The State of New Hampshire
Department of Environmental Services

Michael P. Nolin
Commissioner

May 20, 2005

LETTER OF DEFICIENCY #WSEB 05-049
Certified Mail #7099 3400 0003 0691 1987

Robert Griggs
Griggs Enterprises
P.O. Box 1019
Epsom, NH 03234

Subject: Barrington - Public Water System: Halcyon Hill (EPA #0153020)

Dear Mr. Griggs:

The records of the NH Department of Environmental Services (DES) show that Halcyon Hill is classified as a public water system (PWS), as defined by RSA 485:1-a. A PWS is defined as any water system supplying 15 or more services, or 25 or more people for 60 or more days per year. As such, the water system owner is required to submit samples according to the system's established Master Sampling Schedule to the State laboratory or a State-certified laboratory in compliance with NH Administrative Rules Env-Ws 321 through 330.

The Federal Environmental Protection Agency promulgated new radionuclide rules governing the acceptable levels of radionuclides in the Nation's community public water systems. Consequently, in 2004, DES adopted new rules in conformance with the Federal requirements. New maximum contaminant levels (MCLs) were established and additional requirements instituted for the regulated radionuclides. A new Uranium standard became effective in January 2004, and compliance was determined upon completion of four quarterly samples. As a result of the new regulatory requirements, DES calculated the running annual average (RAA) for your system's 2004 samples. The RAA is defined as the average of sample results collected over the last 12 month period. DES has determined that the following violation(s) has occurred.

SITE: 001 BRW / 150' SE or PS

Contaminant	**MCL (units)**	**Running Annual Average**	**Violation Y/N**
Compliance gross alpha	15 pCi/L	3.8 pCi/L	no
Uranium	30 ug/L	50 ug/L	**YES**
Radium 226 & Radium 228	5 pCi/L	0.6 pCi/L	no

Based on the RAA, as outlined above, your schedule has been modified as follows

Contaminant	**FRDS code**	**Next Sampling Quarter/Year**
Compliance gross alpha	4000	Quarter 1 / 2011
Uranium	4006	Quarterly starting Q 3 / 2005
Radium 226 & Radium 228	4010	Quarter 1 / 2014

DES believes the MCL violation(s) can be corrected and future violations prevented by taking the following actions:

1. **As soon as possible,** but no later than **June 20, 2005**, provide public notice of the violation(s) following the guidelines on the enclosed public notice handout. Continue providing public notice **each calendar quarter** for as long as the violation occurs; and

2. **Within 10 days** of providing notice, submit proof of public notice to this office following the guidelines on the enclosed public notice handout; and

3. Upon consumer request, you shall make alternate (*i.e.* bottled) water available for human consumption. If bottled water is used, the source must be an approved source, monitored in accordance with Env-Ws 389; and

4. **By June 20, 2005**, retain the services of a qualified consultant to address the water quality violation(s) and notify DES, in writing, of the name of the consultant hired. The consultant should review all existing water quality data prior to making recommendations for correcting the MCL violation(s); and

5. **By August 22, 2005**, submit to DES the consultant's report, which shall contain the consultant's evaluation of feasible options, cost estimates, justification and identification of which option the owner has selected to implement, along with an implementation schedule and final correction date to resolve the MCL violation(s). A maintenance schedule must be included if treatment is proposed; and

6. All engineering documents for the design of the selected option must be submitted and approved by DES prior to the commencement of any work on the system. Note that engineering plans for systems serving more than 50 service connections or 20,000 gpd must be stamped by a professional engineer; and

7. By the DES-approved correction date, take the corrective action as approved by DES. Notify DES in writing upon completion of the action(s) taken; and

8. Continue to sample in accordance with your Master Sampling Schedule (copy enclosed), which includes quarterly sampling for Uranium.

In the event compliance is not achieved within this period, DES may initiate formal action against you, including issuing an order requiring the deficiencies to be corrected, initiating an administrative fine proceeding, and/or referring the matter to the NH Department of Justice for imposition of appropriate penalties.

All information as requested above should be addressed as follows or faxed to (603) 271-5171:

Betsey McNaughten
Department of Environmental Services
Water Supply Engineering Bureau
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095

It is important to also note that while a Radon standard has not yet been finalized, your levels have ranged from 2,500 to 12,000 pCi/L. The most recent Federal standard proposed was 4,000 pCi/L if a Multimedia Mitigation Program (MMM) was in effect for that community. Without such an MMM program, the maximum acceptable Radon level in drinking water could not exceed 300 pCi/L.

For your information, a fact sheets on mineral radioactivity is available at: *http://www.des.state.nh.us/ws.htm*. This includes general information, health effects and removal options. Also enclosed is a summary of the expected content of consultant report submittals for your review. Please be reminded that proposed treatment alternatives should take into consideration all water quality parameters as well as current and future quantity needs.

In addition to your operator, assistance may be available to you through a variety of sources. DES staff member Bernie Lucey, P.E., may be able to answer questions concerning treatment for the aforementioned contaminant(s). He may be reached at (603) 271-2952 or via email at *blucey@des.state.nh.us*. Also, financial, managerial and technical assistance is available through either of two government funded technical assistance providers. These are NH Rural Water Association (1-800-556-3792) and RCAP Solutions, Inc. (1-800-488-1969). Health related questions may be directed to Dave Gordon of the DES Bureau of Environmental and Occupational Health whose number is (603) 271-4608. If you have any questions regarding this letter, please contact Selina J. Makofsky, P.G., at (603) 271-4109 or by email at *smakofsky@des.state.nh.us*.

Sincerely,

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Sarah Pillsbury, P.G., Administrator
Water Supply Engineering Bureau

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Encl: Master Sampling Schedule
Public Notice Form
Report Submittal Information sheet

cc w/ encl(s): Alec Bottomly, A.H. Bottomly Co., Primary Operator

cc: Gretchen R. Hamel, DES Legal Unit Administrator
Town of Barrington Health Officer
EPA, Region 1
File

ec: Bernie Lucey, P.E., DES
Dave Gordon, DES BEOH
John Lukin, NHRWA
Robert Morancy, RCAP Solutions, Inc.