

CanWhite Sands – Sand Processing Facility Environment Act Proposal – File No. 6057.00

Public Comments Received From:

Aidan O’Hara

Keith L. Sharpe

Yao Wi

Debbie Wall

Mike Karakas

Tami Reynolds

Ken Taylor

Tangi Bell

Jen and Alex Korotkov

Jay Anderson

Janette and Brent McDonald

Carolyn and James Lintott

Meradith Anderson

William Dyck & family

Sandra Kowalyk

Greg

Sharon Harman

Kelly S MacDonald

Don Jodoin

Marjorie Page

Lindell Page

I don't believe these are the sort of opportunities we should be investing in, other greener options that benefit both the environment and financial wellness should be considered instead. Groundwater depletion is a serious issue and deep considerations should be taken when assessing things that affect it.

Yours truly,

Aidan O'Hara

I wish to have my opposition to the proposed CanWhite Vivian Sand Processing Facility (File: 6057.00) registered with your department.

It seems strange to me that there are two projects, the sand extraction facility ('wells') and the sand processing facility ('plant'), that are linked with the processing plant depending on the sand obtained from the sand wells. The two parts are interdependent, or at least the processing plant is; it would make no sense to build a processing plant without a supply of sand. The wells and the plant should be reviewed together rather than independent of each other or at the very least the well extraction portion should be dealt with first as a separate item and if that first section is approved then the processing plant would be reviewed. The processing plant cannot be properly assessed without including an assessment of the sand extraction wells as it makes no sense to have a processing plant without the sand from the wells.

The same argument applies to the water that will be used, or contaminated, by this entire project. If there are no sand extraction wells there is no need for a sand processing plant. The water used will be cumulative if both project portions are built, but it all starts with the extraction wells. The Sandilands aquifer supplies water to many thousands of people in Eastern Manitoba. Everyone who lives on a rural lot depends on that water. I live in Springfield which uses wells to supply the Municipal water systems. Communities such as Anola, Oakbank, and Dugald depend on the quality of the Sandilands aquifer. This is a very sensitive area and it seems that this type of project is putting the area residents' quality of life, by the potential of contaminated water, at risk for very little benefit to them. While I understand that each application stands on its own I feel that the fact that there are now three current applications for water use in Springfield, the P&H Bulk Fertilizer Storage Plant, the Berger Peat Processing Plant, and now CanWhite, should be taken into account. There is only so much water!

Silica sand is a known carcinogen; it causes lung cancer. The dust from this sand will be of immediate danger to those people living in the area, especially the community of Vivian. Something would have to be done to control dust 100%, no escaping, to protect the area's residents.

Sincerely,
Keith L. Sharpe

Mining the sand from deep underground in the aquifer where it has been safely filtering our groundwater for thousands of years is a terrible idea. Water is sacred.

We should not be mining our groundwater aquifers! Water is life.

Under no circumstance can we mine sand in Manitoba for fracking. All elected officials should take a stand against the expansion of this destructive process.

Unless this sand plant can prove it is not using the sand for fracking, it must not be given a licence.

Yours truly,

Yao Wi

Our poor, poor planet is much too close to her tipping point for us to be enacting policies that will only serve to push her over the edge. We must preserve whatever precious little pristine wilderness remaining and re-wild much of that stolen from the animal nations. I ask that the proposed Vivian Sand Facility and Extraction projects be rejected. We have already taken more than our "fair share" from the planet. Covid-19 is Mother Nature's warning shot, letting us know that we've gone too far. I suggest we heed it.

Yours truly,

Debbie Wall

I was very troubled to hear about a sand fracking mining operation being considered in the Vivian area of our province. The approach of how this operation is being applied for is even more troubling.

This operation should not even be considered without a full environmental assessment being done in advance, so that our government can fully understand the environmental ramifications. Our underground aquifer system is integrally connected to our fresh water river systems. To compromise one would lead to destructive impacts on the other, and to thousands of Manitobans who rely on those aquifers for their drinking water.

Under no circumstance should we permit a mine sand in Manitoba for fracking. Please protect our groundwater systems.

Unless this sand plant can prove it is not using the sand for fracking, it must not be given a licence.

Regards,

Mike Karakas

I was very troubled to hear about a sand fracking mining operation being considered in the Vivian area of our province. The approach of how this operation is being applied for is even more troubling.

This operation should not even be considered without a full environmental assessment being done in advance, so that our government can fully understand the environmental ramifications. Our underground aquifer system is integrally connected to our fresh water river systems. To compromise one would lead to destructive impacts on the other, and to thousands of Manitobans who rely on those aquifers for their drinking water.

Under no circumstance should we permit a mine sand in Manitoba for fracking. Please protect our groundwater systems.

Unless this sand plant can prove it is not using the sand for fracking, it must not be given a licence.

Yours truly,

Tami Reynolds

Stop the destruction of our water. Now !!!!!

Yours truly,

Ken Taylor

This letter is to record my opposition to the Vivian Sand Facility Project. My concerns range from the Environmental Approvals Branch choice in dividing the project, groundwater risks, omissions, ecological and public health.

One Project

It is clear from reading the Environment Act Proposal (Proposal), that the CanWhite Sands (CWS) project for south east Manitoba should not be separated into two parts, as the Sand Facility cannot operate without the Mining, the closed loop system. They need to be addressed in the same application in order to fully assess the cumulative effects and risks from the Project. Further, you must know the details of the mining and silica chemistry, to design the Facility, both in terms of waste water volumes, pyritic shale and oolite waste volumes and proper disposal of that waste.

