

BRIAN JADUL & PETER GIVEN
90 & 96 Lincoln Lane
ERB 03-2 & 03-3

MINUTES
SUDBURY EARTH REMOVAL BOARD
WEDNESDAY, AUGUST 13, 2003

The Board consisted of:

Richard L. Burpee, Acting Chairman
Jeffrey P. Klofft, Acting Clerk
Stephen A. Garanin
Patrick J. Delaney III, Alternate

Also Present: Brian and Dawnmarie Jadul
Charles J. Owen, Jr. P.E.

The meeting was convened by the Acting Chairman, Mr. Burpee who reported that the Board was in receipt of a report, File Date May 29, 2003, prepared by Charles J. Owen, Jr. P.E. This second submittal was the result of the Board's rejection of the first report at its June 11, 2003 meeting as not meeting the requirements of Condition #14 of the Earth Removal Permit.

Mr. Garanin felt the second report addressed to some extent where the lead in Mr. Terzian's well might have come from. However, from his perspective, it did not address the issue of water quality. He said the report was based on looking at a couple of test results. There were no recent studies or test results.

Mr. Jadul said it was his understanding that the drilling of holes and extensive water testing was not required; that the Board wanted a professional opinion by someone with experience. He said the first report spoke to the issue of quantity of water – it contained numbers and studies. It also spoke about the quality of water and whether this project was going to affect that quality.

Mr. Jadul reminded the Board that they would have accepted Town Engineer's opinion, and he didn't do any tests. He felt the Board wanted someone with a little more knowledge of water who was a little more definitive in his answers. Mr. Jadul said he believed this was provided in the reports.

Referring to the second report, Mr. Klofft noted a supposition is made around the hunting and the lead shot that may be there. He saw a contention that removal of some of this topsoil, which may in fact contain some of the lead, would lower the potential filtration that ends up in the actual aquifer down below.

Mr. Owen replied that the lead in the original surface, the old hill, was removed when the lots were prepared. It was excavated and removed from the site. It was surface, lead basically from hunting some 50 years ago.

Mr. Klofft asked why, then, would Mr. Terzian's lead content have gone up after the topsoil was removed.

Mr. Owen noted there was a 6-year period between tests. It might not have necessarily have been from the topsoil removed from Mr. Jadul's property but the vernal pool behind it.

Mr. Klofft said Mr. Terzian had tests done in February 1998, and then a subsequent test in March 2003 which showed a significant increase in lead. In between the two periods it would have been the original excavation that the developer, Eligius Homes, did. He asked whether it was Mr. Owen's opinion, given that in the process of taking the topsoil, the lead that came from the shot, the incidental lead that came from the hunting activities was removed but yet still showed an increase in lead content.

Discussion then followed on the numbers in the test report on Mr. Terzian's well and their possible significance.

Mr. Klofft said the removal of the topsoil may have removed the lead from the filtration that was there, but some other effect is happening which is affecting Mr. Terzian's rainwater separately. He said the Board's concern is what impact it will have on the quality of water of the wells in the surrounding area.

Mr. Owen said his suggestion was to continue to monitor this during the process and believed it was the only way the Board would get a representative number. He knew Mr. Jadul's well was 600 feet deep; he did not know the depth or where the aquifer is for the other wells in this vicinity, or whether those wells are in the same aquifer. This would show up in testing. Mr. Owen felt the lead may have something to do with the vernal pool, but continuous bi-weekly testing, or something similar, is needed.

Mr. Klofft asked Mr. Owen his opinion, for instance, if someone's soil was removed and a change was going to take place, how soon after the removal would that show up and how much effect would it have.

Mr. Owen replied that under normal conditions he would estimate somewhere in the vicinity of 10 hours or more. He also wanted to point out that most of the original lead on Mr. Jadul's property is no longer there. Basically his property should not be the source of that lead.

Mr. Klofft said what remains unclear is why Mr. Terzian's property could change so dramatically in the intermediate soil removal, which is of concern to the Board.

