

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

**Public Comments Received From:**

Janice Bettens

Fred Goods

Jillian Winnicki

Leslie Olsson

D. Krentz

Marie Mozil

Jared Bremner

Philip Ferguson

Cameron Livingstone

Jack Kowalchuk

James Culleton

Margaret Waldner

Lynne Strome

Judith Morrow

Jackie

Michael Zurek

Don Sullivan

Jo-Anne Gibson

Dennis M. LeNeveu

Gary Stuve

Robert D. Hill

Cori Swenarchuk

Nicole

Ralph and Bonnie Christianson

Brenda Kiansky

Brent Bjorklund

Michael Simpson

Brent Holtzman

Linda Whitford

Kathleen Bell

John Heke

Jamie Godfredsen

Loretta

Bev Jacobs and Morley Jacobs

Michael Bailey

Kim Bjornson

As a resident of Springfield I wish to register my concern and opposition to the sand mining that is proposed in Vivian. Anything that threatens the quality of life should never be approved! The clean water supply we currently have and enjoy would be badly contaminated with this mining. Please do not allow this to go forward

Janice Bettens

---

I am writing to express my concerns over the proposed silica sand processing facility and silica sand mine planned to be built in Vivian, Mb by the CanWhite Sands Corp. of Alberta.

The Environmental Act Proposal prepared by AECOM does nothing to account for what will become of millions of cubic meters of water that will be pumped to the surface along with the silica sand in the slurry. The proposal suggests water will be continuously recycled in a loop with excess water to be stored in a surface tank, but a slurry containing 85% water would meet the water needs for production constantly and leave a continuous excess that would be impossible to store in a tank. Where exactly will this water go?

The EAP states that "The Project site contains no surface water apart from roadside ditches" and that "these surface waters are not directly connected with permanent natural waterways". If local ditches don't drain into local waterways, where does the water go?

It does not make sense to suggest that all water in this mining operation will be contained and recycled. Excess water discharged at surface level will undoubtedly flow into the Brokenhead River. Discharge water from a mine will contain harmful chemical by-products that do not belong in our rivers.

I live within what CanWhite Sands describes as the "Regional Project Area", which is likely euphemistic for the area that will feel the most drastic negative environmental impact due to this mine. I live along the Brokenhead River, the likely vulnerable dumping ground for discharge mining water. I am gravely concerned about the damage this project will cause to myself, my family, my neighbours, and the fish and wildlife in the area and all of our future ability to live here.

Please do not accept this Environmental Act Proposal as it has been submitted. It is deeply flawed with obvious attempts to obfuscate the reality of this mining operation's impact on its surroundings.

Thank you for your time,

Jillian Winnicki

---

There have been numerous precedents set on projects such as these companies destroy the aquifer and then just walk away. The majority of residents in the RM of Springfield are on Wells and don't want anyone messing with our watershed we rely on this as our source of clean water. Nobody can guarantee no matter how many environmental assessments they do what the long-term effects of this process are. This needs to be stopped now.

Thank you for your time  
D. Krentz

---

I'm not sure where to start with this. Obviously have questions about the water being used firstly. I'm curious how the company expects to get the raw materials to the actual processing plant? Is there a tailing dam being built for reclamation of excess water? What are the hours of operation?

How would this even be plausible to pass when they can't and don't have a number of gallons expected to be used? If passed, why would this mine be the only one that wouldn't have to divulge water consumption?

If you have time my home number is 1-204-866-2345. I'm not looking to complain to you, in fact looking to help and ask questions that may haven't been asked or addressed. I have commissioned mines and have seen what these companies say they do and what they actually do.

Thanks  
Jared Bremner

---

Respectfully, I encourage you to oppose the sand mine in the RM of Springfield.

In this age of recognition of environmental damage caused by humans in the pursuit of revenue, we need to protect our vital resources. Our water aquifers must not be put at risk. Also, the planned use of the sand for fracking is something we can do without given the concerns about the damage caused by fracking.

Sincerely,

Cameron Livingstone

---

I'm a property owner on the Brokenhead River just north of Vivian and I'm very concerned about this project and the potential affects of it on the river and on Lake Winnipeg. I would be interested in any information on this review process, any public meetings or hearings on it, etc. I'm worried.

