

Saturday March 11<sup>th</sup>, 2023

Clean Environment Commission  
305-155 Carlton Street  
Winnipeg, Manitoba R3C 3H8

This submission to the CEC is in relation to:

**Vivian Sand Extraction Project aka Sio Silica Sand Extraction Project  
(Public Registry 6119.00).**

Thank you for this opportunity to present to the Clean Environment Commission on a matter that is very crucial to my community, Springfield.

For the benefit of others in the room, it is my understanding that the Clean Environment Commission was established under the Environment Act to provide an avenue through which the public can participate in the decision making process regarding the environment in Manitoba. The function of the Commission is to review all evidence and information presented and also provides advice and recommendations to the Minister of Conservation and Climate, who is responsible for the Environment Act, with respect to issues and licensing.

I hope you would agree that Public Hearings are an important part of the process as they allow the Commission to hear representations from all stakeholders: the project proponent, various government departments responsible for reviewing the process and the general public, both supporters and opponents. **I fall into the latter category as I am opposed the project.** I am also a retired Municipal Administrator who has lived in Springfield for over 30 years. Although I live in Oakbank I am not on the municipal water system and I get my water as do 2/3 of the homes in Oakbank from a well. In fact of the over 16,000 people in Springfield I think it would be fair to say 80% of the population relies on well water for domestic and commercial purposes.

I have been able to attend a number of the days of the Public Hearings and I have listened with interest, if not full comprehension, to a number of highly qualified authorities and scientific based presentations. As expected, those presenters were not always in agreement regarding the suitability of modeling that was presented for the sand extraction project: In particular with the potential impact to the shale layer, the potential for subsidence due to the voids that will be created by sand extraction, cross contamination of the aquifers, sealing wells, etc.

One thing that I would like to draw attention to is that Sio management specifically defended making two separate applications to the EAB: the first for the processing plant and the second for the extraction process. He clearly stated that each application could be seen as independent of the other. That the processing plant was not wholly dependent on receiving materials from the extraction process, it could get materials from elsewhere.

Alternately, the materials from the extraction process could be taken elsewhere. This is important to remember because the processing plant has received approvals from the EAB.

Many experts you have heard from have stated that in their opinions there are still outstanding questions and concerns with this project. More than two suggested that additional plans must be prepared by the proponent and approved by the government either before approval or as part of the conditions: for example Groundwater Monitoring and Impact Mitigation Plan, Aquifer Management Plan and a Well Abandonment Plan. Many experts also recommended that either before a license was granted or as a condition to licensing further modeling, further testing studies and even further changes to legislation should be enacted.

Not to dismiss those issues, I would like to comment on what concerns me most, which is the potential impact to our groundwater resources. We, the people from the area that depend on well water, feel that there is **no room for error** because once contamination happens to our water it is irreversible. This should be paramount.

The Public Hearings to date primarily have revolved around the specific operational and scientific arguments both for and against the silica sand extraction proposal so I will try and offer a different approach.

1. The proposed method of removing the silica sand, in my opinion, is neither mining in the normal sense, or open pit mining as from a quarry. Sio is proposing to use a unique and untested process that as a layperson, I would describe is more like flushing than drilling. Having looked through the Mines and Minerals Act and Drilling Regulation, 1992, I concluded that this process has not been contemplated and falls outside the protective measures that legislation should have in place.

2. The use of water to extract the sand adds another and different dimension to the issue because the actual quantity of water being handled is not clear. The proponent suggests that 80% (I think that is what I heard) will be replaced back into the aquifer. Taking water from an aquifer has to follow guidelines and obtain approvals etc. But this project continues to add that other dimension of concern by suggesting that much of the water being removed will be replaced. I'm not convinced that it is just as simple as taking the sand out of the Winnipeg Sandstone aquifer by using volumes of water, dewatering the sand, then just passing the resulting water through an ultra- violet process before be re-injecting it back into the aquifer and that this practice will not adversely change the chemical makeup of the water and ultimately this will be the water thousands of people depend on for drinking.

The purpose of the Water Protection Act is (Section 2)  
*for the protection of and stewardship of Manitoba Water Resources and ecosystems recognizing that*  
*(c) water resources and aquatic ecosystems require protection to ensure high quality of drinking water sources,*

*(d) the importance of applying scientific information in decision making processes about water, including the establishment of standards, objectives and guidelines.*

Again, I don't believe that the proposed process has been contemplated under current legislation or that there are any relevant standards, objectives or guidelines in place to address this untried process. It is my understanding that for water use that exceed the threshold of 25,000 litres per day the user must obtain a Water Use License (Water Rights Act). I could not find any reference in the Guidelines regarding reinjection of water, and I question how and who would be monitoring the multiple wells, the dewatering, the treatment etc. to determine actual volumes of water that being handled and ultimately used.

The Water Protection Act (Section 9) Identifies as a priority of the purpose for which water may be used..... *in accordance with that Act: identifies domestic purposes and the number one use and industrial purposes as the fourth use.* This suggests to me that the importance of water for domestic consumption should have a higher priority than this proposed project.

The Ground Water and Water Well Act Section 4, sites "*its purpose is to (a) provide for the protection and stewardship of Manitoba aquifers and groundwater and (b) to ensure that the construction, maintenance and sealing of wells and test holes meet standards that protect*

- i) the environmental quality of Manitoba's aquifers and ground water, and*
- ii) human health and safety.*

\*\* I did note that this Act excludes from its application a well or test hole to which the Mines and Minerals Act applies. So, if this process is being considered as falling under the Mines and Minerals Act, then it is ever more concerning that the environmental protections that should be provided under the Ground Water and Water Well Act should be addressed as a condition to any license.