Section 1.6.1 of the Proposal provides weak reasoning to explain why assessment of the Sand Facility should come before the mining. Being a permanent structure and built over a fall and winter, does not provide for a rational explanation. Neither does anticipating special license conditions because the mine moves to a new site every 3 days. This is not cause to assess the Facility first but definitely to ensure that the mining is assessed before the Facility, due to its special nature and unproven methodology.

The company has gone on record many times indicating that they do not know how to mine for the silica in our water supply and “need to develop a new extraction methodology that has never been done before”. CanWhite Sands has been experimenting throughout the drinking water of thousands in its 85,000-hectare claim, trying to “figure out a way to extract the sand”. Turning an aquifer into a lab rat goes beyond what is allowable for a mineral exploration licence. This mining technique is unprecedented so there is no known outcome. The risks, the unproven mining method and the very location of the mining, in drinking water, should take priority over the Proponents reasonings.

This section also includes CWS plans to “operate the Facility on a commercial basis to process and transfer sand that they do not mine provided that the sand is of the same nature and quality as the resource to which CanWhite’s subsidiary has rights to.” This is not a valid reason for assessing the Facility before mining but is more a reason to initiate a completely new Environment Act Proposal. The Proposal needs to certify the “nature and quality” of the sand.

Secondly, “CanWhite’s wholly owned subsidiary, HD Minerals Ltd., is the legal owner of mineral claims in and around the RM of Springfield” (1.3). This is misleading as it suggests just Springfield. HD Minerals and its subsidiaries need to be identified. HD Minerals may have properties possibly near Pine Dock or Rousseau River and in or outside of Manitoba. The Proposal needs to acquire this information and acknowledge the logistics and impacts involved.

CWS states in section 1.3, that Vivian Sand is “unique to Manitoba and North America”. For this statement to remain truthful, sand from outside North America would then be required. The proposal needs to acknowledge this and the obvious contamination from foreign pathogens outside of North America and the amount of greenhouse gases generated and energy efficiency evaluated. This “commercial basis” is questionable and unsupported by the Proposal and must be rejected.

At the virtual open house, held May 26, 2020, CWS Chief Operating Officer, Brent Bullen made this comment when asked why start with the Facility.

“the reason why we are starting with the plant is we actually have both applications going concurrently, and um we really promised everybody that when we had something of value, we would come back to the market place immediately with it and that’s what we’ve done”.

Industry and the market place should not take priority over the health and welfare of Manitobans. Mr. Bullen’s presentation minimized the effect the project may have on the environment and the residents.

Mr. Bullen also provided another reason, “One of the things we had was there was a bunch of misinformation being spread about our operation so we wanted to get this out, sooner than later, uh to the stake holders as to what we were doing. So that’s why we’re dealing with the plant permitting now. And we decided to break the two into two separate operations. Um, it is actually for the benefit of the stakeholders and the public to be able to come back and look at both and ask us questions on them.”

Allowing the Approvals Branch to assist in a company’s Public Relations and for PR to be a reason for the order of assessment, is improper. Although these are from CanWhite’s open house and

not from the Proposal, one would still expect these to be formal and truthful statements coming from the COO.

From the Premier of Manitoba to the Executive Council, his mandate letter, from March 3, 2020; “Manitobans deserve a government that reflects their values: honesty, integrity and a commitment to hard work. I expect all ministers to work as a team to achieve our platform commitments and to hold themselves to the highest ethical standards.”, and, “We have a record of public trust that cannot be compromised by conflicts of interest, complacency or entitlement.” https://manitoba.ca/asset_library/en/executivecouncil/mandate/2020/cc_mandate.pdf As a Manitoban, I no longer have trust in the proceedings of this government and find I work far too hard to get this government to respect and protect my health and the health of our environment.

13.1(1) Agreements with other Jurisdictions

The Sandilands Aquifer contains the Carbonate and Sandstone aquifers. The Sandstone is also referred to as the Winnipeg Formation. CWS will use water and mine 200 feet into The Winnipeg Formation. The Sandilands Aquifer resides and provides life and livelihood for Minnesota as well as Manitoba. The Winnipeg Formation extends outside of the Sandilands Aquifer. It is “an extensive geological unit which is found throughout southern and central Manitoba and eastern and central Saskatchewan and extends southward into North and South Dakota, Montana and Wyoming” (1). The Proposal fails to address Section 13.1(1) of The Environment Act, “Agreements with other jurisdictions”. The Proposal needs to acknowledge this.

