

EXHIBIT NO. H-049

File Name: Tenji Bell Peretzko

Date: 3-14-23, (Peretzko issue 3-11)

Received by: Krohn

I am affiliated with Our Line in the Sand Manitoba but today I am speaking to you as a concerned area resident. Thank you for this opportunity.

I was first alerted to the mining project in 2016. Landowners in southeast Manitoba had applied to subdivide their lands, were approved by their Council, then a few weeks later received a letter from the Mines Branch stating mineral claims were on their lands and to stop. No reasons were provided other than proprietary. It is alarming and disrespectful that landowners are not notified when claims are placed on their property. This proposed project is unprecedented in that private property is and will be under claim. Mining development will impact landowners property rights, values, land use, future development, insurance, and liabilities; this needs to be considered and it hasn't been.

<https://steinbachonline.com/articles/mystery-mineral-interrupting-subdivision-development>

<https://steinbachonline.com/articles/mystery-mineral-becoming-more-clear>

2017 the public was informed core sampling would take place and findings made public in September. <http://landmarkplanning.ca/perch/resources/hdmineralspresentation15may2017revmay19-1.pdf>

This was revised to November 2018; still no information.

April 2019, we were told that silica sand rests 200' below the surface in the sandstone aquifer and "a new extraction methodology that has never been done before would need to be developed.

<https://www.steinbachonline.com/articles/mystery-mineral-revealed>

<https://steinbachonline.com/articles/mining-discussion-draws-response-from-local-reeves>

May 26, 2020 Sio Silica held a virtual meeting prior to release of the facility EAP July 2, 2020. It is difficult to ask questions on a facility if the proposal is not provided in advance and the focus leading up to it has been on mining.

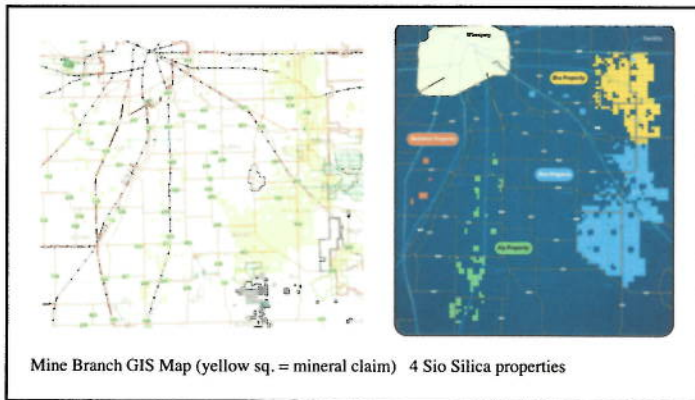
I understand this hearing is on the mining but I bring this to your attention because from the very beginning there has been limited transparency and sharing of information for both proposals. Furthermore, I believe our regulator, allowing the project to be split apart for and in the particular order of assessment, shows a grave weakness in the licensing process.

The proposed project is seeking approval to mine directly in our water source. They state it is a "multigenerational" project. We have heard both 100 years and most recently 200 years. (2022 Municipal Board Hearing file#22B3-007)

Mineral claims also range, 120,328 hectares (2019)

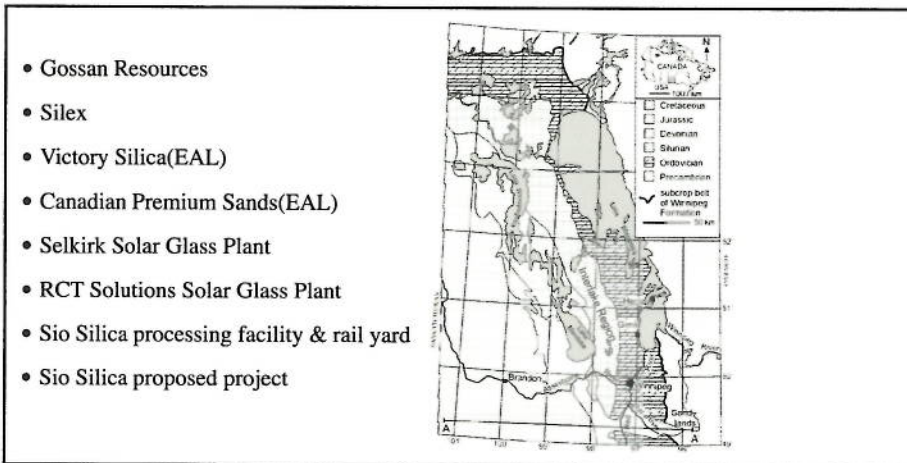
<https://steinbachonline.com/articles/results-of-mystery-mineral-drilling-to-be-made-public>

168,000 hectares from the hearing (Porous Tec) and 85,000 hectares from the corporation. Only a minute 633 hectares and the first four years of operation is being assessed for a 24 year license.



