

Good morning,

My name is Shaun Sturby,

My concerns lie with the mining process involved to extract the sand. More so the structure left behind after mining. These pillars of sand are of the lowest structurally sound mechanism to support the voids left behind from mining of the sand. I as well as the engineers tasked to design a model to support this operation know that sand is a very fluid and unstable structure. I should also note, I'm studying engineering. This silica sand is probably the most unstable solid structure there is, but now we've disturbed this structure even though parameters have been added to mitigate subsidence. The fact is the models presented are just models, and don't represent full scale production. I'm bringing this up because sand structures don't really support anything. They need to be propped up to really have any structural affect. But what were doing here is disturbing water saturated sand and then adding air to it. Although the models presented show a vertical pocket in which the sand has been extracted, the outlying sand will replace the removed sand and move toward the void. I feel with the water extraction coupled with adding air to ease for extraction that

the presented model doesn't take these extremely fluid variables into account. Of course, I could be wrong as I haven't had the opportunity to conduct such tests, but it should be of concern. History has shown us that engineers in practice still make mistakes. The Mount Polley tailing pond disaster in B.C. is an example in which a berm failed resulting in an ecological catastrophe. I bring this example up because the materials used to construct the tailings pond berm was soil, clay and sand. I will acknowledge that engineers sounded the alarm stating that the tailings pond was at capacity and could fail. But this is where my direction changes. Our levels of government have laws governing how companies conduct and maintain they're operation. On many instances systematic failures in policy, law and our governing bodies allowe these catastrophes to take place. Recommendations are made and are routinely pushed aside. I've heard the statements made by Brent Bullen, ensuring that if there were any problems with water contamination at this proposed mining site, his company would provide clean drinking water to the citizens. I'm not sure if he knows how many people this aquifer provides clean drinking water to, but I am certain this company would certainly claim bankruptcy before they had to

provide bottled drinking water for the whole south eastern population of Manitoba.

Just a few other remarks I wanted to bring to light. The ad campaign that Sio Silica is presenting via mailed pamphlets and by radio commercials are a clear smear campaign. Their pamphlets show in large words “8000 NEW JOBS”. The words themselves are baseless and are there to persuade the public that 8000 jobs will be locally generated. Some numbers I pulled from the largest North American solar panel producer First Solar, shows in 1999 they employed 50 people at start up. Currently I don't know how many people are employed at the First Solar plant in Ohio, but their target is to employ over 3000 direct jobs by 2025. So in 26 years the largest solar panel company in North America has yet to be anywhere near 3000 jobs, yet Sio Silica had stated the Memorandum of understanding signed with RCT Solutions will become the largest on the continent. That is a strong statement to be making considering the amount of money and time First Solar has invested into their plant. Realistically speaking Sio Silica plans for at most 200ish jobs to be created, and the reality is some of those jobs will be for people from outside our province considering

the company is from Alberta. Even for RCT Solutions, the 8000 job claim is an outlandish claim, if they even build a manufacturing facility here to begin with, the deal is of course a memorandum and not legally binding.

My closing remarks, my drinking water is not for sale. Not for 50 jobs, not for 200 jobs not for 8000 jobs. This country is yet to provide clean drinking water to all of its citizens, but this government is so quick to jeopardize the clean drinking water already available. It's astounding.

I hope this commission takes these claims seriously because to reverse a permit to a mining company is a very difficult and long process.

Thank-you for your time.