

EXHIBIT NO. 71-035  
File Name: At Seven Oaks Met School  
STC  
Date: 3-11-23  
Received by: PL Groden  
(Commission Secretary)

**Seven Oaks Met School - Social Justice Club (Winnipeg, Manitoba)**

Re: Sio Silica's Vivian Sand Extraction Project (RM Springfield)  
Presentation to the Manitoba Clean Environment Commission  
Saturday, March 11, 2023  
Anola Community Club

**INTRODUCTION (Julian) - 1-2 min**

Hello, and thank you for accepting our application to present. My name is Julian. I'm in grade 9. I'm here with other grade 9 to 11 high school students from the Seven Oaks Met School in Winnipeg, Manitoba. We're part of a social justice group that meets because we're concerned about social and environmental issues. When we learned about this proposed mine, we were concerned and wanted to know about what was happening. As we learned more about the proposed mine, and we found out that someone in our group lives in Springfield, we became concerned about the direct and immediate environmental impacts to the land and to the people and animals living on it, the environmental impact on the connected aquifer, and future impacts related to climate change. The initial study by Vivian Sands Corporation did not include the potential impacts on the geochemistry of the area, on the wildlife, biology, or ecosystems, and in addition, the project puts a very important aquifer system at high risk.

And now I would like to invite grade 10 student Madi to speak about the potential impacts on the people who live in the area of the proposed mine.

(After Madi) Now I would like to invite Max from grade 11 to speak about the potential impacts on the aquifer.

(After Max) Now I would like to bring on Lily from grade 9 to speak about the potential impacts on the ecosystem.

(After Lily) Now I would like to invite Emily from grade 11 to speak about the future impacts related to climate change.

(After Emily) Last but not least I'm going to invite Katelyn from grade 10 to wrap up our presentation.

**PART ONE – Impacts on the People of Springfield (Madi) - 2 -3 min**

When I was 5 my parents decided to move from our house in Winnipeg. But finding a new home was much harder than they thought it would be. Raising 3 kids is no easy task, so finding the perfect place for us to call home was difficult. But after looking at over 15 houses in 6 months they found the perfect home. The house was in Oakbank, a small town located only 15 minutes from Winnipeg. There were many factors in deciding on their dream home. Location was something that they were picky about. My dad grew up on a farm and really enjoyed having the space and quiet that came with that life. Luckily living in Oakbank offered that same lifestyle.

Since moving there in 2013 I have enjoyed living in Oakbank for almost 10 years now. I enjoyed growing up in this town from attending elementary to middle school and taking my first dance classes at the SPACE. Many of my best memories are in this town. From playing at the parks with my friends to going on walks to get ice cream this town offered me a safe space. I can honestly say that I am so grateful that my parents picked such an amazing place for me and my sisters to grow up.

Oakbank is surrounded by large parcels of farmland. While driving around the outskirts of town, crops will fill your vision. The mining of the silica sand can affect many of these farmers and their livelihoods. This project could give Sio Slica the right to mine on these farmer's properties. This will not only affect their crops but also the animals that inhabit the lands as well. Some landowners will have mining occurring on their land for months on end and left with destruction. This project will also leave behind thousands of abandoned wells, affecting the farmers and their fields.

With this proposed project so many things could change in these small towns. This could make the water that kids carry in their water bottles unsafe to drink. This could make the air while going on walks with friends harmful to breathe. This could endanger many of the plants and animals that thrive in these areas. This could affect the people who just like me call these places home. A home is a place that should offer us the feeling of safety. So how can you push a project that will affect so many people in such negative ways? How can you take away our safety (just to make money)?

When I was younger I always wondered where I would live in the future. My mind always floats back to the town that my parents fell in love with, Oakbank. But what will life in Oakbank look like in the future? Would I want to raise a family where I am not sure that the water is safe to drink and where industry takes priority over the safety of its citizens? Will this town be the one that I call home in the future?

These are concerns I shouldn't have as a 15 year old.

## **PART TWO – Impacts on the Aquifer (MAX) – 2-3 MIN**

I want to mention our concerns about the possible contamination of the aquifer below the location of the proposed silica mine. We have noticed that Sio Silica has not provided any information about this and the impacts on the people affected. We question why a project of this magnitude, with so little information and data on the environmental impact and that, is still in the conceptual stages, is able to be allowed to go through an Environmental Assessment. There is mention you will monitor the groundwater but that will not affect if it is polluted or not. You also proposed injecting aerated process water into the aquifer but that could lead to the contamination of microbes, even if UV light is used to cleanse the water. The rising of dissolved oxygen levels in an anaerobic aquifer will change the aquifer, it becomes oxidized thus chemical reactions can occur. There is also the fact that a Geotechnical report by ARCADIS has noted its concerns about the possibility of the destabilization of shale between aquifers and this has potentially significant implications. Specifically, given the anticipated diameter of the void at each boring cluster, significant breaches in the shale aquitard will occur when the shale collapses into the underlying void. Conceptually, this will create a connection between the Red River Carbonate Aquifer and the Winnipeg Sandstone Aquifer.

Now, what about all of the affected users, the public and private well users, the 1,612 wells which lie in the regional project area, and the 406 wells within the local project area that was concluded by Sio Silica's own Groundwater Monitoring and Impact Mitigation Plan? What will the community do if their groundwater is contaminated temporarily or permanently to a point where they cannot even use the water to clean their clothes, wash their hands, or even water their garden? What will the community do?