James Culleton

---

We are Manitobans, each of us. With this honour comes the responsibility of doing the best we can to live healthfully and respectfully together. I am deeply concerned that the Vivian Sand Facility project may jeopardize the vast clean water supply of the Sandilands aquifer.

The project's environmental impact proposal warrants a Clean Environment Commission review with a public hearing and intervener status funding,  
For the future well being of all concerned, I strongly encourage Minister Sarah Guillemard to take on this project, re-analyze it, and bring it up to the status that it deserves. Then only, will we be doing our best.  
Sincerely and with hope for the future,

Lynne Strome

---

I am writing to express my objection and concerns with the Vivian Sand Facility Project. I live in Anola, and have received boil water advisories in the past. Clean, safe drinking water is not something we should risk or take for granted.

Frack sand mining and processing has significant potential to contaminate our ground water, the Brokenhead River and Lake Winnipeg. People, animals, agriculture, and our eco-system depend on fresh, clean water. Once it's been destroyed, the damage cannot be un-done. I do not want frack sand mining and processing in my back yard. The Vivian Sand Facility does not have the right to contaminate our water, and you as a Government minister should protect Manitoba's environment. Aside from the health hazards, think of the economic disaster contaminated water will bring.

We need a clean environment commission review and a public hearing. Any project with such a negative impact to our most valuable resource, water, should never be approved. A lesson from the current pandemic tells us that things can get out of control quickly. Lets not add unsafe water to our 'new normal'.

The quote below is from the Winnipeg Free Press article, and should be taken seriously.

<https://www.winnipegfreepress.com/local/sand-plant-threatens-drinking-water-critics-say-572105012.html>

*'A proposed sand-processing plant 35 kilometres east of Winnipeg would threaten the drinking water of 64,000 Manitobans and needs greater scrutiny, critics say.*

*"It will destroy the sustainability of the aquifer," said Dennis Le Neveu, a biophysicist and one of the area residents who joined Liberal MLAs Dougald Lamont and Jon Gerrard Thursday to voice concerns about the project.'*

*CanWhite Sands Corp. plans to remove 3.5-million tons of sand a year from the ground, for fracking and other purposes, at its Vivian Sand Facility Project near Anola, in the RM of Springfield.*

*The plan is to pump sand and water up from the ground and then return the water, which LeNeveu said becomes contaminated when the pyrite in the shale hits the surface, oxidizes and*

*turns acidic. There is a risk of contaminating the groundwater as well as the Brokenhead River and Lake Winnipeg, he said. The frack sand mining and processing might provide short-term wealth to some, but could contaminate the source of drinking water for 64,000 Manitobans, said LeNeveu, a former safety officer at Atomic Energy Canada Ltd., who has worked as a consultant in the oil industry.'*

Your name was listed in the article for a reason - you have the authority and ability to help. Would you please help?

Thank you!

Jackie

---

I am writing on an urgent matter that requires immediate attention from the appropriate Ministers and or Federal Authorities.

**Brief Background of the Issue:**

On July 16th, 2020 CanWhite Sands Corp (CWS) submitted an Environment Act Proposal (EAP), as per the Manitoba Environment Act (Public Registry File # 6057.00), to obtain Manitoba environmental approval to construct a silica sand processing facility and to produce 1.36 million tonnes of processed silica sand per year. The proposed silica sand processing facility will be located near Vivian, in Southeastern Manitoba.

Closing dates for comments on CWS EAP is August 25th, 2020.

Once the proposed silica sand processing facility receives Manitoba environmental approval, CWS intends to submit a second and separate EAP for environmental approval, under the Manitoba Environment Act, for its proposed silica sand mine and the mining method to extract the silica sand.

This splitting of this single proposed development project into two separate projects makes approval, under the Manitoba Environment Act, of the silica sand mine and the mining methods to extract the silica sand a foregone conclusion.

**Issues Regarding Federal Responsibilities:**

The issues I wish to raise with the appropriate Ministers and or Federal Authorities is as follows; Based on the information contained in CWS EAP, the company indicates that 15 percent of what they will extract from 200 feet below the surface, in the Winnipeg Formation aquifer by using solutions mining method, will be solids (silica sand and shale), while not explicitly mentioned (intentionally I might add) in CWS EAP the remaining 85 percent will be water. (page 12 of CWS EAP - 2.1.1.1)

After doing some basic math, based on 15 percent of what is being extract will be solids, we know that in order to produce 1.36 million tonnes of silica sand per year, CWS will also need to extract 7.7.million cubic meters of water on an annual basis to produce the 1.36 million tonnes of silica sand per year.