Mr. Terzian said his water is now undrinkable as a result of the tests. The only thing he could think of is that a lot of earth that was removed and there is some problem that is happening

to cause lead in his well. He said well is 160 feet deep as opposed to Jadul's which is 600 feet so the effect is going to be different. He asked where that left him.

Mr. Klofft replied that unfortunately there is probably no remediation for whatever already took place. If, in fact, there was some causal link that could be drawn, Mr. Terzian would have to sue Eligius Homes. The Board can only try to ensure that whatever happens now doesn't affect anybody else.

Mr. Klofft said this is a difficult case. On one hand there is the right of the Jadul's to use their property to its fullest. On the other hand, their rights end where the rights of the people who are also there to use their well and their land are not there. Once the dirt is gone there's no way to put it back. Mr. Klofft's concern was that he didn't think he knew enough yet. He was not yet sure that he could be satisfied that the proper due diligence was taken on this issue.

Mr. Delaney noted that in the second report Mr. Owen indicated he would not foresee any harmful effects on private water systems that were constructed in accordance with state public health requirements. He said that conclusion that is a bit different than the condition that the Earth Removal Board established in the permit. The first point was a reference to whether or not the private water wells are constructed in accordance with state public health requirements. Mr. Delaney asked for an explanation.

Mr. Owen said he did not know where the wells were or whether one or more of the neighbors had shared systems. He was referring to all the wells in the vicinity. The only wells he looked at were Jadul's and Given's.

Mr. Delaney asked Mr. Owen, in the words of the Condition 14 as it is written, if he could affirm for the record that in his expert opinion that the proposed earth removal will not cause or exacerbate water quality issues including, but not limited to, elevated levels of sodium, lead, silt, reduced flow or corrosion, with drinking water wells on adjacent properties.

Mr. Owen replied, "on the work that is being done within this property (Jadul's & Given's). He said if someone else uses excessive fertilizer or excessive salt on their driveway this could change."

Mr. Delaney said he would read this again because he wanted it clear in the record that Mr. Owen's expert testimony to this Board is that the proposed earth removal will not cause or exacerbate water quality issues, including but not limited to, elevated levels of sodium, lead, silt, reduced flow or corrosion, with drinking water wells on adjacent properties.

Mr. Owen replied, “yes, that is what I’m trying to strongly point out.”

Mr. Delaney asked if that is Mr. Owen’s testimony to the Board.

Mr. Owen replied, “yes it is, and it is strictly related to this proposed earth removal.”

Mr. Delaney said there are some good reasons for the proposed earth removal; i.e., safety, aesthetics. His bigger concern, was whether there was any possibility of contamination on the adjoining wells. He said the Board was expecting to get a report that said there is not going to be an issue - that it doesn’t have to worry about pollution of those wells. What was received is a report that advises the continuous monitoring of wells in this area during the earth removal. He asked whether Mr. Owen was telling the Board that there is the possibility of pollution and that is the purpose for testing.

Mr. Owen said it was not. He said he didn’t know the water table or absorption; that nothing in earth work is ever fixed. It always helps to be continuously monitored. The uncertainty of earth is always there.

Mr. Delaney asked whether because of uncertainty in what will result from this earth removal that well monitoring on this property should work.

Mr. Owen replied, “yes.”

Mr. Delaney said this seems as though there is a contradiction in those statements.

Mr. Owen said what he was saying was that in all of the places he has worked he has never found things to always go exactly as he said they would go. He said there will always be something that shows up. And it is nearly always minor. He said earth sciences are not a given.

As a last question, Mr. Delaney asked why Mr. Owen knew there was lead contamination because of shot in this area.

Mr. Owen said because of the quantity. There was heavy hunting period there. He said he has lived here for 50 years and has seen the lead shot in the ground.

Mr. Delaney wanted to raise one last question to the Board. He said he wondered, as a layman, if the area, the hill or a portion of it which had not been disturbed since the lead shot were to be excavated and there would be natural recurring rainfall, if it would be conceivable that that would wash lead to a lower elevation than it would normally have been at because the hill was excavated bringing it closer to a well.