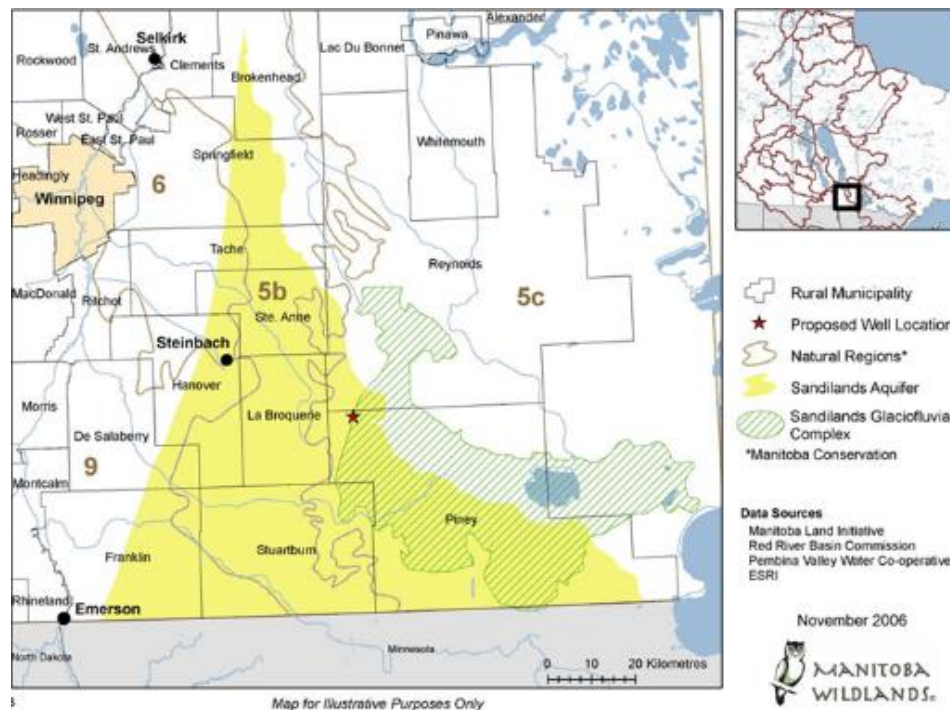
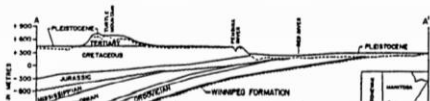




FIGURE 3: Extent of the Winnipeg Formation in Manitoba.



(1) Regional Hydrogeology of the Winnipeg

Formation in Manitoba, R.N. Betcher, figure 3.

https://www.gov.mb.ca/sd/waterstewardship/reports/groundwater/resources2/regional_hydrogeology.pdf

Groundwater Jeopardized

The Proposal states that the Facility will have negligible effects on groundwater. However, with the dependence that the Facility has on the slurry mining, the project overall will have a great effect on local groundwater and the Environment Act Proposal should acknowledge this.

The Winnipeg aquifer is deep and recharges much slower than the Carbonate. The amount that can be withdrawn sustainably is much lower. Mining at deeper levels is particularly problematic because deeper aquifers, which contain less polluted water and have longer water residence times, are placed at direct and long-term risk. Residence time gives an indication of how quickly water in a hydrosphere reservoir can be renewed. Most deep aquifers have a water residence time from under a century to over several. A multi-tracer estimation of groundwater ages, at the Sandilands Aquifer recharge zone near Woodridge, gives groundwater ages getting older with depth but at around 60m below the water table, ages were 40 to more than 49 years. (Andrea J. Cherry from the University of Ottawa, 2000, pg.68) This Project puts this aquifer into a direct and long-term risk.

As fresh groundwater withdrawn from east of the boundary increases, particularly in the populous areas of southeastern Manitoba, including the City of Winnipeg, there are concerns that saline water intrusion into the fresh water portion of the aquifer will result in an eastward movement of saline groundwaters. Charron (1965) More research into the hydrogeology of the aquifer is needed to ensure that current and future rates of withdrawal will not adversely affect the current position of the freshwater boundary. The Proposal does not indicate that this research was undertaken. Prior any mining, this study must be undertaken. <https://web.viu.ca/earle/geol304/grasby-betcher.pdf>

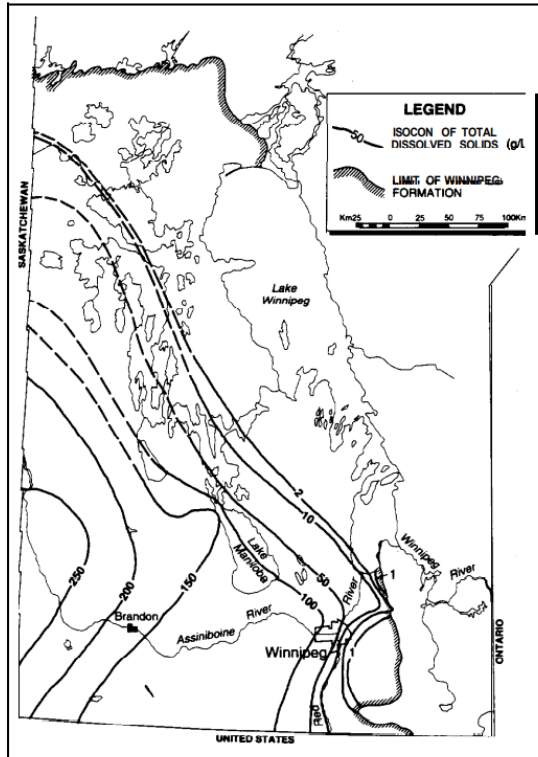


Figure 9. Total dissolved solids of Winnipeg Formation groundwaters (g/L).

Fresh water-saline water boundary Figure 9. Over production of the freshwater zone can enhance the eastward movement of saline water into freshwater.