We also know that the silica sand, once extracted and after going through the wet plant at CWS proposed processing facility, the stockpiled processed silica sand will contain roughly 15 percent water and the wet plant itself will use some of the 7.7 million cubic meters of water a year in the processing of the silica sand.

Therefore, we anticipate roughly 6.5 million cubic meters, of the 7.7 million cubic meters of water extracted yearly, will need to be discharged.

This discharge of 6.5 million cubic meters of water annually will in all likelihood be released into the Brokenhead River which drains directly into Lake Winnipeg and will contain high levels of heavy metals, chromium and arsenic and will be acidic, as pyrite in the shale withdrawn with the sand and in the sand itself, will cause acid drainage and mobilization of heavy metals.

The release of deleterious substances into the Brokenhead River would be a clear violation of Section 36(3) of the Federal Fisheries Act.

The Chestnut Lamprey eel, with an extant population on the Brokenhead River and assessed as vulnerable and of special concern on schedule 3 of Species at Risk Act, will also most certainly be adversely impacted by this proposed development project.

The Brokenhead River is a fish bearing river that flows through federal lands, as the Brokenhead River runs right through the Brokenhead First Nation which to our knowledge has never been consulted by the Province of Manitoba prior to CWS EAP submission with respect possible adverse impacts to Brokenhead First Nation Section 35 Rights.

I have included, as a pdf, a more detailed assessment of our concerns outlined in this e-mail, that was prepared by Dennis LeNeveu who does research for What the Frack Manitoba.

**Request:**

We are therefore asking the appropriate Ministers and or Federal Authorities to exercise their fiduciary responsibilities, as per a number of Federal Acts to do the following;

1. Request that the Province of Manitoba suspend its provincial 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 of the proposed development project will have with respect to federal jurisdiction and briefly outline in this e-mail and attached pdf analysis. Furthermore, 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, to determine the extent of the adverse impacts of CWS proposed development project with respect to federal jurisdiction.
2. Determine if 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.
3. 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 of CWS proposed development project will have with respect to Brokenhead First Nation Section 35 Rights prior to any environmental approval of said proposed development project occurs.

Respectfully,

Don Sullivan  
What The Frack Manitoba

Attached pdf document:

## **CANWHITE SANDS CORP PROPOSED SILICA SAND PROCESSING FACILITY AND IMPACTS TO THE BROKENHEAD RIVER**

**Prepared by**

**Dennis M. LeNeveu B.Sc. (hons. physics), M.Sc. (biophysics), former member of the Canadian Society of Safety Engineering – July 28, 2020**

The CanWhite Sand Corp (CWS) proposed project for its silica sand processing facility at Vivian, Manitoba is now in the Public Review Approvals process with the government of Manitoba. The approval is for a licence for the company's silica sand processing plant only and will be built at Vivian, Manitoba.

CWS silica sand mine and the method they will use to extract the silica sand will undergo a separate approval process by the government of Manitoba at some later date.

Public comments for CWS processing facility are accepted until August 25 at

<https://www.gov.mb.ca/sd/eal/registries/6057canwhite/index.html>.

CWS plans to extract 1.3 million tonnes of sand per year by solution mining method from the sandstone aquifer of the Winnipeg formation about 200 feet below ground.

Hundreds of boreholes will be drilled through a layer of surficial till, through the limestone aquifer, through a layer of shale and into the sandstone aquifer. Compressed air will then be pumped into the bore holes to create a silica sand slurry. The silica sand slurry will be withdrawn from the boreholes from the aquifer and pumped by pipeline to its silica processing plant in Vivian. Shale fragments have been observed in sand piles extracted during exploratory drilling. Thus shale fragments generated by the compressed air extraction method will be in the silica sand slurry

The silica sand will then be washed in a wash plant. Silt, clay and fine silica particles will be separated out. The washed sand will then be stockpiled outside the wash plant for further processing in a dry plant. In the dry plant the sand will be dried with a rotary drier and sieved into various size fractions to be sold throughout the North American market.