From my reading, I would suggest that The Mines and Minerals Act (1991-1992) also does not address extracting sand by the proposed flushing method and I would advocate strongly for more regulations to ensure that the process does not irreversibly and negatively impact the domestic water supply.

3) The large number of wells that are proposed to be drilled over a relatively small area are unprecedented. We have all heard the expression " the best laid plans"

In November of 2022 the Manitoba Government launched its New Water Management Strategy: stating that the Strategy will balance environmental, social and economic needs and **ENSURE WATER SECURITY FOR FUTURE GENERATIONS.**

*"The strategy sets the stage for future work and decision-making on water for the coming decade and beyond. The framework includes a vision, mission, guiding principles, and key focus areas with corresponding strategic objectives. The water strategy action plan will be a*

*focused guide to specific actions, initiatives, and investments directed at implementing the Water Management Strategy.”*

I ask the Commission to keep this environmental protection action in mind.

As I wind up, I mentioned at the beginning of my presentation the role of the CEC and I'll explain why now. Perhaps it is naïve of me but I am hoping that the Commission will act independent of the other levels of Government in reaching its decision and making its recommendations.

In my opinion, this project seems to be more focused and perhaps swayed by Economic Development and potential revenues than about protecting the Environment. I am counting on the Commission who is the body appointed under the Environment Act, to focus on **assessing the environmental impacts** that this proposed project will create. I trust this will be your primary concern because my elected representatives seem to be sitting on the fence.

I did reach out to my MLA even before the matter was sent to the CEC and I expressed to him my concerns about the project, its location over the aquifer that supplies much of the water for South East Manitoba including Springfield and asked for his assistance in not allowing it to locate there. His response to any action regarding CanWhite Sands (the name at that time) was that at some point he may be put into a position where he would have to make a decision on the project so he had to refrain from taking any side or any action. At the time I thought isn't that was why we elect people to office, to make decisions and help with the interests of their constituents.

I then reached out to the Council of Springfield. In 2021 and 2022 it was a considerably different council than we have today. That council, who requested by resolution that CEC hearing be called, and subsequently hired an independent expert, Christopher Neville of S.S. Papadopolus & Associates, Inc. to prepare a peer review for the municipality. In the spring of 2022, that council promised its ratepayers that they would have opportunity to see the report before it was submitted to the CEC. **This did not happen.** It is my understanding that there was a preliminary report done in May, 2022 and another report has just recently been done on January 10, 2023. These reports have cost the RM residents approximately \$28,000 and even after numerous requests to council to have the report made public, the requests were denied. It was only on February 24, 2023 that the second report was discreetly posted on the municipality's website. **Posted but not filed with the CEC.**

I have a copy of that report that I would like to give to the Commission if you do not already have it. It raises some important issues that should have been part of this hearing.

I should also mention that in October of 2022 there was a municipal election that significantly changed the makeup of Springfield Council. In fact only one councillor kept his seat, the one who did not campaign against Sio Silica and promise to protect the ground water for Springfield residents. So it has been very disheartening to say the least to learn that the only submission to the CEC by CAO for Springfield Colleen Draper, stated *“At this*

*time, the RM of Springfield has a neutral position with respect to the Vivian Silica Sand Project". Springfield, where the extraction project is to begin, chose to sit silently through the Public Hearings.*

For full disclosure, I did not reach out to my MP because it is well known in our community that our MP's private interests are heavily tied to the gravel industry and that his company has land/lease interests in the Vivian area. I need not say more.

My point in all this is, besides being very disappointed in how the RM of Springfield has failed to represent its constituents in a meaningful and respectful manner, is that elected representatives may campaign and make promises but when they are actually faced with making decisions, even though they may be hard decisions, they back down and vacate their responsibilities and leave it up to, in this case you, the Clean Environment Commission and you have very hard decisions to make in front of you. I would like to leave you with something that was told to me 25 years ago by the Engineer for East St. Paul. It has stuck with me over all those years and I think it has become more and more relevant. He said: *"Water will become the oil of the future. What we now take for granted will become more precious due to demand, more costly due to treatment and supply and more scarce due to squandering and lack of protection".* Water is our most valuable resource and life depends on it. We can live without solar panels etc. but we can't live without water. Could I make 5 requests or recommendations before I conclude?

Requested Recommendations for consideration by the Clean Environment Commission:

1. That the Province be asked to designate as a groundwater sensitive area, the areas in Springfield (including the south east area where Sio project is proposed) that have been identified as being groundwater sensitive, pollution hazard areas, or vulnerable areas in the Report done by Friesen Drillers titled ***Aquifer Capability and Groundwater Vulnerability in the RM of Springfield dated July 25, 2019*** (figures 31,32 on pages 38 and 39). This report has been reference a number of times in earlier presentations. *This could be the first step for Springfield to establish a comprehensive water conservation and protection program for the municipality.*
2. That the Province be asked to prepare an Aquifer Management Plan for the region but for Springfield in particular for the purpose of protecting water, aquatic ecosystems and drinking water sources.
3. That all legislation related to the use of groundwater for this type of mining be updated and that the regulatory framework be put in place before a license is granted.
4. That the current application is only for 4 years, yet it is expected to continue for approximately 24 years. Should a license be granted for this project, that it be for a limited time (4 years) and that the project be required to apply for a new license and undergo a further full review including all relevant modeling, studies, testing, sealing of wells, etc. including in particular impacts to the groundwater.

5. That a comprehensive and progressive Well Abandonment Plan including prompt timelines, monitoring and enforcement be a condition for granting of the license.

Thank you,

Janet Nylén