

February 12, 2023

To: The Manitoba Clear Environment Commission

Re: Sio Silica's proposed Vivian Sand Extraction Project in Springfield Manitoba

From: Elaine Burland, Resident of the Municipality of Springfield, Manitoba

I am writing to you with questions and serious concerns regarding Sio Silica's proposed Vivian Sand Extraction Project in Springfield Manitoba.

I attended the public hearing in Anola (October 19 & 20, 2022 re: Sio Silica's request for amendments to the Springfield zoning by-laws) in hopes of getting a better understanding of the company's position and to alleviate some of my concerns. I learned a lot, but my concerns were only increased, not lessened.

I **STRONGLY OPPOSE** this project and **DO NOT WANT** this facility or any extraction taking place in Springfield, and will outline my reasons in the following document.

First, Sio Silica's **process is unproven and largely untested, and poses a significant risk to residents' health and the environment.** Part of the process is new and patent pending (theoretical) so there is no data on the actual impact of this - short or long term. For the "proven" components of the process, what are the long-term impact data from other sites? Even if the 'proven' process works elsewhere, what guarantee is there that it will work in Vivian? It may not work the same here and could potentially have detrimental impact to the environment. This is a long-term project and many factors can change over time.

At the re-zoning hearing in October 2022, Sio Silica explained the extraction process and how **piles of sand** would be treated to prevent dust and risk of silicosis via wet screening in summer and snow-coverage in winter. Sand would then be moved into silos and railcars, and this would be done internally. However, how can this be done internally when the piles of sand are outside and have to be moved? As well, it was revealed that the piles of sand would be up to 90 feet high. Not only does this not conform to Sio Silica's claims that the process would be screened and out-of-sight to surrounding areas as these piles would be significantly higher than any surrounding trees, how can piles this large be effectively wet-screened? Moreover, in winter, they explained that the frozen piles of sand would need to be broken up to be moved. How do these processes not create significant dust and risk of silicosis?

This project also **jeopardizes the aquifer in Springfield.** Sio Silica has made assurances that the project would be suspended if there were any issues and that they would be 'fixed', but how do they fix collapsed shale that separates the aquifer? The reports from PorousTec & Acadis (expert consultants hired by the CEC) both noted concerns about the failure of the shale and that Sio Silica's has ignored this issue. Even if this method is better than open-pit mining (and to-date, only in theory, not practice), it doesn't necessarily mean it is safe and/or low risk, only that it is likely to be safer/lower risk - it

could still have significant negative health and environment impacts. Even if any given issue was something that could be fixed, we are supposed to believe that Sio Silica would stop its multi-million dollar operation, even temporarily, and lose money/profits? Moreover, what if the problem cannot be fixed and there are long term, irreparable consequences?

Arcadis also notes in its report that they are skeptical about the effectiveness and safety of Sio Silica's plan to sterilize the **extracted groundwater with ultraviolet treatment** before re-injecting it into the ground. Again, Sio Silica's plan may sound good in theory, but what if it does not work? How much damage could be done before this is discovered? What if the damage is irreparable?

At the October 2022 hearing, it was also noted that Sio Silica would need to **extend the natural gas line** from Dugald to the Vivian site, for a long-term power source. Did Sio Silica get approval to do this? If not, what if they cannot get approval? How will they power their operation? If they are approved, what is the impact on residents and businesses along Highway #15 where this line is likely to run? Who covers the cost of this line extension?

Arcadis' report also noted their concerns about Sio Silica engaging in **project-splitting**, and that doing so allows the project to fall below environmental assessment standards. As Arcadis points out, the project should be assessed as a single, comprehensive project, not a series of independent and unrelated projects.

I am also shocked that there have been **no consequences for Sio Silica for drilling and testing at the Vivian site, before they obtained proper approvals**. Even if the project is granted, what reason is there to believe that Sio Silica will follow its parameters? They have already demonstrated that they do not follow the required procedure. What assurances are there that Sio Silica will be held to any project-related requirements?

I understand that other sites denied Sio Silica's project but that Springfield's former Mayer (Tiffany Fell) encouraged them to come to Springfield. Obviously there are other site of interest to Sio Silica, so Vivian is not the only source of the sand they want. With all this opposition, why not move the project to another more appropriate, unpopulated area that is more suited to mining, rather than residential municipalities?

At the October 2022 re-zoning hearing, it seemed clear that the provincial representatives' **main concern with this project is the potential for economic development** and investment which I understand is important, but how can it outweigh the wishes and well-being of the tax-paying residents who live here, and the environmental risks and threats to their safety? The need for development and jobs is important, but at what cost? Any related jobs would be relatively short-term. The risk of irreparable damage to the water and environment is high given Sio Silica's unproven methods. And any financial benefit from allowing the project is not likely cover the costs for the municipality and residents to repair any damage done. This project would lower property values and ability to sell property in Springfield now and long into the future – is the short-term gain worth the long-term pain? Is it worth jeopardizing Springfield's

attractiveness as a place to live? Is it worth the risk of residents moving out of the municipality and taking their tax dollars with them? Is it worth the threat to the long-term viability of the region? What do people from Alberta care if a Manitoba municipality is damaged/negatively impacted? They are going back home to their nice houses and neighbourhoods and collecting huge profits from their exploitation of land two provinces away. Their lives are not being negatively impacted.

I implore the CEC to **DENY Sio Silica's proposed project** and rely on the expertise of, and information provided by PorousTec & Arcadis. Why engage in this significant risk with unproven methods, thus, threatening the water and environment that will impact thousands of residents?

Sincerely, a concerned tax-paying Springfield

Elaine Burland