61.

(c) The department shall approve a request for a waiver upon finding that:

(1) The requirement for which a waiver is requested is not a statutory requirement; and

(2) The health and safety of the population served by the water system will not be compromised if the waiver is granted.

(d) No waiver shall be granted which, in the judgment of the department, contravenes the intent of RSA 485:61 or these rules.

(e) The department shall issue a written response to a request for a waiver within 45 days of receipt of the request. If the department denies the request, the reasons(s) for the denial shall be clearly stated in the written response.