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To: <Cora.Sheppard@ontario.ca>

Date: Mon, 20 Nov 2006 15:15:31 -0500

Subject: EBR Registry Number: IA06E1293, Ministry Reference Number: 4455-6U9MKG

Understanding that St. Mary's is allowed to conduct the testing in order to put their case forward on their "theory" of water re-circulation I offer the following critical analysis in consultation with my hydro geologist Ian Macdonald with regard to their proposal.

1. The proposal is very good at saying which wells will be monitored during the testing but these wells are mostly close to the pumping wells and the trench. I think they must monitor a lot more wells especially those wells around the perimeter of the site. They cannot just monitor close to the pumping wells, they have to use existing monitoring wells to get the impacts at greater distances. They should also try to monitor water levels in nearby domestic wells, if someone is willing to give them access.

2. In order to accurately evaluate if resident's wells are effected by this testing there should be a data logger implemented in wells around the area prior to any testing to show the affects. Without data loggers we will not be able to determine if it is a pump problem or seasonal fluctuation. If someone's well is going to be affected it is much better to find out now when conditions will return to normal following the testing. Obviously I am concerned that there will be a false sense of security afforded St. Mary's if we do not have this analysis prior to the testing.

3. I noticed that they did not put the testing trench along the alignment for the proposed actual trench. This would be best from a hydro geologic perspective.

4. I do have a concern about the amount of water that they are proposing to discharge to Mountsberg Creek. It seems like a lot of water that could cause some detrimental affects. They are proposing to monitor those potential affects but whether anything is long term is beyond my capabilities to evaluate. Comments from the Conservation Authority on this matter will be very important since potential impacts to surface water are of grave concern to me as well as ground water.

5. Increased monitoring is essential with this application in order to know the impacts of the testing so that it can be stopped immediately if need be. When you see that the volume of groundwater proposed for testing in the second and third test is estimated to be almost 4 times that of what is licensed for the Carlisle municipal system - that increased monitoring will be essential in order to take quick action to stop the tests if or when detrimental results are felt by surrounding area wells.

6. There is great potential for contamination of the ground water aquifer. If the proposed tests are successful, groundwater will be taken out of the aquifer, exposed to potential surface contaminants and changes in temperature, and then transported directly back into the aquifer. Groundwater will become surface water, and then immediately become groundwater once again. How will the safety of our groundwater supply be ensured during such a process? Changes in temperature can, for example, contribute to bacteriological growth within the aquifer itself. It is critical to note any changes during the testing. If there are changes over the short term of testing then there will certainly be changes in the long term. They have proposed monitoring temperature changes to the surface water but they should also add monitoring to changes in the groundwater temperature.

7. My community also needs to know what potential impacts can be expected from blasting. Fracturing the aquifer may cause impacts to groundwater users well beyond the proposed quarry boundary. How is this to be monitored, measured, evaluated?

As the Flamborough Councillor representing the area in question I would like the MOE to be made aware of the issues that I have raised in reviewing the application and respectfully request that I be informed as to how my concerns will be addressed through this process.

Sincerely,

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