U of M paper by Kennedy and Woodbury from 2005 states normal population growth in 20 years (2025) will exceed the sustainable yield of the Sandilands aquifer. See Sustainability of the Bedrock Aquifer Systems in South-Central Manitoba: Implications for Large-Scale Modelling. In section, 6.2.3 “impacts on groundwater are assessed to be negligible. The effects are expected to be short term because groundwater levels in the aquifer are anticipated to recover quickly following cessation of pumping, which will occur over winter months each year. The seasonal operation of the Processing Facility will allow for aquifer recovery during periods of time when operations have stopped and following closure.” The Proposal acknowledges impacts to the groundwater however since groundwater levels recover after snow melt, it does not provide their findings as to the length of impact, degree of impact; can you flush a toilet, water quality impacts; higher levels of arsenic, radon, boron etc. With the effects of climate change, a reliable and dependable water source is essential. Lowering groundwater through excessive water usage will have adverse effects to the ecosystem. During summer months, more water is drawn by the environment and human enterprise. The Facility will create a conflict with established residents and business. The Proposal should address how the environment and public will have their right to water, before the CWS Project.

The Proposal states that “water treatment will involve an outdoor clarifier capable of handling a minimum of 64,450 gallons per minute using a food grade flocculant (anionic polyacrylamide) as an aid for fines settling. The levels of flocculant remaining in the water after leaving the clarifier will be virtually undetectable.” Although polyacrylamide (PAM) is nontoxic it degrades from sun, acid and iron into a water-soluble acrylamide monomer, a cancer-causing neuro toxin that

deforms fetus' at parts per billion. Since CWS will be injecting high pressured air into the aquifer the following is comparative, "Although deep subsurface conditions in EOR or HVHF are anoxic, the injected fluids will carry significant concentrations of oxygen into the formation. This oxygen can cause PAM degradation, although it can also react with pyrite and various hydrocarbons". See Polyacrylamide degradation and its implications in environmental systems 2018 Boya Xiong et al. 67,76 <https://www.nature.com/articles/s41545-018-0016-8> This flocculant will go directly into the aquifer via the closed loop slurry mining system. This is unacceptable and CWS licensing application must be rejected.

The shale layer contains pyrite so not only will the flocculent be an issue but air introduced to pyrite will form acid, changing PH levels and heavy metals, such as arsenic, will leach out of the shale. This shale is a natural barrier that separates the two aquifers from cross contamination. Shale is inherently fragile and using high pressured air will degrade its integrity and weaken its ability to continue to separate differing water qualities.

The Manitoba Water Protection Act states; "an abundant supply of high-quality water is essential to sustain all ecological processes, life-support systems and food production, and is paramount to the environmental, economic and social well-being of Manitoba now and in the future". The CWS Project goes against the spirit of the Manitoba Water Protection Act.

Mine Closure and Financial Bond

The Proposal does not mention a mine closure plan and financial bonds for the Facility as required under The Mines Act. It states that "mine" also means (c) a processing plant. Section 74(2) states, a holder of a claim shall not commence or recommence work on an advanced exploration project until (ii) a closure plan prepared in accordance with the regulations; and (b) the director approves the closure plan and accepts the security provided with the plan for the performance of rehabilitation. The Proposal should acknowledge the closure plan and bond requirements as required under The Act.

Transport

Key components of the Project are a Rail loop track that will allow the Facility to transport silica sand to market by rail. This has been sold as an essential safety feature that will prevent release of silica fines into the atmosphere, an issue with truck transport. Discussions to develop two rail spurs to connect the loop track have not been finalized with Canadian National Railway (CN). CWS has moved responsibility for these spur lines onto CN and somehow been allowed to entirely dismiss the two rail spurs from assessment. (section 1.1) The Proposal should acknowledge the two rail spurs as they are a safety feature and essential to rail traffic and create impact.

If discussions fall through with CN, truck transport is the only option. This increases the risk to Silicosis and other lung diseases from nuisance dust impacts and it increases noise, traffic congestion, highway safety issues and wear and tear to infrastructure. As the Proposal does not provide information on truck transport, the Proposal should not be assessed until discussions with CN are finalized and the results known.

Information given by CanWhite Sands in a presentation to investors in 2019, Fort Lauderdale, Florida, contained warrants that CWS must achieve for certain performance milestones required by investors. The fourth milestone is to "provide evidence of the economic viability of transporting the product from the project area to Winnipeg, Manitoba, by rail, truck, or a

combination thereof;”. It is unclear as to why this warrant information is not contained in the Proposal, it is part of the economic feasibility of this Project.

From the same presentation, information on; “Low environmental impact, no truck traffic – sand moved to processing facility without use of any trucks (proposed Plan).”

This slurry will be transported to the Facility by portable pipeline. This pipeline replaces the need for truck transport and will pump a sand slurry over 60 km distances throughout the 24-year life of the Facility. The Proposal however, does not provide any details or evidence to explain how the CWS claim, that there will be no truck traffic, can be achieved over these distances and throughout the life of the Facility. The Proposal needs to contain this information.