The slurry withdrawn from the sandstone aquifer will be 15% solids (silica sand) the rest, 85 percent will be water. This means 7.7 million cubic meters of water will be withdrawn from April to November from the sandstone aquifer. Of this 6.5 million cubic meters will be discharged. The remainder will be in the wash plant and sand stockpiles.

The silica sand and shale withdrawn from the aquifer contains pyrite and heavy metals such as iron, arsenic, barium, manganese and chromium. The pyrite when exposed to air and moisture will form acid that will leach the heavy metals from the sand and shale.

The 6.6 million cubic meters of discharged water laden with acid and toxic heavy metals will drain from the plant site into the Brokenhead River about 3.5 kilometres to the southeast. The drainage path shown in figure 1 is to the southeast of CWS proposed processing facility through a partially forested area and a swamp and into the Brokenhead River.

At 6.5 million cubic metres withdrawn over about 220 days, the average discharge rate will be 0.34 cubic meters per second. The hydrographs of the Brokenhead flow rate at Beasejour show

the rate is highly variable from near zero to 9 cubic meters per second. Typical low flow rates are less than one cubic meter per second.

For much of the time the entire flow of water into the Brokenhead River will be from plant discharge. The acid and heavy metals will be toxic to fish and aquatic organisms. The heavy metals will enter the food chain and accumulate in sediments and biota on the pathway to Lake Winnipeg. Accumulation of toxic heavy metals in sediment at the mouth of the Brokenhead River will be expected to occur. This toxic load will continue year after year.

There is no doubt the toxins will eventually reach the mouth of the Brokenhead River. To see the effects of the toxins leached from the sand of the Winnipeg Formation we need only look at the abandoned quarry on Black Island. Residents of Seymourville report ruby coloured water from the oxidized iron leached by acid from the sand and shale. Nothing grows in the quarry pit. There is no life in ruby coloured water.