Slide 1 - On left shows mineral claims in yellow squares, right is the company's website depiction of 4 properties. Just to clarify the upper left hand corner, there is another claim holder, Silex, which happens to be another name for silica but to my knowledge is not affiliated with sio silica. Bottom right grouping is a lithium claim.

## Slide 2



The sand is located in the Winnipeg formation. The Formation covers much of central and southern Manitoba. The potential to capitalize on further extraction operations using this mine method must be considered.

The side panel lists some known developments at various points along the licensing process. Gossan Resources, 1 of the original owners of the Canadian Premium Sands mine near Wanipigow, have mineral claims near Narcisse. Victory Silica near Grand Rapids and the Wanipigow project are Licensed. An adjoining glass plant in Selkirk is under review for the CPS project. A similar prospect has been mentioned for the proposed project. It is unknown if the Vivian processing facility will service all 4 properties or if more plants are required. There is also potential for all 4 properties to operate simultaneously. With our government's push for mining and the extent of the Formation, it is imperative that we consider further expansion of this industry and its cumulative impacts.

## Slide 3 -

The proposed project has been split for assessment from its intended operations: mining, processing and transportation. The mining portion has been further split by assessing only a

small 4 year block. Project splitting prevents a full comprehensive investigation into all environmental, social and economic risks and impacts. The commission's consultants refer to it as a material deficiency and inappropriate.

- With regard to the EA process, Arcadis concluded that the abbreviated temporal scope, substantively smaller spatial scope and exclusion of critical project components constitutes “project splitting”. Arcadis considers this to be a **MATERIAL DEFICIENCY** with the Project Proposal.
- The exclusion of Sio Silica's sand processing facility and other supporting infrastructure from the scope of the current Environmental Assessment is **INAPPROPRIATE**. The potential impacts of the entire mining project throughout its life cycle including extraction, processing and transport should be evaluated by a single, comprehensive assessment that considers the Vivian Sand Project as one undertaking, not a series of independent and unrelated projects.

Slide 4



Project splitting has the potential to underestimate the significance of project impacts.

The assessment should take in the big picture; a full assessment of the entire Sio Silica development and all cumulative impacts from known and future activities.

We deserve to know the truth and to protect our environment; our life support system

The proposal states activities and components will be located on previously disturbed land to the extent feasible. Mining has occurred in the project area and in the LSL pit. Another pit, north of Vivian and outside of the mineral claim area was drilled and mined in 2020.

Slide 5 - shows groundwater sensitive areas throughout the RM of Springfield. The major defining features are permeable surface material and a shallow depth to aquifer.

[https://springfield.municipalwebsites.ca/ckfinder/connector?command=Proxy&lang=en&type=Files&currentFolder=/&hash=c245c263ce0ced480effe66bbde6b4d46c15ac&fileName=9\\_RPT\\_AquiferCapabilityandGroundwaterVulnerability\\_RM\\_Springfield\\_Sep2419\\_....pdf](https://springfield.municipalwebsites.ca/ckfinder/connector?command=Proxy&lang=en&type=Files&currentFolder=/&hash=c245c263ce0ced480effe66bbde6b4d46c15ac&fileName=9_RPT_AquiferCapabilityandGroundwaterVulnerability_RM_Springfield_Sep2419_....pdf)

