



Loudoun County, Virginia

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Office of the County Administrator

1 Harrison Street, S.E., 5th Floor, P.O. Box 7000, Leesburg, VA 20177-7000

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At a business meeting of the Board of Supervisors of Loudoun County, Virginia, held in the County Government Center, Board of Supervisors' Meeting Room, 1 Harrison St., S.E., Leesburg, Virginia, on Wednesday, September 5, 2012 at 9:00 a.m.

IN RE: BOARD MEMBER INITIATIVE: TOWN OF HAMILTON – WELL  
MONITORING UPDATE

(This item was initiated by Supervisor Higgins.)

Mr. Buona moved that the Board of Supervisors confirm that Condition No. 2 of SPEX-2010-0005, (Hamilton Well No. 14) has been satisfied and that no further monitoring is required under that condition.

Seconded by Mrs. Clarke.

Voting on the Motion: Supervisors Buona, Clarke, Delgaudio, Higgins, Letourneau, Reid, Volpe and York – Yes; None – No; Supervisor Williams – Absent for the Vote.

A COPY TESTE:

  
DEPUTY CLERK FOR THE LOUDOUN  
COUNTY BOARD OF SUPERVISORS

(8-BOARD MEMBER INITIATIVE: TOWN OF HAMILTON – WELL MONITORING UPDATE)

**SPEX 2010-0005 WELL 14 STONE EDEN PROPERTY  
APPROVED CONDITIONS OF APPROVAL  
SEPTEMBER 8, 2010**

1. **Special Exception Plat.** The Special Exception use, structure or use for local governmental purposes (public well), shall be developed in substantial conformance with the revised Outlet Lot "A", Well Lot, Town of Hamilton Special Exception Plat prepared by Stantec Consulting Services, Inc., dated March, 2010 and revised through April 28, 2010, and the Revised 1993 Loudoun County Zoning Ordinance. Approval of this application for Tax Map /45//37//WELL/ (PIN # 454-20-8349) (the "Property") shall not relieve the applicant or the owners of the Property from the obligation to comply with and conform to any other Zoning Ordinance, Codified Ordinance, or applicable regulatory requirement.
  
2. **Pumping, Monitoring, and Mitigation Plan.** Use of the well on the Property ("Well 14"), including but not limited to pumping, monitoring, and potential mitigation of impacts due to the use of the well, shall be in accordance with the provisions of the accepted Pumping, Monitoring and Mitigation Plan (PMMP) for Town of Hamilton Well 14, dated October 15, 2007, and the attached Additional Requirements Regarding Pumping, Monitoring, and Mitigation for SPEX 2010-0005 Well 14 Stone Eden Property, provided that the attached Additional Requirements shall take precedence in the event of conflict with the PMMP. The Applicant shall continue monitoring of adjacent wells and shall provide quarterly reports, including all data collected and required to be collected, to the Loudoun County Department of Building and Development as established in the PMMP. In accordance with the attached Additional Requirements, such monitoring and reporting shall, if requested by the Board of Supervisors, continue beyond the initial 2-year monitoring period provided for in the PMMP and extend at least one year beyond the next one-year period October 1-September 30 that exhibits moderate drought conditions in Loudoun County as reported by the U.S. Drought Monitor (which is compiled and/or published jointly by the U.S. Department of Agriculture, the Department of Commerce/National Oceanic and Atmospheric Administration, and others, and is accessible on-line at <http://www.drought.unl.edu/dm/monitor.html>) following approval of SPEX 2010-0005. The Applicant shall also work with Loudoun County staff to develop and implement a reporting system to inform adjacent property owners of monitoring reports and investigate situations in which private wells may have been significantly impacted by Well 14.
  
3. **Noise Attenuation.** The Applicant shall install an earthen berm on the Property at least four (4) feet in height, between the generator and the northern property boundary. The berm will begin at approximately the eastern end of the existing control building and run approximately 70 feet in an easterly direction. The berm shall be completed within 60 days after issuance of the zoning permit for the generator. Until the berm has been completed, the generator shall not be operated for more than thirty (30) minutes per week, and any such operation shall be only between the hours of 10:00 a.m. and 4:00 p.m., Monday through Friday. After installation of the berm, the noise level of the generator will be tested to document that the noise level does not exceed 55 dBA, measured at the northern property line. Such measurement shall be continuous noise measured using a slow meter response of the sound level meter. Should additional noise mitigation be necessary, a board on board fence will be installed on the berm. The

Applicant will work with the County Urban Forester to provide suitable landscaping of the berm. The plantings may include a mix of low maintenance shrubs and trees and will consist of a planting density similar to a Type 2 side/rear buffer. The Applicant shall provide documentation that noise created by operation of the generator is in compliance with the noise standards of Section 5-1507 of the Revised 1993 Zoning Ordinance.

4. **Generator Test.** Generator tests lasting for one half-hour shall only be scheduled each week between the hours of 10:00 a.m. and 4:00 p.m., Monday through Friday.
5. **Lighting.** All lighting on the Site shall comply with the requirements of Section 5-1504 of the Revised 1993 Zoning Ordinance regarding Light and Glare Standards. All lighting shall be full cutoff and fully shielded lighting fixtures such that the light will be directed downward and away from adjacent properties and the direct glare of the bulb shall not be visible beyond the property line of the parcel, and the lighting system shall be operated by motion sensor. The lighting will be designed in such a manner as to minimize the impacts on the nearby residential uses.