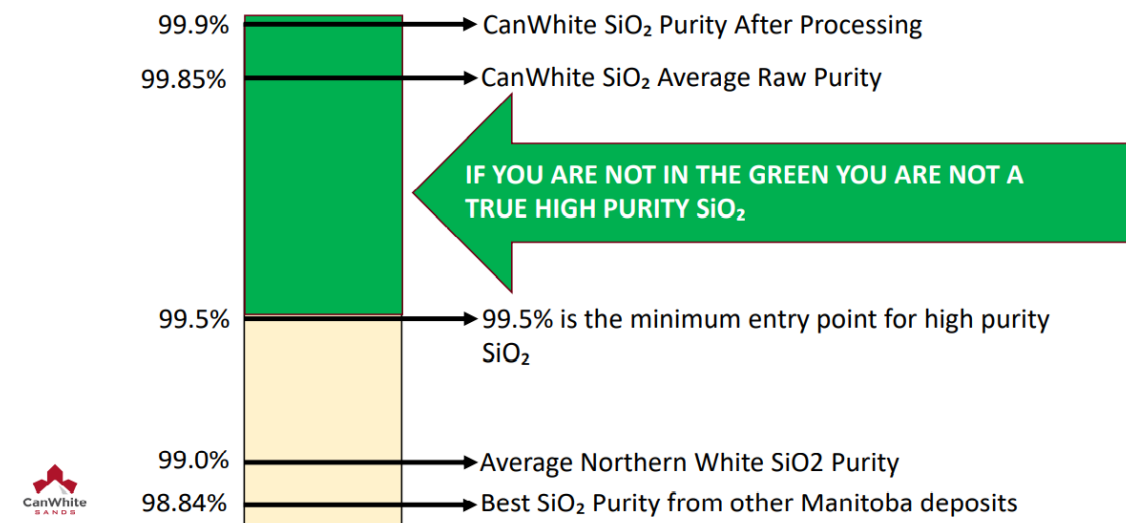
Market

Forty percent of the mined silica will supply the Fracking Industry. CWS fails to provide a Business Plan to support that their Board, consisting of only oil, gas and coal experience can be successful in diversifying 60% of the mined silica into a new, unfamiliar market.

Silica used for raw material for producing solar panels must have a purity of 99.99%. Quartz sand cannot be used as a raw material for pure silicon for the manufacturing of solar panels with ordinary washing processes because a breakthrough is required in the wash process so that the Quartz can reach the standard necessary as a raw material. (Journal of Physics: Conference Series 1434 (2020) 012021 IOP Publishing doi:10.1088/1742-6596/1434/1/012021 1

Characteristic study of SiO₂ content of quartz rock as a raw material for making silicon metal for solar cells D Darwis¹, E Sesa¹, Iqbal¹, S Kasim², Diharnaini³, A S Lestari³, M Lamanu³)
<https://iopscience.iop.org/article/10.1088/1742-6596/1434/1/012021/pdf>

Why are we focusing on sand here in the Vivian area



CanWhite Sands slide provided to citizens at virtual open house May 26, 2020.

Since ordinary wash processing cannot turn 99.85% into 99.99% standard for the manufacture of solar panels, the Proposal needs to identify how CWS can achieve this claim.

At the same presentation in 2019, CanWhite provided a Technical Report on Sand Purity.

The report shows that the highest purity for CanWhite Sands is 98.80%

The Proposal fails to provide certified evidence whether their product can meet the standards for solar panel production and other industries as declared.

Health and Property

The single study provided, on property values in the vicinity of silica sand extraction and processing facilities in the United States, concluded that there are “no documented circumstances of industrial sand mining causing a community-wide reduction of property values” (The Heartland Institute, 2016). The Heartland Institute is a free market think tank and is at the forefront of denying scientific evidence for man-made climate change, second hand smoke health hazards and was a guest as the president announced the withdrawal of the United States from the Paris climate agreement. <https://insideclimatenews.org/news/22122017/big-oil-heartland-climate-science-misinformation-campaign-koch-api-trump-infographic>

A 2013 report by the Department of Agricultural & Applied Economics at University of Wisconsin-Madison was initiated to study the impact of Frac Sand operations on tourism and Property Values. The report found a 2% decrease in home values from a doubling of traffic volume and homes effected by traffic in the 65 to 70 decibel range, sell at a 5.1% discount. For context, a dump truck at 50-foot distance registers 84 decibels. The Proposal gives overall decibel levels for the rail portion between 92 to 97 dBA. Although Vivian is situated nearby and on the North side of the CN mainline, the Proposal states that 3 fully loaded freight trains will be added weekly to this mainline. The Report found that properties within 750 feet of lines having increased freight traffic saw property values drop from 5% to 7%. <http://www.sandpointtimes.com/pdf/Frac-Sand-Impact-Tourism-Property-Values.pdf>

In another study, Communities at Risk: Frac Sand Mining in the Upper Midwest, it discusses property value impacts, tax revenue reduction and costs externalized to the public. The Civil Society Institute is a non-profit, non-partisan research and education organization focusing on advancing civic engagement on issues that directly affect individuals and the communities they live in.

<https://www.civilsocietyinstitute.org/NEWCSI/2014CommunitiesatRiskFracSandMiningintheUpperMidwest.pdf>

An industrial sand processing plant operating 24 hours, 7 days a week will definitely help to decrease property values for rural residential living. This, plus the presence of a 94-foot silica sand stockpile, equal in height to a 10-story apartment building will also be a constant reminder of the dangers to silicosis and a worry that the company, CanWhite Sands will follow safety protocols.

Our experience in trying to get our Government officials to help us with CanWhite Sands unsecured silica stockpiles, has destroyed any trust in having the rules and regulations, that protect our environment and our health, enforced. Rules and regulations are great but nothing if not enforced. COO Brent Bullen, claimed that they were prevented in coming out and securing the stockpiles because of Covid restrictions. However, in speaking with the Regional Medical Officer of Health for Interlake-Eastern Regional Health Authority who, with Dr. Roussin, wrote the Covid essential service guide, informed me that mining is an essential service and they were allowed to come to Manitoba and secure the stockpiles. In our conversation, I was also informed that their department knew of this issue on June 10th. When asked as to why they did not act, they were told that the mines branch would be looking after it. I requested that an independent investigation into this matter be taken to ensure that this does not happen again and that the Mines Branch

acts on behalf of the people and does not interfere with enforcement of rules and regulations. Still waiting for my answers and requests to be fulfilled (email June 17).