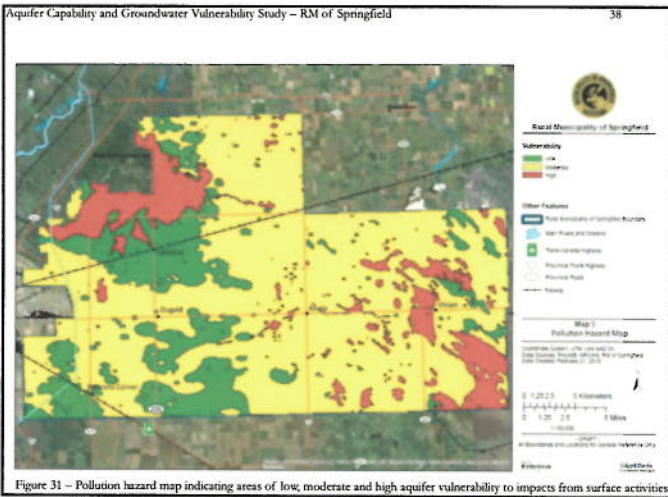
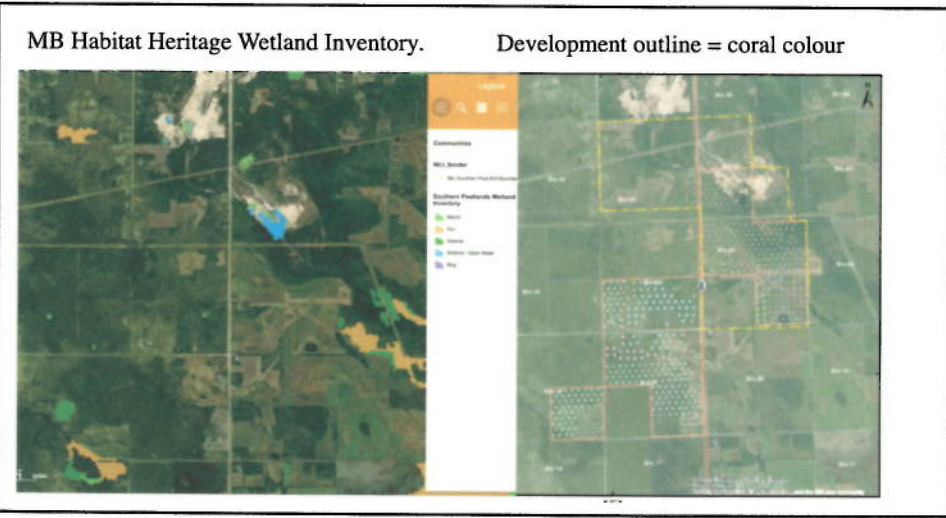


Figure 31 – Pollution hazard map indicating areas of low, moderate and high aquifer vulnerability to impacts from surface activities

Both pits and the Facility are situated in the high aquifer vulnerability zone. Mining is high risk and subject to accidents and malfunctions. Sio Silica's 2020 Sustainability Report states "The levels of flocculant remaining in the water after leaving the clarifier will be virtually undetectable." Responses to public comments(#93) states "The slurry line connecting the extraction sites with the Processing Facility will only contain a sand/water slurry and a residual amount of a non-toxic biodegradable flocculant (from recycled water as described in the Facility project EAP).

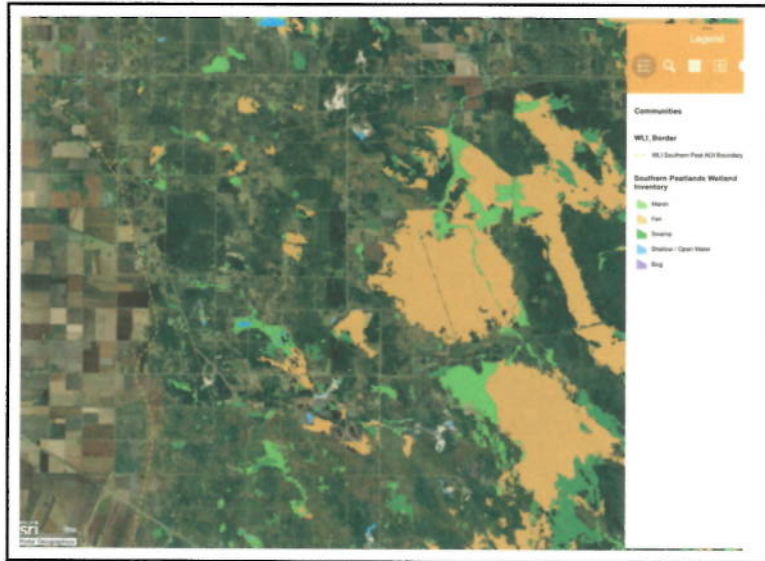
The polyacrylamide levels, in the slurry and return lines, have not been provided. The slurry and return lines will be located throughout this zone leading to the facility. Spills or leaks from the lines and project operations would likely contaminate groundwater. Project operations in the pits will compound contamination risks because the overburden has been removed. It is alarming that this location is being considered. Further alarming is the facility location was approved.