Mr. Owen said that is now exposed to the air. That section doesn't have lead in it.

Mr. Delaney asked whether the areas around it might have lead.

Mr. Owen said the areas around it are penetrating their areas. They aren't flowing onto this land.

Further discussion centered on drainage and flows. Mr. Owen said on the other side there is a road that goes up the hill which goes to its own turnaround. That small road and its four houses drains to the other direction.

Mr. Delaney said the Board was looking to see a study of the surface and subsurface water flow that existed and why that would not have a negative effect on the wells.

Mr. Owen said he did not feel qualified to do all water systems although he's been in charge of some.

Mr. Jadul asked whether the Board was asking for a water study of flows of water, both surface and subsurface.

Mr. Klofft said what has just been established is that the surface water is not the issue for the wells. It's the subsurface water. And if the subsurface flows are from the direction of the Jadul property then, there's a potential. If the Board has something that says the flows are coming some different way, that changes things.

Mr. Jadul said he wanted to be clear on what the Board wanted.

Mr. Klofft said the text in Condition 14 states exactly what it is that the Board is looking for. He read from Condition 14 verbatim.

Further discussion centered on hypothesis of situations, impacts of same and implications with regard to Condition 14. Mr. Burpee said he believed the Board had the necessary information to decide what the next step should be.

Skip Williams, 25 Lincoln Road, referenced his letter dated July 21, 2003 sent in response to Mr. Owen's reports. The letter notes two representatives from the DEP reviewed both reports and pointed out deficiencies which are summarized in Mr. Williams' letter. Also enclosed was a copy of the DEP regulations for a hydrogeological study. He said \$1,000 buys all well records, logs and historical records which will provide information on the area and level of the aquifer. He said this is essentially what is needed and which would make a lot of the neighbors feel better. He said \$10,000 would provide more, but he didn't feel this was necessary.

Mr. Jadul was not sure what this information would indicate.

Mr. Klofft said it would indicate if there is a likelihood that this could cause additional problems. If the information indicates that there is a good possibility that that it's going to cause problems, the Board has to decide whether or not the permit should go forward or not. If it doesn't, if, based on someone's professional opinion and study after looking at this they say it's unlikely or if there is an impact, that it's an inexact science and will be within controlled limits. then the Board can say it did due diligence and protected the adjacent properties, and got the requested information. If a catastrophe happens at that point and the expert was wrong, at least at that point the Board couldn't be accused of gross negligence.

A motion was made by Mr. Delaney to reject the two reports received from Mr. Owen as not meeting the requirements of Condition 14 of the Earth Removal Permit. Seconded by Mr. Klofft.

Mr. Delaney felt the summary that Mr. Owen provided met the requirements but the supporting facts did not. He believed that a report from a professional hydrologist, as suggested by the neighbors, is perhaps the best way to solve this problem. He would suggest the \$1,000 report.

Mr. Delaney also felt the Board should begin thinking now about how to terminate this issue. He did not want to have to go through several more rounds of incomplete reports for a straightforward condition. His suggestion was to think along the lines of an opportunity for one more report. And that report will either meet the condition, or not meet the condition and the permit will be void and the case closed. He did not want to limit it to one report now, but to think about it.

Mr. Klofft said this would allow for a report from a professional hydrologist, and if the Board thinks largely it meets the requirements but would like to see more information, it would not be precluded from continuing the meeting.

The Board then voted on the following motion:

MOTION: "To reject the two reports submitted by Owen as not meeting the requirements of Condition 14 of the Earth Removal Permit."

VOTED: In favor: 4 (Klofft, Garanin, Taylor, Delaney) Abstain: 1 (Burpee)

The meeting was adjourned.

Richard L. Burpee, Acting Chairman

Jeffrey P. Klofft, Acting Clerk

Stephen A. Garanin

Patrick J. Delaney III, Alternate