

EXTRA INFO. - POSSIBLE CITIZENS' CONCERNS
5/8/06



INTERDEPARTMENTAL COMMUNICATION

Acton Board of Health - Telephone 978-264-9634 - Fax 978-264-9630

May 8, 2006

TO: Don Johnson, Town Manager
FROM: Doug Halley, Health Director
SUBJECT: Brabrook Road/ Flagg Road Perchlorate

During the approval process for Ellsworth Village concerns were raised by residents regarding potential impacts on their private wells. One particular concern was the presence of perchlorates in materials used to do blasting. Based on that concern the Planning Board required that either the developer, Fenton & Sons, pre-test and post-test private wells adjacent to the work being done or not use blasting materials with perchlorate. The developer attested that he would use materials without perchlorate.

Some of the residents on Flagg Road, Brabrook Road and Pope Road looking for better assurance pre-tested their wells. Perchlorate was not found in any of the wells on the first round of sampling done in October of 2005 (1,4,6,7,8,9 Flagg Road, 6 Brabrook Road, 39 & 42 Pope Road). On the second round, done in early March 2006, perchlorate was found at 6 Brabrook Road at 1.38 ppb (Also tested were 1,4,6,7 & 9 Flagg Road, 39 & 42 Pope Road). On the third round, done in late March 2006, perchlorate was found at 4 Brabrook (5.36 ppb) and 6 Brabrook (2.43 ppb) (also tested were 3, 8, 10, 11 Brabrook Road and 8 Flagg Road).

The Health Department, as well as, the Fire Department and Planning Department are looking into the perchlorate issue on Brabrook to see if there is any assistance the Town can provide to resolve the issue. To that end, the Health Department has researched available information to determine what the sources and issues are related to this substance.

Perchlorate is both a naturally occurring and man-made substance. It occurs as perchlorate and perchlorate salts. It has been identified in fertilizers, bleach, pool shocking chemicals and any number of other sources. It's primary use seems to be in rocket propellants and pyrotechnics. It is not currently a controlled substance but EPA is studying it to see if it should be regulated with respect to human consumption. Discharges have been identified in 25 states so far and at least one community has had levels as high as 5 ppb detected in Massachusetts. EPA seems to feel that levels as high as ~ 50 ppb would not cause harm to humans but they are looking at safe drinking water standards in the 4-14 ppb range. (Industry representatives, on the other hand, are essentially saying that there is little chance that harmful levels would ever be reached.)

Whatever the results of EPA's research, the Health Department is looking for a proper resolution to the issue. Specifically, because there has been a level of detection in at least 2 wells on Brabrook the department believes it would be prudent to have private wells transfer to public water when possible.

The developer of Ellsworth Village did not have pre-tests done on the wells in the Brabrook Road/ Flagg Road vicinity, apparently relying, instead, on Material Safety Data Sheets (MSDS) to satisfy the Planning Board requirement of not using any perchlorates in the blasting materials. After reviewing all available information regarding MSDS the department is not confident that a lack of a reference to perchlorate can be inferred that perchlorate is not in a material in trace amounts.

The Health Department has checked well test results for the Brabrook area as noted above. We are seeking any additional information that may be generated by homeowners both on any recent testing of their private wells or information regarding the well's depth or location.

Jim Deming, Superintendent of the Water District, has been contacted to determine if the District tests for perchlorates and whether they have detected perchlorates in any of their wells. The Water District has tested and no perchlorates have been found.

The department also asked Jim Deming if the Water District would be willing to waive their demand charges for the impacted properties on Brabrook Road. Jim stated that a request would have to be made to the Water Commissioners and they would make a determination at a public meeting.

Last week the developer of Ellsworth Village agreed to connect 4 and 6 Brabrook Road to the public water supply at cost. This work was done and the two properties are now using the public water supply.

The Health Department is correlating all available information regarding the presence of perchlorate in the Brabrook wells and the health risks associated with perchlorate. The department believes it would be appropriate to send out an advisory to the applicable neighborhood. At a minimum the advisory will most likely be advising homeowners to test their wells for perchlorate. It is anticipated that will be sent out by the end of this week.

For the past couple of years the Board of Health has been examining private well issues, in particular regarding the W. R. Grace contaminant plume. Currently the Board has instituted an administrative hold on any private well permits within the identified area of concern to the plume. The Board has requested that EPA meet with the Board to determine a final resolution on private wells within the contaminant plume area. EPA does not anticipate that to happen until late this year or early in 2007.

The Board requires private wells to test for the presence of bacteria every year and a chemical analysis every third year. Up to this point the Board has not required private wells to test for volatile organics or other contaminants because private wells are deep bedrock wells which seemed to have less of a risk to be exposed to those materials.

However, the information attained through the W. R. Grace investigation has caused the Board to reconsider their testing requirements. The Board anticipates addressing this issue at the same time it resolves the issue of private wells within the Grace contaminant plume. The recent testing finding perchlorates in bedrock wells will be taken into consideration as the Board defines the testing requirements for private wells.

In order to define how the issue of perchlorate should be addressed within its regulations the Board will need to see how it is addressed at both the Federal and State level. Hopefully, that information will be shortly forthcoming and the Board can take it into account.