Slide 6



Manitoba Habitat Heritage undertook a Wetland Inventory of wetlands greater than 1 hectare. The area within the development outline shows open water in the pit and adjacent wetlands. Wetlands are also present at the facility and railway.

Slide 7 - is a larger view of the Wetland Inventory. Hazel Creek and Brokenhead River are not shown and the inventory is incomplete further west of the boundary line.



The southeast portion shows a relatively intact and diverse wetland ecosystem. Wetlands are critically important. The ecological diversity in the project area has not been assessed. Splitting the project up prevents acknowledgment and underestimates the true impacts and risks resulting from the project.

The proposed project will abandon thousands of wells that interconnect both aquifers. Sealing the wells is compromised through failure of the shale aquitard and limestone rock. Even if the material remains intact, the casings and sealing compounds degrade over time. The wells will be perpetual pathways for groundwater contamination by agricultural operations, industry, land use and floods. We have no certainty that our water source will be protected and remain safe.

Slide 8 -

The processed water will be returned to the aquifer. Chitosan is proposed for use in the filtration process. We are told that “any residual chitosan...would be extremely limited, biodegradable, and in order to degrade, the presence of an enzyme would be required, of which there is none.” (DLN-IR-007).

Sterilization of this water is a major component and it is frightening that it remains at an untested, conceptual stage. The company states “Detailed design and final plans are still being finalized and those details are not required to understand and assess the potential environmental effects from the proposal.” (DLN-IR-004). I take offence to this statement. It is obvious this

company does not care about us and if our Environment Act and licensing regime is this shoddy that it will allow this project to come this far in the process, than more than this project needs to be looked into.

Safety data sheet for Chitosan states “prevent from entering into soil, ditches, sewers, waterways and/or groundwater.” - <http://www.ampolymer.com/SDS/ChitosanSDS.html>

<b>Section 6: Accidental Release Measures</b>	
<b>Personal Precautions, Protective Equipment &amp; Emergency Procedures:</b>	Spilled material may cause a slipping hazard. Avoid dust formation. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment. For additional information, refer to Section 8: Exposure Controls & Personal Protection.
<b>Environmental Precautions:</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. For additional information, refer to Section 12: Ecological Information.
<b>Methods &amp; Materials for Containment &amp; Clean Up:</b>	Contain spilled material if possible. Sweep up. Collect in suitable and properly labeled containers. For additional information, refer to Section 13: Disposal Considerations.

I do not want to drink Chitosan and since the aquitard and a portion of the Carbonate aquifer collapses, the Carbonate, where my well is located, is no longer isolated from mining operations proposed for the Sandstone Aquifer. The entire freshwater system is subject to mining. I don't want to drink mined water. I don't want to gamble with my health.

Sio Silica claims that material filed in their EAP meet provincial guidelines and when Licensed would provide the requested information. Both CEC consultant's view the material provided by Sio Silica as deficient. All active participants agreed and filed motions to have Sio provide the omissions for the CEC review.

The facility EAP was filed: July 2, 2020  
The mining EAP was filed: July 23, 2021  
Request for federal jurisdiction: Aug 18, 2020

According to MB EAP guidelines the proponent is to file information on “funding, including the name and address of any government agency or programs (federal, provincial or otherwise).”

Slide 9 - is from the 2020-2021 Industrial Research Assistance Program as per the Public Accounts of Canada. CanWhite Sands Corp received \$119, 071. <https://donnees-data.tpsgc-pwgsc.gc.ca/ba1/pt-tp/pt-tp-2021-eng.csv> Sio Silica failed to file this funding.