[30130539 RPT Technical Review\\_13Sept2022 \(cecmanitoba.ca\)](#)

[gwmimp-2023-02-06-rpt.pdf \(cecmanitoba.ca\)](#)

[siosicilia supplemental information4 process wastewater treatment options.pdf \(cecmanitoba.ca\)](#)

### **PART THREE – Impacts on the Ecosystem, including wildlife and plants (Lily) - 2-3 min**

This pollution doesn't just affect the people and water, it affects an entire ecosystem. Land, plants, water, wildlife, all slowly dying because of the emissions and pollution this project is producing. The amount of emissions that will be emitted during this project is highly underestimated.

Did you happen to know that 80% of North Americans already can no longer see the milky way due to *light* pollution? It will take heavy machinery, trucks, deforestation, and more 24/7 to complete this project causing unmistakable pollution. Light pollution not only affects our view, but affects the animals that live in these areas, interrupting their normal behaviors and affecting their safety.

Biodiversity loss is at an alarming rate in Canada. Up to one million species are currently at risk of extinction. Including plants, animals, and fungi, which all impact parts of a healthy ecosystem.

To adapt to Climate Change it is fundamental to conserve and restore nature. But how can we mitigate the harms we are causing our land if we continue to change and threaten it through proposed projects such as this silica mine?

This project is said to have safety mechanisms such as seals and casing. However, seals and casing degrade overtime and this project will leave behind thousands of wells, which are permanent sources for groundwater pollution from surface sources when, if left, would be under that threat.

Silica mining causes habitat loss, fragmentation, and affects the water and air quality of this ecosystem. It is well known that living organisms need clean water and oxygen in order to survive. The effects of this project are strongly overlooked. This pollution can cause species in the area to die or become endangered affecting the complex food web and ecosystem for the worse. Climate Change and pollution are already at an all time high, we shouldn't be supporting and allowing it to go on. We're causing bigger and more harmful damage than expected. This will affect an entire ecosystem and natural environment. This needs to stop here.

As someone who has seen first-hand the disturbance this project is causing across communities and the environment and learned first hand how it has affected the ecosystem that has already taken place there, I think this silica mine is shameful and should never have become this big of a project in the first place. This land is the peoples', the animals, and nature's.

<https://www.canada.ca/en/environment-climate-change/news/2021/11/the-government-of-canada-increases-nature-protection-ambition-to-address-dual-crises-of-biodiversity-loss-and-climate-change.html>

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<https://www.gov.mb.ca/nrnd/fish-wildlife/wildlife/wild-animals/index.html>

<https://www.gov.mb.ca/nrnd/fish-wildlife/wildlife/ecosystems/index.html>

[https://www.gov.mb.ca/sd/eal/registries/6119/public\\_comments\\_2.pdf](https://www.gov.mb.ca/sd/eal/registries/6119/public_comments_2.pdf)

#### **PART FOUR - Future impacts related to climate change (Emily) - 2-3 min**

The proponent has been greenwashing their project saying that the sand will be used for green technology yet the method is not green and the high risk they are putting the aquifer system under for using the sand for the necessary "decarbonization" is not worth it. They want to sacrifice the aquifer to get sand out to use some of it for solar panels. How can we guarantee that this sand will be used to make solar panels? Is there no safer way to make solar panels? What about recycling/reusing silica/sand/glass that already exists? Is there no other safer and environmentally friendly energy production process?

Arcadis surveyed and found that emissions are likely to be 3 times as much as what was in the original report. You will notice a fair amount of pumps (water & slurry) cyclones, etc. are excluded in the original report, and this would result in the underestimation of emissions. As of 2021 many big areas of operations have been missing in the emissions calculations. Bringing in the equipment, bringing out waste products from the mine site, clearing out old growth forests and much more, all of which haven't been discussed in the EAP. Emissions must be addressed in a cumulative or combined nature and the mining operation and process facility need a full calculation. The current report does not do so.

Deep aquifers such as the Sandstone are required for combating climate change. They help deal with effects of climate change, such as the effects of too much greenhouse gas emissions. With all of that being said, what will my future look like if we continue like this?

<https://climatechangeconnection.org/emissions/manitoba-ghg-emissions/manitoba-large-final-emitters-lfe/>

### **Conclusion (Katelyn) - 1-2 min**

We, the youth of Seven Oaks Met School, are concerned about the direct and immediate impact of this project, and the long term consequences. We do not feel that the original report done by Vivian Sands Corporation took into account the true and harmful impacts this project will have.

We feel, based on our research, that this project will be impacting the safety of the drinking water for the plants, animals and humans living in this area. This project will put a large and important aquifer at risk of change, contamination and harm. This project will continue to reduce the biodiversity of an important ecosystem. This project will continue to produce emissions that result in climate change, causing irreversible change to the entire community, country and world.

This should have been prevented. Research and reports, some from as early as 2015 had recommendations to improve the EA process and licensing. These recommendations were ignored by all levels of government to date. This project is what the report warned us about.

The secrecy of the Sio Sands Corporation's project in Springfield Manitoba is undeniable and concerning. This is putting the best drinking water on this planet at risk. It is risking the health and well being of our entire ecosystem. Given the many harmful impacts we've just brought up, how can we justify this just for profit? You're risking our future and the future of many JUST for money. This project could potentially be seen as a top ten emitter in MB and we, the youth, do not agree.