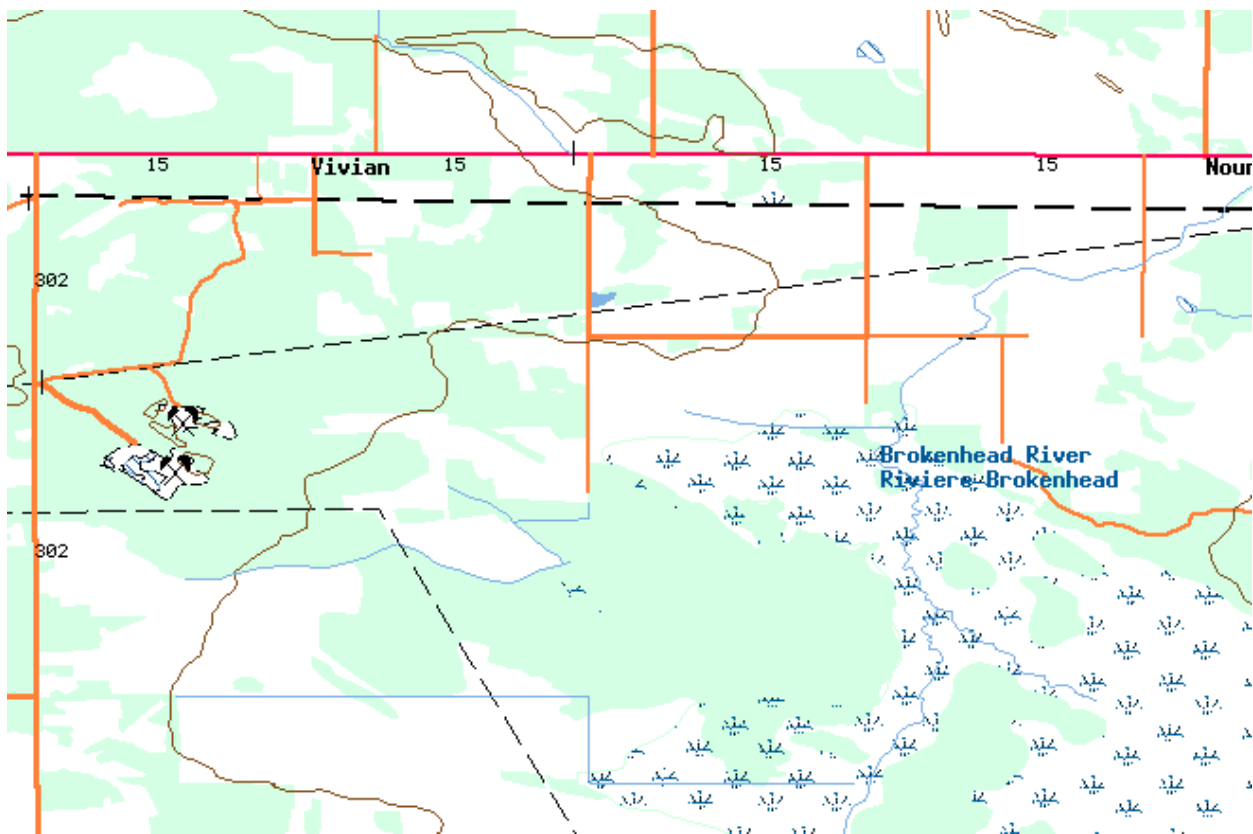


Figure 1. Topography from Vivian to the Brokenhead River.

---

The Vivian Sand Processing Facility's Environment Act Proposal is endangering a major water system in the eastman region. I do not believe the proposal is worth the risk and the current request should be denied.

Thank-you.

Gary Stuve

---



I wish to express my concern regarding the proposal by CanWhite Sands Corporation to extract sand sitting in an aquifer 60 metres below ground at its Vivian mine. I would request that an independent environmental impact study determine, using the methods to be employed by CanWhite Sands to extract the sand, to what extent contamination of the aquifer might occur. The costs should be borne by CanWhite Sands. The Manitoba government should not rely on results provided by CanWhite Sands in making their decision.

Robert D. Hill

---

This project is environmentally unsafe and not a benefit to the community or Manitoba's economy

Cori Swenarchuk

---

Hello, my name is Nicole Ferraro. I am a resident of Winnipeg and am emailing to express my concern and disappointment of the proposed sand processing plant near Anola, Manitoba. The risk of contaminating drinking and agricultural water is absolutely terrifying to me. I am wholeheartedly against this. I feel strongly that we all need to work together to protect our water! Especially our drinking water! This seems really reckless and short sighted. Please reconsider,  
Respectfully yours,

Nicole

---

I am glad that someone is going to look into a chance the sand company might destroy our aquifer. My wife and I along with 64,000 other people are not impressed that this company may destroy our water. It can not be fixed, if the company goes bankrupt they will not have the money to fix their destruction to our water as I assume it can not be fixed once it is polluted. We moved out to Hanover 18 years ago for the country lifestyle and decent water. We have retired here and would like to stay here for many more years. It is very foolish to let this company destroy our water for the sake of a couple of jobs that will go away in a few years or even longer, however we were here first and there is nowhere else we want to live. If they destroy the water or should I say when they destroy the water I doubt that they would want to buy us out any more then we would want to be bought out. I have little faith that a study will do the trick as this is obvious with very little study to see that it is a wrong thing to allow. A big sorry we did not think this would be a problem does not carry much weight after the fact. As well the cost to the health care system as we all get very sick from this water gone bad. Much cheaper to send these people on their way as their short term gain is not worth the long term pain. With due respect please stop this project right now or as soon as possible and ask yourself, how would you like to drink acidic water at your home for your family. Hope you will do the right thing, it would be a blessing for all.

Ralph and Bonnie Christianson

---

Please stop or delay this project ( till further research and proof is given) As a nurse who worked in a large hospital in Winnipeg, I seen the suffering of my patients from silicosis, having fibroids in the lungs is a painful suffering and at times slow painful death.

Please delay. Some of the symptoms were similar to Covid Thinking of our children's and grandchildren's future, not the greed of big corporations.

Brenda Kiansky

---

This week I read a detailed history by Bloomberg on the fracking shale industry history and status. Clearly it has been boom and bust and ridiculously over financed. If you believe it will recover even at \$100 a barrel I advise you to please update your understanding.

I live in Hadashville. Our groundwater May already be under threat from rapidly growing demands. Look at Steinbach today, they are seeking water from Sandilands due to growth especially from industrial agriculture.

Under these circumstances how could anyone entertain the idea of risking to our ground water? How can a dollar amount be calculated for Financial Security that would be acceptable to investors and protect Manitobans? Impossible!

This project is the essence of short term thinking and bad governance.

