

CanWhite Sands Corp rebranding to Sio Silica Corporation and its green washing PR is not transparency and definitely not science.

In the January 13, 2022, Clipper Weekly, Sio Silica Corporation claimed “their” sand is capable of “entry level glass and industrial quartz applications” and after “processing” a whole new high purity world of “high grade glass photovoltaics” and “advanced manufacturing electronics” opens up. Like many of their claims this has no independent verification.

Sio Silica claimed the sand, prior to processing, is 99.85% pure yet their October 2017 Technical Report on the BRU property sand, presented to investors at Noble Capital Markets Investor Conference, NobleCon 2019, disproves that. The Technical Report states the sand only reached 98.80%. Such misrepresentation is unethical and illegal.

Sio Silica also noted in the Clipper Weekly they are “offering transparency and striving to build long-term positive relationships with you and Mother Earth.” Sio Silica has not been transparent throughout the environmental review and certainly has not explained how this “processing” is achieved and where it takes place.

The silica sand industry calls this processing “mineral beneficiation” a cleaning and purification process that aims to improve quality. Sio Silica claims they can reach 99.9% purity.

It is not as simple as “washing” the sand as Sio Silica states. Purification is attained through acid leaching techniques, two-step flotation, and magnetic separation to remove impurities such as pyrite, aluminium, calcium, magnesium, iron and manganese. Much of the industry uses hydrochloric or oxalic acid. Flotation reagents that are added to the conditioners are fuel oil, sulphuric acid, pine oil, xanthate, and a petroleum sulfonate. These product enhancers have detrimental environmental implications. This processing requires design and construction of an effluent disposal facility for all waste streams. Sio Silica claims they do not produce effluent so do not need tailing ponds/waste treatment.

According to their Environment Act Proposal(EAP) and Notice of Alteration(NoA) Sio Silica Corporation’s processing plant in Vivian will use recycled water to wet the sand stockpiles and “wash” the sand. This recycled water will continually be used “without release to the environment” for the entire life of the plant (24 years). The EAP indicates that the wash water will not be treated only recycled and stored on site. Dissolved impurities; flocculant, heavy metals, mineral contaminations, etc will likely increase every year in the recycled water. These impurities will be present in the recycled water and will get baked on the sand in the dry plant. These impurities will be in the final silica sand product. The processing plant as proposed is not capable of producing silica sand for high purity markets.

It is still unknown whether there is potential for this recycled water to enter the aquifer through the slurry loop, the chemical composition of the slurry and recycled water, how water balance is achieved and maintained in the wash plant, and supporting evidence that the processed sand is viable for photovoltaic markets. These and many more questions have been ignored and remain unanswered by Sio Silica.

Since the Sio Silica sand processing facility slated for Vivian does not have the ability to produce high purity silica sand, will the proposed glass plant in Selkirk Mb be the location for this mineral beneficiation?

If so, Selkirk’s claim of being a green town comes to an end as the amount of energy, chemicals, and water required to upgrade the silica sand is unsustainable and puts further pressure on “Mother Earth”.

At best Sio Silica’s raw sand is only fit for the glass, foundry, and fracking markets. Rather than mining silica sand and producing new glass a far more beneficial and long term positive relationship would be one of recycling the millions of tonnes of glass tossed out as garbage.

The risk that Sio Silica presents to the Sandilands Aquifer by drilling over 450 extraction/injection wells every year to mine out the naturally present, purifying silica sand that produces high quality drinking water is not worth the unsubstantiated claim of being “an incubator of investment within Manitoba” and “employ approximately 40-50 people”.

For a long term positive relationship with Mother Earth we need less industry PR and more transparency and science independently verified.

Manitobans have appealed Environment Act License No. 3367 granted by former Minister of Conservation and Climate, Sarah Guillemard, for the construction and operation of a silica sand processing facility/railway. A License granted without required approvals and through an environmental review process that relied on an EAP and NoA devoid of technical data, supportive evidence, transparency, and approved engineered designs for the processing facility and railway.

Join us in calling for greater corporate and government accountability and transparency. Contact Minister of Environment, Climate and Parks, Jeff Wharton, [minecp@leg.gov.mb.ca](mailto:minecp@leg.gov.mb.ca) 204-945-3730. It is critical that he revoke the Licence. At the very least the Honourable Jeff Wharton must suspend the Licence and direct the Clean Environment Commission to begin a thorough, open, and transparent review of the entire project, mining, processing, and transporting silica sand.

Image: video of silica sand processing - loaders, trucks, hopper, screeners, dewatering, desliming, slime overflow, flotation, chemicals, conveyor systems, stockpiles, cyclones, scrubbers, noise, light, and dust pollution, drop in property values and end to a country lifestyle. A 24/7 silica sand processing plant and railway operation is set for the quiet hamlet of Vivian MB in the RM Springfield.  
[www.youtube.com/watch?v=9Hg4-nyhoQ](https://www.youtube.com/watch?v=9Hg4-nyhoQ)