

Maryjane Kenney

CC: BOS
POSSIBLE "CITIZENS' CONCERN"

From: Carol Holley
Sent: Thursday, May 04, 2006 5:18 PM
To: Board of Selectmen
Subject: Citizens' concern - perchlorate



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Please find attached a letter to you and other documentation, submitted as background information for Monday's meeting.

Carol Holley

5/5/06

CC: ROLAND & DOUG -

SOME OF MS. HOLLEY'S COMMENTS GO TO THE ISSUES AND QUESTIONS I HAVE BEEN COVERING WITH BOTH OF YOU IN THIS REGARD. AS YOU CAN SEE FROM HER NOTE, I EXPECT HER TO COME IN FOR CITIZENS' CONCERNS MONDAY (ALTHOUGH SHE HAS NOT OTHERWISE REQUESTED AN APPOINTMENT). PLEASE PROVIDE APPROPRIATE COMMENT BY NOON ON MONDAY IN ORDER THAT I MIGHT FORWARD IT TO THE BOARD BEFORE THE MEETING.

Don

PS I HAVE ATTACHED A COPY OF MY E-MAIL TO YOU WITH THE MATERIALS I AM SENDING THE SELECTMEN. I HAVE NOT INCLUDED YOUR SEVERAL RESPONSES - SIMPLY BECAUSE THEY ARE DISJOINTED. FEEL FREE TO INCLUDE ANY OF THAT MATERIAL, IN A COHERENT FASHION, IN YOUR COMMENTS.

Carol Holley
39 Pope Road
Acton, MA 01720

May 3, 2006

Board of Selectmen
Town Hall
Acton, MA 01720
VIA EMAIL

Dear Selectmen and Selectwoman,

I am writing to you as a follow-up to a recent Planning Board meeting and a recent article in the Northwest Weekly section of the *Globe*.

First, I'd like to refute two of the implications in the article. Activists do not cause contamination; however, they do facilitate its discovery and hopefully its remediation. Secondly, perchlorate is not a naturally occurring substance in New England and therefore could not be caused by shifts in rock – it had to be introduced from an outside source. It may interest you that, per Larry Ladd at www.perchlorate.org, “W.R. Grace started out importing perchlorate-tainted Chilean nitrate (originally Peruvian) fertilizer in the 19th Century.”

Also, I would like to consider, as Mr. Bryan Iandoli has noted in several meetings, the need for preventing a recurrence of this incident. It seems to me that it would be appropriate to promulgate a new Acton By-Law prohibiting the use of blasting materials known to contain perchlorate, with a statement in the by-law that simply the lack of the word “perchlorate” on a Material Safety Data Sheet (MSDS) is not adequate evidence (see memo to Planning Board, attached). I would like to Board of Selectmen to initiate the drafting of such a by-law.

Third, I would like to reconsider an issue brought up by ACES a few years ago when contamination from the WR Grace plume was found in two private irrigation wells – updating Acton's private well regulations. Since the initial ACES study, other towns have moved forward (Townsend comes to mind first) and updated their regulations, and Acton has remained static. I believe that it would be wise to test any and all private wells, used for irrigation or otherwise, that are within a quarter mile of any blasting done in the past few years to ensure that they are not contaminated with perchlorate, which could have been used at much higher levels than at Brabrook Road.

Finally, I would like to Board of Selectmen to ponder the appropriate municipal reaction to a private well owner who is concerned that his or her well could become contaminated due to off-site activities such as blasting, or other releases of hazardous materials, and who has no capacity to hook into the Acton Water District system. There are eight households on Flagg Road with this concern.

Thank you for your time,

Carol Holley

Also attached:

Sept. 19, 2005 Letter to Richard Groll
April 17, 2005 Memo to Planning Board

MEMO TO: Acton Planning Board

FROM: Carol Holley

DATE: April 17, 2006

RE: Ellsworth Village, Blasting, and Perchlorate

The Acton Planning Department is to be commended for its awareness and proactiveness in dealing with perchlorate, particularly by issuing the following condition to the Ellsworth Village Special Permit:

“3.2.2 If perchlorate compounds will be used in the blasting process, the Applicant shall offer all immediate abutters of the Site, and, in the event that blasting is required on Brabrook, Flagg, and Pope Roads, all residents on Brabrook and Flagg Roads and residents abutting the blasting location on Pope Road, a pre-blasting screening of their domestic well water for ammonium perchlorate and other perchlorate compounds. Prior to conducting the blasting, the Applicant shall pay each such abutter or resident who agreed to a pre-blasting test, the cost of a post-blasting test which they may conduct at the time of their choosing. The post-blasting payment is waived for any abutter who ties into the newly installed water main.”