Project Name	Project Number	Project Status
Manitoba Aquifer Protection Program	1-1000000	Active
Manitoba Aquifer Protection Program - Phase 1	1-1000001	Active
Manitoba Aquifer Protection Program - Phase 2	1-1000002	Active
Manitoba Aquifer Protection Program - Phase 3	1-1000003	Active
Manitoba Aquifer Protection Program - Phase 4	1-1000004	Active
Manitoba Aquifer Protection Program - Phase 5	1-1000005	Active
Manitoba Aquifer Protection Program - Phase 6	1-1000006	Active
Manitoba Aquifer Protection Program - Phase 7	1-1000007	Active
Manitoba Aquifer Protection Program - Phase 8	1-1000008	Active
Manitoba Aquifer Protection Program - Phase 9	1-1000009	Active
Manitoba Aquifer Protection Program - Phase 10	1-1000010	Active
Manitoba Aquifer Protection Program - Phase 11	1-1000011	Active
Manitoba Aquifer Protection Program - Phase 12	1-1000012	Active
Manitoba Aquifer Protection Program - Phase 13	1-1000013	Active
Manitoba Aquifer Protection Program - Phase 14	1-1000014	Active
Manitoba Aquifer Protection Program - Phase 15	1-1000015	Active
Manitoba Aquifer Protection Program - Phase 16	1-1000016	Active
Manitoba Aquifer Protection Program - Phase 17	1-1000017	Active
Manitoba Aquifer Protection Program - Phase 18	1-1000018	Active
Manitoba Aquifer Protection Program - Phase 19	1-1000019	Active
Manitoba Aquifer Protection Program - Phase 20	1-1000020	Active
Manitoba Aquifer Protection Program - Phase 21	1-1000021	Active
Manitoba Aquifer Protection Program - Phase 22	1-1000022	Active
Manitoba Aquifer Protection Program - Phase 23	1-1000023	Active
Manitoba Aquifer Protection Program - Phase 24	1-1000024	Active
Manitoba Aquifer Protection Program - Phase 25	1-1000025	Active
Manitoba Aquifer Protection Program - Phase 26	1-1000026	Active
Manitoba Aquifer Protection Program - Phase 27	1-1000027	Active
Manitoba Aquifer Protection Program - Phase 28	1-1000028	Active
Manitoba Aquifer Protection Program - Phase 29	1-1000029	Active
Manitoba Aquifer Protection Program - Phase 30	1-1000030	Active
Manitoba Aquifer Protection Program - Phase 31	1-1000031	Active
Manitoba Aquifer Protection Program - Phase 32	1-1000032	Active
Manitoba Aquifer Protection Program - Phase 33	1-1000033	Active
Manitoba Aquifer Protection Program - Phase 34	1-1000034	Active
Manitoba Aquifer Protection Program - Phase 35	1-1000035	Active
Manitoba Aquifer Protection Program - Phase 36	1-1000036	Active
Manitoba Aquifer Protection Program - Phase 37	1-1000037	Active
Manitoba Aquifer Protection Program - Phase 38	1-1000038	Active
Manitoba Aquifer Protection Program - Phase 39	1-1000039	Active
Manitoba Aquifer Protection Program - Phase 40	1-1000040	Active
Manitoba Aquifer Protection Program - Phase 41	1-1000041	Active
Manitoba Aquifer Protection Program - Phase 42	1-1000042	Active
Manitoba Aquifer Protection Program - Phase 43	1-1000043	Active
Manitoba Aquifer Protection Program - Phase 44	1-1000044	Active
Manitoba Aquifer Protection Program - Phase 45	1-1000045	Active
Manitoba Aquifer Protection Program - Phase 46	1-1000046	Active
Manitoba Aquifer Protection Program - Phase 47	1-1000047	Active
Manitoba Aquifer Protection Program - Phase 48	1-1000048	Active
Manitoba Aquifer Protection Program - Phase 49	1-1000049	Active
Manitoba Aquifer Protection Program - Phase 50	1-1000050	Active

Water is priceless; SHE IS LIFE ITSELF.

To even consider mining in drinking water is not in our best interest; it is unethical and utter madness. There are parts of Manitoba that suffer from the lack of potable water. Here we are blessed with fresh, raw, safe and dependable water, and some are considering to put it at risk for mining of a non renewable resource. This Aquifer system needs protection, reverence, not exploitation by industry.

I have attended the hearings every day. Listened to all experts from all sides. There are far too many uncertainties, irreversible and permanent effects, undeveloped and untested components, omissions of plans and programs, data gaps, no noise, vibration, and lighting studies, limited sampling, and the lack of chemistry, ecology, and cumulative impact assessment leave far too many unknowns. Handing the company an environment act license to fill in these deficits is disrespectful and untenable on so many levels.

I urge the Commission to strongly recommend denying the licensing of the project. The risk is too great.

Tangi Bell