**ADDITIONAL REQUIREMENTS REGARDING PUMPING, MONITORING,  
AND MITIGATION FOR  
SPEX 2010-0005 WELL 14 STONE EDEN PROPERTY**

The Town of Hamilton's Pumping, Monitoring and Mitigation Plan (PMMP) for Well #14, dated October 15, 2007, with respect to the operation of the well approved pursuant to SPEX 2010-0005, shall be subject to the following additional conditions and requirements for the purpose of enabling remedial action to avoid, or mitigate any impact of, interruption in water service for any neighboring residential supply well resulting from the Town's use of Well #14.

1. **Point of contact.** The Town will coordinate with the County to establish a point of contact with the Director of the Department of Building and Development, or his designee, to whom homeowners may report adverse impacts to their wells. Such contact information for the County and the Town shall be posted on the Town's web site.
2. **Investigation of Homeowner Reports.** When a suspected problem with a well is reported to the designated County office, the first step will be to determine whether or not the problem results from the use of Well #14. This determination will be made by the County and representatives of the Town based upon an analysis of the PMMP monitoring data and the nature and scope of the reported problem. Every effort will be made to initiate the data analysis within 24 hours of when the report is received. If the problem is determined to result primarily from the use of Well #14, appropriate remedial action will be undertaken.
3. **Posting of Data.** Information regarding the PMMP and Monitoring Reports will be posted on the Town's web site.
4. **Duration of Monitoring and Mitigation.** The monitoring program provided for under the PMMP will continue for at least two (2) years from the time of pumping startup at Well #14, namely until October 6, 2011. At the end of the said two years, the Town of Hamilton will submit a groundwater monitoring report (the "2-Year Report") to the Loudoun County Building and Development Office. The 2-Year Report will include all data collected during the monitoring program from its inception, as well as a professional opinion, supported by detailed hydrogeological analysis, as to the nature and extent of apparent impacts, if any, to the neighboring residential supply wells. The 2-Year Report will include a recommendation, based upon the data collected during the 2-year monitoring period, of whether additional monitoring beyond the required 2-year period appears warranted. After receipt of the 2-Year Report, the Board of Supervisors may request the Town to continue the monitoring and mitigation for an additional period in accordance with and under the terms as set forth in the following paragraph 5.
5. **Continuation of Monitoring and Mitigation through drought conditions.** If requested by the Board of Supervisors in accordance with paragraph 4 above, the Town will perform additional monitoring, beyond the initial 2-year monitoring period, to

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continue and extend at least one year beyond the next one-year period, October 1-September 30, that exhibits moderate drought conditions in Loudoun County, as defined in Condition 2 of SPEX 2010-0005, provided that the County reimburses the Town for all monitoring costs incurred for monitoring beyond the initial 2-year monitoring period required by paragraph 4 above. The County reimbursement shall be for only the costs of the monitoring at the frequency provided for in section 4.5 of the PMMP. The Town shall be responsible for all costs as contemplated by the provisions of Section 6.1 of the PMMP, including without limitation costs associated with any necessary increased monitoring intervals, mitigation actions, well rehabilitation efforts, new well installation, or other necessary actions necessitated by any statistically significant change in groundwater levels, impacts to monitored wells, or failure or lack of success of mitigation actions.

**COUNTY OF LOUDOUN**  
**DEPARTMENT OF BUILDING AND DEVELOPMENT**  
**MEMORANDUM**

**DATE:** March 20, 2012

**TO:** Susan Glass  
Proffer Manager, Zoning Division

**FROM:** Dennis Cumbie  
Water Resources Team, Engineering Division

**SUBJECT:** SPEX-2010-0005 Hamilton Well 14, Stone Eden Property

At its September 8, 2010 Business Meeting, the Board of Supervisors approved the application SPEX-2010-0005, Hamilton Well, Stone Eden property. Condition of Approval #2, *Pumping, Monitoring, and Mitigation Plan*, clarified language in the Pumping, Monitoring and Mitigation Plan (PMMP) that was included as a condition of approval for SPEX-2007-0022 by adding the following;

*“...monitoring and reporting shall, if requested by the Board of Supervisors, continue beyond the initial 2-year monitoring period provided for in the PMMP and extend at least one year beyond the next one-year period October 1-September 30 that exhibits moderate drought conditions in Loudoun County as reported by the U.S. Drought Monitor...following approval of SPEX-2010-0005.”*

In a memorandum delivered to the Zoning Division on October 10, 2010, Water Resources Team staff indicated that the above referenced section of Condition #2 has been fulfilled. Therefore, in accordance with the *Additional Requirements Regarding Pumping, Monitoring, and Mitigation for SPEX-2010-0005 Well 14 Stone Eden Property* item #4, *Duration of Monitoring and Mitigation*, the monitoring program would continue until the end of the initial 2-year period, namely until October 6, 2011.