However, this condition was not met.

I spoke with Rosemary Knox of the Massachusetts DEP last September regarding perchlorate and blasting. She informed me that even if perchlorate is not listed on the Material Safety Data Sheet (MSDS) for blasting products, certain products contained perchlorate as a contaminant. This raised enough concern in the neighborhood that nine individuals performed pre-blast testing, using a DEP-certified lab and DEP-approved testing procedures. All nine wells in the pre-blast testing round showed non-detect for perchlorate. This sampling was done last September 26.

A post-blasting sampling round was performed on March 6. One Brabrook Road well came back with a perchlorate level of over 1 ppb. This result caused other residents of Brabrook Road to test their wells, and the well with a perchlorate hit was resampled for confirmation; this testing occurred on March 29. The resampled well showed results of 2.43 ppb at this time and the well next door, previously unsampled, showed results of 5.36 ppb – both over the proposed DEP Maximum Contaminant Level (MCL) of 2 ppb. Consultation with a hydrogeologist and Licensed Site Professional (LSP) indicated that the geographic distribution of the first testing would “cover” the previously unsampled well; this opinion was later confirmed by conversation with a second LSP.

Further investigation, including a review of the Acton Fire Department file, yielded information that the blasting compound known to be contaminated with perchlorate, MSDS #1019, was indeed used at this site. The DEP published a draft report, “The Occurrence and Sources of Perchlorate in Massachusetts”, in August of 2005, containing this information. Blasting caps containing perchlorate were also used, although the DEP indicates that these are not significant contributors to groundwater contamination.

Perchlorate has been shown to have neuropsychological development effects in fetuses, nursing infants, and children under 12 (see "Update to 'Perchlorate Toxicological Profile and Health Assessment'", Mass. DEP, March 2006, available at the DEP website). Studies have tracked effects after 2-week exposures. The actual exposure length of the two families involved is unknown, however, it is certainly more than two weeks, and more than two weeks will probably pass before the water main, should they choose to hook into it, will be available.

Therefore, it seems appropriate that the families that participated in the testing rounds, in accordance with the provisions of the special permit as noted above, be reimbursed. Other actions may be taken outside the purview of the Planning Board. The total cost to all families involved, at \$127.50/sample, exceeds \$3,000. Copies of Alpha Analytical invoices are available upon request.

Carol Holley
39 Pope Road
Acton, MA 01720

September 19, 2005

Richard J. Groll, Geologist
PO Box 572
Tyngsboro, MA 01879

Re: Preblast Inspection, 39 Pope Road

Dear Mr. Groll,

Pursuant to our conversation regarding pre-blast private well testing for static water level and perchlorate content of well water on Saturday, September 17, I am enclosing a printout of a Memorandum to "Blasting Contractors and Interested Parties" from Dick Chalpin, Acting Assistant Commissioner of the MADEP BWSC dated March 1, 2005. I regret that some of the text is truncated at the right margin, but believe that you will get the gist of the document. This document notes that "perchlorates are highly water soluble, and can travel significant distances in groundwater.... Pregnant women and their fetuses, infants, children under the age of 12, and people with hypothyroidism are most susceptible to its potential effects." As I related to you in our conversation, there are several children in the blasting area under the age of 12, and one woman who has had her thyroid surgically removed. This document also notes that "situations when perchlorate-containing products are sometimes used include tight underground cuts, tight trenching applications...The content of perchlorate in this products is variable...but can be 20% to 30% or more by weight." The installation of a trench in bedrock, per this document, appears to be a typical application for perchlorate-rich product.

I am also enclosing, in refutation of your statement of perchlorate being everywhere due to jet fuel exhaust from planes flying overhead, page 6 of a Draft Report from the MADEP on Perchlorate Occurrence. Please note that blasting and fireworks appear to be the primary causes of known perchlorate contamination.

I wish to reiterate my request, for a pre-blast well inspection for static water level and flow rate, as my domestic well relies on bedrock fissures. I also wish to reiterate my request for water quality testing for perchlorate only, per conditions 3.2.19 and 3.2.20 of Acton Planning Board Decision 05-01 (excerpt enclosed). I understand the blaster intends to submit information to the Health Department regarding the lack of perchlorate in its explosive materials, but I have learned in a conversation with Rose Knox of the MADEP that some blasting compound manufacturers have not been forthcoming as to the contents of their products, which undermines my confidence in any such paperwork.

I have discovered that the only state-certified lab for this substance is Alpha Analytical in Westborough and have left a message with them regarding pricing and procedures. I will get back to you by telephone with this information as soon as I have it. Even if the blaster or developer decline to finance this round of testing, abutters wish to have the testing performed before the blasting occurs.

Sincerely,

Enclosures