Conclusion

Permitting CanWhite Sands to divide their project and evaluate in this particular order, creates a fragmented, incoherent and vague assessment process that prevents acknowledgement of the cumulative risks and impacts from the project. This project puts our Environment and Manitobans at unnecessary risk. This project must not be divided into two parts. It merits a class 3 development rating with the Clean Environment Commission holding public hearings with participant funding.

As there are also Federal jurisdictional issues; neuro toxin and waste water contamination of waterways, species at risk, deleterious impacts to Aquifer systems and the drinking water of thousands of Manitobans and the need for aboriginal consultation as per section 35 of The Constitution, a joint Provincial and Federal Impact Assessment with Clean Environment Commission hearings is vital.

I would ask that you carefully consider all the objections you are receiving and in the interest of public and environmental health, deny CanWhite Sands Corporation – Vivian Sand Facility Project-File: 6057.00.

Sincerely,

Tangi Bell

We are obviously concerned with these activities in the RM.

At the very least the RM should request postponement of the test drill to enable an independent engineering review of the aquifer and impacts of the borehole and extraction so close to the Lorette well, of immediate concern.

The RM should hire a competent engineering firm to assess the risks including expected recharge rates given our recent dry weather. Also, who is and how are they ensuring that they will only extract the approved amount of water and not more?

It is already concerning how this test site selection even came to be. Clearly the main consideration was the optimal location for Can White.

In the RM of Springfield Vivian is at least some distance from Oakbank.

Sincerely,

Jen and Alex Korotkov,Lorette

I was appalled to read the story of the sand-mining plans near the town of Vivian. The shortsightedness demonstrated in even considering such a proposal, given that the environmental risks are well known and easily defined, speaks to a "screw you" attitude toward the environment and the people of Manitoba by the provincial government and the mining interests.

On top of the environmental transgressions, the now-public knowledge of the proposal ensures the province and the business owners of a protracted and expensive legal battle that carries a significant risk to you and them of ending this and any future plans to extract sand from a Manitoba watershed.

I own a small plot of land just outside of Vivian and the mining proposal is likely to make the property useless to me. I am not pleased that I had to discover this project in the media instead of being informed directly that a change in land use was in the works. Common courtesy-the kind a mother would teach-would have dictated that I be informed of the project directly instead of hearing of it "accidentally." I don't like it and I want it to stop.

Yours truly,

Jay Anderson

We are very concerned about the proposal from CanWhite Sands (CWS) to construct a silica sand processing facility near Vivian, Manitoba.

Shale overlies a sandstone aquifer of the Winnipeg Formation far below the ground surface at Vivian. Shale is well known to contain pyrite that causes acid drainage that mobilizes heavy metals such as arsenic in the shale. If this facility is allowed to proceed, this shale will eventually be exposed on the surface, leaching acid. Pyrite will dissolve in the excess water that will be discharged on the surface of the mine. Mobilized heavy metals in the discharged water will end up in the Brokenhead River.

We were born and raised in Manitoba and have family members who operate a very successful business on the banks of the Brokenhead River. The protection of the Brokenhead's water quality is vital to the continued success of this business and to the quality of life of residents of eastern Manitoba.

We recommend that:

1. the province of Manitoba suspend its approval process until such a time that the appropriate federal authorities have the required information from CWS to determine the extent of the adverse impacts.
2. CWS submit information for its proposed silica sand processing facility and its silica sand mine and mining method, to be reviewed as one project.
3. the province of Manitoba determine whether a federal Impact Assessment Act (IAA) is applicable.
4. the Crown undertake a consultation process with the Brokenhead First Nation to determine impacts of the proposed project on the Brokenhead First Nation.

Yours truly,



Janette McDonald



Brent McDonald

We are writing to express our concerns over the CanWhite Sands proposal to build a processing facility and a sand extraction facility in the Vivian area of Manitoba. It is important for us to state clearly that we do not object generally to industrial development in the RM of Springfield. Our issue is with this specific project and stem from concerns over three things:

1. In Manitoba and Canada we are extremely fortunate that good, clean drinking water is accessible to most people. While we want to encourage growth and development this proposal is for a project that is expected to extend over only 24 years. This is a very short term investment which does not seem worth the potential risk to a valuable water supply.
2. The proposals are being dealt with separately. This does not allow for a comprehensive look at the environmental impact of this project. If the first one is approved the second may wind up being rubber stamped without the proper oversight to ensure groundwater safety.
3. A large proportion of the sand being extracted is intended for use in Fracking in the oil and gas industry. Although we understand the need for the oil and gas industry, there are concerns with this method of extraction. Surely our long term objectives for Manitoba and for Canada need to take us in a direction that puts us on a greener path for energy sourcing and consumption.

In closing, what we believe is needed is an independent third party analysis of the chemical and environmental impact of the entire project before proceeding. We also want to know what is happening in similar projects elsewhere. Until this happens the request for this project:- the CanWhite Sands Corp - Vivian Sands Processing Facility - File 6057.00 should be denied.

Thank you
Carolyn and James Lintott

THIS MUST STOP NOW!!!!!!!!!!!!!!!!!!!!!!

Stop the Silica Sand processing Facility in Vivian Manitoba.

I live in Vivian, Manitoba with my young daughter and husband.