On October, 2011, the Final Monitoring Report for the Town of Hamilton Well 14, Stone Eden Well (attached) was submitted to Building & Development for review. A review letter (attached) was sent to Analytical Services, Inc., the reporting author, indicating a minor omission from the approved Pumping Monitoring and Mitigation Plan (PMMP). The omitted section should have contained specific language regarding the consultant's professional recommendation regarding the continuance or discontinuance of off-site and on-site monitoring as per section 4.5 of the PMMP (page 8). To date, there has been no official response from the Town that would satisfy that section.

However, Water Resources Team staff has continued to review the data and interpretations provided in the Final Monitoring Report, and have concluded that there is no compelling evidence that the PMMP be continued any further than the October, 2011 date.

Cc: Rodion Iwanczuk, Senior Planner  
John Roberts, County Attorney  
Ron Brown, Assistant County Attorney

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**COUNTY OF LOUDOUN**

**DEPARTMENT OF BUILDING AND DEVELOPMENT**

**MEMORANDUM**

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**DATE:** May 11, 2012  
**TO:** Jack Roberts, County Attorney  
**FROM:** Susan Glass, Proffer Manager   
**SUBJECT:** Hamilton Well #14

This memo is written on behalf of the Zoning Administrator with respect to Condition 2 of the Special Exception application that was approved for Hamilton Well 14, Stone Eden Property, SPEX 2010-0005, which was approved by the Board of Supervisors on September 8, 2010, subject to the Conditions of Approval dated September 8, 2010.

As stated in the language below, Condition 2 requires that the use of the well shall be in accordance with the Pumping, Monitoring and Mitigation Plan (PMMP) for the Town of Hamilton Well 14, dated October 15, 2007, and the Additional Requirements.

2. **Pumping, Monitoring, and Mitigation Plan.** Use of the well on the Property ("Well 14"), including but not limited to pumping, monitoring, and potential mitigation of impacts due to the use of the well, shall be in accordance with the provisions of the accepted Pumping, Monitoring and Mitigation Plan (PMMP) for Town of Hamilton Well 14, dated October 15, 2007, and the attached Additional Requirements Regarding Pumping, Monitoring, and Mitigation for SPEX 2010-0005 Well 14 Stone Eden Property, provided that the attached Additional Requirements shall take precedence in the event of conflict with the PMMP. The Applicant shall continue monitoring of adjacent wells and shall provide quarterly reports, including all data collected and required to be collected, to the Loudoun County Department of Building and Development as established in the PMMP. In accordance with the attached Additional Requirements, such monitoring and reporting shall, if requested by the Board of Supervisors, continue beyond the initial 2-year monitoring period provided for in the PMMP and extend at least one year beyond the next one-year period October 1-September 30 that exhibits moderate drought conditions in Loudoun County as reported by the U.S. Drought Monitor (which is compiled and/or published jointly by the U.S. Department of Agriculture, the Department of Commerce/National Oceanic and Atmospheric Administration, and others, and is accessible on-line at <http://www.drought.unl.edu/dm/monitor.html>) following approval of SPEX 2010-0005. The Applicant shall also work with Loudoun County staff to develop and implement a reporting system to inform adjacent property owners of monitoring reports and investigate situations in which private wells may have been significantly impacted by Well 14.

As noted, Condition 2 requires the applicant (the Town) to continue monitoring and providing additional reports beyond the initial two year period if requested by the Board of Supervisors. Dennis Cumbie, Hydrologist with the Water Resources Team in Building & Development, has reviewed the Town's Final Monitoring Report, dated September 26, 2011 and concluded that there is no compelling evidence that the monitoring and reporting for the Hamilton Well 14 be continued any further than the original 2-year period that ended in October, 2011. I also note that (as reported to the Zoning Administrator in a memo from Mr. Cumbie) Loudoun County exhibited moderate to severe drought conditions during the 2010 water year and that, therefore, the monitoring and reporting covered a period of time that included a drought period as contemplated by the SPEX Condition.

To my knowledge, the Additional Requirements referenced in Condition 2 for Hamilton Well 14 have also been satisfied. Those requirements are:

1. Point of contact: Dennis Cumbie was the County's point of contact.
2. Investigation of Homeowner Reports: The County did not receive any reports of homeowner problems.
3. Posting of Data: The Town of Hamilton's website contains information about the PMMP and has digital copies of the monitoring reports.
4. Duration of Monitoring and Mitigation: The Final Monitoring Report was submitted to Building & Development in October 2011. Building & Development staff does not believe that it is necessary to continue the monitoring and mitigation.
5. Continuation of Monitoring and Mitigation through drought conditions: The initial reporting period included a period of moderate to severe drought; therefore, there is no reason to continue monitoring through a drought condition.

Based on the above information, Zoning Administration finds that Condition 2 of SPEX-2010-005, Hamilton Well 14, has been satisfied. Consequently, Zoning Administration is not aware of any reason for the Board of Supervisors to request an extension of the well monitoring.

Cc via email: Nicole Dozier, Zoning Administrator  
Ron Brown, Deputy County Attorney  
Dennis Cumbie, Hydrologist