Thanks

Brent Bjorklund

---

WHAT THE FRACK IS THE PROVINCE THINKING?????????

It is irresponsible that the Province of Manitoba would consider a mine project of this type in one of the Province's largest aquifers!!!!

This resource provides clean drinking water to over 64,000 residents in the Province of Manitoba.

In the year 2020 it is hard to believe a project such as this would even be considered. CanWhite Sands Corp. wants to drill into the aquifer and extract the sand with the clean water and return the processed water back into the aquifer and the Broken Head River just to provide Frack Sand. WHY would the Province even take the chance on such a project!!! There is NO going back once this water is contaminated!!

Shame on the Province of Manitoba's Government who say they have Green Plan, and then allow this or even consider it!!

What would the Province of Manitoba do if a mine was being considered for Shoal Lake? The People of Winnipeg would run them out of office!

Politicians work for the People of Manitoba, show some respect!!!!

I await your response.

Concerned Citizen of Manitoba,

Michael Simpson

---

Please add my name to the unhappiness with the proposed sand plant east of Winnipeg. Any threat to drinking water is unacceptable. This company will make a tremendous profit, ruin the water, then walk away leaving a mess which will not be able to be repaired. There is enough pressure on the quality of our water with the massive hog industry in the Province.  
regards,

Brent Holtzman

---

I am a retired nurse and I am increasingly concerned about the environment and the impact that environmental damage will have on our children, grandchildren and future generations. This morning, I read the article in the Free Press re the concern that the very large aquifer which supplies water for thousands of people could be put at risk from a sand mining project. It is vital that any project that might damage drinking water is studied very carefully before proceeding and ideally an alternative site be chosen. We have to start placing the environment before profits. Thank you for your attention to this important matter.

Linda Whitford MN

---

Hello. Please document and bring forward to responsible party. I am not supportive of the sand plant proposed to operate near Vivian, MB in the RM of Springfield. Our pristine water supply is at risk.

Kathleen Bell

---

This project as reported on page 4 of today's Free Press deserves the examination of the most expert analyst about the possible harm to the huge aquifer and other water bodies and uses. The province should also be invited to have a hard look at the road issues involved in all of that sand movement on our roads. It may be that Manitoba should look at the big issue of when a transporter should have to pay for road and environmental cost of major projects. We may even need legislation to deal with such issues.

---

I find it amazing that Manitoba is promoting this type of environmental destruction while countries around the world have discovered the problems and are banning ANY fracking.

John Heke

---

Hi there, I am under the impression that there is going to be a silica sand facility opening up in Vivian, I live a few miles away and am very concerned on the water issues, traffic, noise, dust etc...

Jamie Godfredsen

---

I am very concerned and even alarmed about the environmental repercussions of the proposed sand-processing plant by CanWhite Sands Corporation.

Aquifers are vital to the long term health of our environment. Any threat for short term gain would be extremely unwise. When biophysicist Dennis Leveu, whose credentials are noteworthy, is alarmed by the project, government needs to listen carefully!

Please consider not going forward with this project. The environment should always come before short term monetary gain.

Sincerely

Loretta

---

Information for the extraction of sand, regardless of reason, profit-politics-regional economies, the long studied effect on that extraction to the environment, primarily, the aquifers, and ultimately, the mutation of the water to thousands of people, whose lives and livelihood depend upon the useful quality of that water, is printed in black and white.

There can be no denial of the cause and effect, for the above named proposal, from CanWhite Sands, an Alberta, company.

Any 'rational' for this project, insults the intelligence of people whose lives will be impacted, as the information available from reliable studies, without bias, obviously speaks to the ultimate degradation of the water within the sand extraction process, spreading into hundreds of miles.

For Manitoba, and the RM of Springfield, the permanent damage to the Sandilands aquifer, interacting with much of southeastern Manitoba, and 64 thousand people immediately affected for drinking water, there can be no apology when the potential damage, become inevitable.

Item offered, case in point, also,

<https://hoffmanncentre.chathamhouse.org/article/driven-to-extraction-can-sand-mining-be-sustainable/>

I am not a homeowner in that area, nor do we own a cabin in the area.

However, we are Manitobans, having camped and travelled for years, and saying that, where we once enjoyed the pristine waters of this province on dozens of beaches, the water in our lakes, are now tragically polluted, in most of those same locations.