It will be devastating to the environment in Vivian, surrounding area and anywhere the Brokenhead river flows.

It will create at the very least 3 very serious problems:

1. Destroying and contaminating the aquifer that provides water to the nearby communities. I'm worried our well will be affected and no town water to fall back onto.
2. Breathing in the silica dust which can cause silicosis an incurable and deadly lung disease. I'm worried about our 8 yr old daughter and the effects on her lungs. I also suffer from Multiple Sclerosis and already have a compromised immune system.
3. Implications of the area where its going to Drain on the Brokenhead River and the damage it's done to previous sites example.. Black Island shores.

Would you like to live across the street from this? I already do. What am I supposed to do now?
How about all the people that will be affected in this community as well as the surrounding areas
by this very bad business deal?
What about their rights to clean water and air?

Our government needs to stop being reckless with our environment!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Yours truly,

Meradith Anderson

This email is in regard to the proposed project submission by CanWhite Sands Corp. We are long-time residents of the Anola area and this project will directly affect us. We enjoy our clean drinking water and believe that the silica sand serves a purpose of filtration to our water. We are very concerned about the possible affects that removal of the silica sand would have in relation to the quality of our drinking water. As well, any contamination of the aquifer due to the extraction and mining of the silica sand. The jobs that the mine claims it will provide will only be for a period of 25 years if the project is successful. What happens to those jobs after the mine is no longer operational? We have seen an increase of houses put up for sale in the area due to fears that people have regarding this mine.

During these uncertain times we should be doing our best to protect our environment and drinking water, not sell out for monetary gains.

Please forward to any department that needs to be aware that we as citizens of the area, will be directly affected by this proposed project, and we are not in favour of the mine that will be in close proximity of where we live.

Sincerely,

William Dyck & family

this in regards to the proposed processing plant that Can West has proposed to build and process silica sand. I am very concerned about the environmental effects this will cause in regards to discharging toxic waste into the Brokenhead River and Manitoba's eastern waterways. This project should be thoroughly looked at for the ramifications if this is pushed ahead and approved. Our environment is already be severely affected by climate change. We do not need further man-made problems being added to an already stressed out environment.

Sandra Kowalyk

Wednesday's Free Press - Letter's to the Editor
Mining poses environmental dangers

Re: *New project puts Brokenhead at risk* (Aug. 19) For the second time, my picture has appeared in the *Winnipeg Free Press* without identifying what I am holding. The first time on Aug. 14 the cutline under my picture stated I was holding a soil sample.

It is not soil. It is a sample of shale taken from piles of sand extracted by CanWhite during exploration solution mining of sand near Vivian. The shale overlies the sandstone aquifer of the Winnipeg Formation far below the ground surface. Shale is well known to contain pyrite that, when exposed to air and water, causes acid drainage that mobilizes heavy metals such as arsenic in the shale.

The licence given to Canadian Premium Sand for surface mining of the sand from the same Winnipeg Formation sand as at Vivian required extracted shale to be buried in clay-lined pits covered with limestone to prevent acid drainage. The province spends millions per year to remediate old tailings in northern Manitoba that contain pyrite.

This shale interspersed in the extracted sand from the solution mining process of CanWhite will eventually be in reject piles exposed on the surface, leaching acid. Another source of pyrite is oolite nodules (a form of limestone) that contain 75 per cent pyrite according to a certified NI 43-101 technical report for the Wanipigow Sand Project. These nodules have been collected in the extracted sand piles near Vivian.

Certified lab reports have identified marcasite as a third source of pyrite in the sand itself. Pyrite from these three sources will dissolve in the excess water from the solution mining and that will likely be discharged on the surface.

Mobilized heavy metals in the discharged water can leach into the carbonate aquifer and eventually migrate to the Brokenhead River in runoff. The evidence for the pyrite in the shale, sand and oolite extracted by the solution mining method should be enough to halt this project.

DENNIS LENEVEU

Selkirk

Also, there is an article on the front page of this week's Clipper

Greg

New project puts Brokenhead at risk

DON SULLIVAN

THE Brokenhead River begins in the wetlands of Sandilands Provincial Forest, located in southeastern Manitoba. It ultimately drains 200 kilometres later into Lake Winnipeg. Most of the river is navigable by canoe or kayak.

This meandering river is now under threat.

It might very well become a toxic dumping ground for CanWhite Sands Corp (CWS) of Alberta. Last month, CWS filed a proposal under Manitoba's Environment Act, for approval to construct a silica sand processing facility near the town of Vivian. The closing date for commenting on this proposal is Aug. 25.

Once the processing facility receives government approval, CWS intends to submit a second application. This would be for both the mine, where the sand will be obtained, and for the methods the company will use to extract it. The splitting of a single proposed project into two separate ones in this manner probably makes approval a foregone conclusion.

CWS indicates that 15 per cent of what it will extract (from 60 metres below the surface in the Winnipeg Formation aquifer), will be sand and shale. That means that 85 per cent will be water — a fact conveniently ignored in the company application. Simple math shows that in order to produce its intended target of 1.36 million tonnes of sand per year, CWS will also need to extract 7.7 million cubic metres of water annually.

This will surely pose a serious problem for the people of southeastern Manitoba who rely on this aquifer for their drinking water, because this much water coming out of the aquifer annually will certainly inhibit the ability of this aquifer to recharge itself.

Since the average Canadian uses 329 litres of water a day, this means the amount required by the company would serve a city much larger than Brandon each year.