There is government precedent in Manitoba for not acting when lakes and water ways are polluted.

Although many people, a mix of indigenous, local homeowners and cottagers, including professional environmentalist, who continued to raise concerns, the Provincial politics over many years, including the City of Winnipeg, on all lake and water-ways, continued with mismanagement to 2020, contributed to where we are at : It is all still unsolved, unresolved, untreated.

But for excellent rebuttal, and meaningless reassurances attached to nothing substantial, no matter who was in charge all of those years, the water is the proof of this truth, and only thing that does not lie.

The Sandilands aquifer at risk by Alberta's CanWhite Sands Corp. proposed removal of over 3 million tons of sand every year, cannot be spoken about in terms of any reassurances, with years of studies to demonstrate all evidence to the contrary, given the history of Manitoba with water resource mismanagement.

Just a personal story: twenty years ago, in conversation with the head official for provincial water resources, I was afforded an extraordinary opportunity to understand the entirety of our unique Manitoba natural water resource, which he elaborated upon with intelligence and clarity.

If he were here today, he would be in total agreement with biophysicist Dennis LeNeveu's concerns, for negative impact, with the CanWhite Sands project.

Why would Manitoba Provincial government and Federal Canada not shine a laser beam of scrutiny on the CanWhite project statement " ...adverse residual effect of the proposed project are expected to be negligible to minor in magnitude and mitigable."

Hundreds of feet into the ground, water damage is beyond reparation, potentially for centuries. It is irresponsible to speak to that damage, using 'mitigable' as a descriptor.

That this company used this language should be an enormous and obvious red flag, for insincerity of intentionality.

In the midst of a rather busy day, I had to write to someone to voice our concern.

What we have in this country is remarked upon with awe, by all and every person, born here or travelled here, sometime in their life as they are standing beside rushing clean waters amidst lush forest growth.

These glorious natural resources are inhabited by us for a time.

We would enjoin anyone who could step up now while the time counts to examine the balance here, in this project, for short term financial benefit against an irreparable cost to the humans whose time now and beyond, will be affected by what is allowed to happen to the Sandilands aquifer in Springfield Manitoba.

Sincerely

Bev Jacobs and Morley Jacobs

---

I ask that you determine the Vivian Sand Facility (processing plant) be combined with the mining/extraction portion of the operation and be considered as a Class 3 development with a Clean Environment Commission public hearing with participant funding.

My reasons are as follows:

The size and scope of this project: The mining claims of 166,890 acres (67,537 hectares) of land is the largest given to any one company in Manitoba's history. The impacts of the processing plant cannot be properly assessed without including an assessment of the impacts of sand extraction, because the processing plant cannot operate without the sand extraction portion of this project.

Impacts to the Sandstone and Carbonate Aquifers: This silica mining will take place over 200 feet into the Winnipeg Formation of the Sandstone aquifer. The shale that separates the two aquifers and the sand contains sulphide which when exposed to air will turn to acid and cause leaching of acid and heavy metals into the water from the shale.

Aquifer Sustainability and Cumulative Impacts: The aquifers support many municipal water systems, agriculture, industry, private well users and of course an abundance of wildlife and ecosystems. The sustainable yield of these aquifers have not been established. Also, the processing plant and the sand extraction aspects of this project function in tandem.

Potential Transboundary Impacts: The aquifers extend into Minnesota and therefore transboundary impacts need to be addressed.

Unproven Mining Method: CanWhite Sands Corp. is experimenting with a new, unprecedented method for mining silica sand 200 feet below the surface out of the Winnipeg Formation, a process that has only been experimented within Manitoba, without much success in the past.

Sincerely,

Michael Bailey

---

I ask that you determine the Vivian Sand Facility (processing plant) be combined with the mining/extraction portion of the operation and be considered as a Class 3 development with a Clean Environment Commission public hearing with participant funding.

My reasons are as follows:

The size and scope of this project: The mining claims of 166,890 acres (67,537 hectares) of land is the largest given to any one company in Manitoba's history. The impacts of the processing plant cannot be properly assessed without including an assessment of the impacts of sand extraction, because the processing plant cannot operate without the sand extraction portion of this project.

Impacts to the Sandstone and Carbonate Aquifers: This silica mining will take place over 200 feet into the Winnipeg Formation of the Sandstone aquifer. The shale that separates the two aquifers and the sand contains sulphide which when exposed to air will turn to acid and cause leaching of acid and heavy metals into the water from the shale.