The sand and water will be sucked up to the surface through hundreds of boreholes; only a fraction of it will be needed to process the sand in the wet plant. The bulk of it, likely more than six million cubic metres, will likely be dumped into the Brokenhead. It will contain high levels of heavy metals, chromium, arsenic and neurotoxins. It will also be acidic, as pyrite in the shale will cause acids to drain into the river.

Of course, CWS never mentions any of this in its application. That would apparently be too transparent for them, and might even raise a number of alarm bells.

The release of deleterious substances into the river would be a clear violation of the Federal Fisheries Act and would threaten aquatic life there — life such as the rare chestnut lamprey eel, an at-risk species still surviving in the Brokenhead. It would almost certainly be affected. The river runs through the Brokenhead First Nation, which, to my knowledge, has never been consulted on the effects of this project on their treaty rights.

What The Frack Manitoba is therefore calling on the appropriate authorities to do the following.

First, request that the province of Manitoba suspend its approval process until such a time that the appropriate federal authorities have the required information from CWS to determine the extent of the adverse impacts the proposed development project will have with respect to federal jurisdiction. And that the proponent (CWS) submit information not only for its proposed silica sand processing facility, but also its silica sand mine and mining method, to be reviewed as one project via a panel-review process, to determine the extent of the adverse impacts with respect to federal jurisdiction.

Second, determine whether the federal Impact Assessment Act (IAA) is applicable, and if not, that the appropriate federal minister and/or federal authority use the discretionary powers under the IAA to designate this proposed development an IAA project for the purpose of applying the provisions contained in IAA.

Third, request that the Crown (federal/provincial, as they are not divisible) undertake a Section 35 consultation process with Brokenhead First Nation to determine what, if any, adverse impacts this project will have with respect to Brokenhead First Nation Section 35 rights prior to any environmental approval of said proposed development project occurs.

Don Sullivan is the spokesman for What The Frack Manitoba, former director of the Boreal Forest Network and has served as special adviser to the government of Manitoba on the Pimachiowin Aki UNESCO World Heritage site portfolio. He is a research affiliate with the Canadian Centre for Policy Alternatives.



Biophysicist and concerned resident Dennis LeNeveu says the proposed frac-sand project will render the region's aquifer unsustainable.

JESSE BOILY / WINNIPEG FREE PRESS

As a Manitoban I vote a big NO to this project. I have informed myself as well as possible and have not read one expert who comes near expressing a positive outcome. Just danger!! , Risk, danger and nothing good for people in Manitoba. Stop this project. It is a reckless path to disaster.

The only positive outcome is outlined on the website of CanWhite Sands Corporation.(an Alberta company)..where we hear it's wonderful clean almost perfect sand....it won't need to be cleaned very much at all!

No mention of their use of water. No mention of the polluting of an aquifer that should sustain the people of Manitoba for decades. No mention of the heavy metal pollution and toxic mess that will need to be cleaned up for decades in the Brokenhead River. etc.,etc.

No mention that the sand already has a purpose....to maintain the pristine quality of the aquifer water.

This project is a reckless path to disaster.

The experts have the facts ...I ask you to listen to them.

Wpg Free Press Aug 19 Page A7 Don Sullivan's piece.

Also numerous letters to the editor over the last month ..urging citizens to speak out against this project.

This is the same old rape and pillage.. find it, take it away, leave the people with a big mess. Oh and nothing safe to drink.

And I haven't even mentioned the fracking aspect. Fracking ..which has already peaked and is a dying industry. and leaves water problems everywhere it goes. Silica sand is becoming more and more scarce. Don't squander it.

I really hope you hear us....and our resounding NO Thank You.

Yours truly,

Sharon Harman

I am writing to express my concern about the proposed silica sand mine in the RM of Springfield Manitoba.

I believe the environmental assessment does not adequately take into account the long term impact on the 2 major aquifers in the region. As you know, this will be the largest project of its kind in North America and silica sand mines have a history of being under estimated in terms of their long term environmental impact so it is my opinion that a federal environmental review is absolutely required . This is particularly the case given the potential for drinking water contamination because of water acidification.

Additionally, the Brokenhead River may be contaminated if acidification creates increased heavy metals in surface water and thus the reserve will be severely impacted. They have not been consulted.

I don't have to tell you that this river runs into Lake Winnipeg and we have many stories in the past with contamination of rivers running into Lake Michigan and Erie, we don't need to repeat this.

I don't oppose this project completely but I do think a federal assessment and involvement of Native groups potentially impacted is absolutely necessary.

Thank-you for work on this,

Kelly S MacDonald

Considering the history of Corporations abandoning sites after the environment (in this case the water supply for thousands) has been completely ruined, I think an alternative sand supply needs to be found. The impact of obtaining the sand from this site carries too big a price. The mine should not be allowed to operate.

Yours truly'
Don Jodoin

I wish to register my concern regarding the proposed Vivian Sand Processing Facility (FILE: 6057.00).

As you know there is significant concern from informed stakeholders that this project will endanger aquifers and local groundwater.

I would ask that you carefully consider all the objections you are receiving and seriously consider delaying and possibly denying the CanWhite Sands application File: 6057.00.

Sincerely,

Marjorie Page

Please register my grave concern over this file.

I think more intense study is warranted with a possible termination of the project. Extensive environmental impact assessment is called for. Objections raised by knowledgeable individuals must be adequately answered before any further approval should be considered. Health issues are at stake. Sustainability of water quality is in danger.

Thank you

Lindell Page