Aquifer Sustainability and Cumulative Impacts: The aquifers support many municipal water systems, agriculture, industry, private well users and of course an abundance of wildlife and

ecosystems. The sustainable yield of these aquifers have not been established. Also, the processing plant and the sand extraction aspects of this project function in tandem.

Potential Transboundary Impacts: The aquifers extend into Minnesota and therefore transboundary impacts need to be addressed.

Unproven Mining Method: CanWhite Sands Corp. is experimenting with a new, unprecedented method for mining silica sand 200 feet below the surface out of the Winnipeg Formation, a process that has only been experimented within Manitoba, without much success in the past.

Sincerely,

Kim Bjornson

---

I ask that you determine the Vivian Sand Facility (processing plant) be combined with the mining/extraction portion of the operation and be considered as a Class 3 development with a Clean Environment Commission public hearing with participant funding.

My reasons are as follows:

The size and scope of this project: The mining claims of 166,890 acres (67,537 hectares) of land is the largest given to any one company in Manitoba's history. The impacts of the processing plant cannot be properly assessed without including an assessment of the impacts of sand extraction, because the processing plant cannot operate without the sand extraction portion of this project.

Impacts to the Sandstone and Carbonate Aquifers: This silica mining will take place over 200 feet into the Winnipeg Formation of the Sandstone aquifer. The shale that separates the two aquifers and the sand contains sulphide which when exposed to air will turn to acid and cause leaching of acid and heavy metals into the water from the shale.

Aquifer Sustainability and Cumulative Impacts: The aquifers support many municipal water systems, agriculture, industry, private well users and of course an abundance of wildlife and ecosystems. The sustainable yield of these aquifers, have not been established. Also, the processing plant and the sand extraction aspects of this project function in tandem.

Potential Transboundary Impacts: The aquifers extend into Minnesota and therefore transboundary impacts need to be addressed.

Unproven Mining Method: CanWhite Sands Corp. is experimenting with a new, unprecedented method for mining silica sand 200 feet below the surface out of the Winnipeg Formation, a process that has only been experimented within Manitoba, without much success in the past.

Sincerely,

Fred Goods

---

I wish to register my opposition to the proposed Vivian Sand Processing Facility.

The processing facility and sand extraction facility should be reviewed together rather than independently. The impacts of the processing facility cannot be properly assessed without including an assessment of the impacts of sand extraction, because the processing facility cannot operate without the sand extraction portion of this project.

The Environment Act Proposal submitted by CanWhite fails to properly address the cumulative impacts of this project on local groundwater. As per the previous point, the processing facility and sand extraction aspects of this project function in tandem, and so the effects of pumping thousands of litres of sand slurry from the ground must be assessed when determining the environmental impacts of this project.

The Environment Act Proposal is misleading with respect to the claim that there will be no truck traffic associated with the project. In the Proposal there is no information that supports that all sand can be delivered to the facility by portable pipeline over the 24-year life of the plant – therefore the assertion that there will be no truck traffic cannot be supported.

3 fully loaded freight trains will be added weekly to an already congested CN mainline. But this has been dismissed from the Environment Act Proposal and discussions with CN have not been finalized. If discussions fall through, truck transport is the only option. This increases risks for Silicosis and nuisance dust impacts.

The Environment Act Proposal states use of a flocculant material PAM- in their outdoor clarifier (settling/treatment pond). Polyacrylamide (PAM) is nontoxic but degrades with sun, acid and iron into a water-soluble acrylamide monomer, a cancer-causing neuro toxin that deforms fetus' at parts per

billion. [https://www.gov.mb.ca/sd/pubs/water/drinkingwater/final\\_factsheet\\_tce.pdf](https://www.gov.mb.ca/sd/pubs/water/drinkingwater/final_factsheet_tce.pdf)

The Facility is located in an area of sandy, porous soil. Some acid, acrylamide and heavy metals will seep into the aquifer just as occurred with a small surface spill of trichlorethylene in the 90's, contaminating all wells within 24 square kms, now called the Rockwood Sensitive area.

Removing the amount of water that 64,000 people would use every year for 24 years, is beyond the sustainable limit of the Winnipeg Formation. See Kennedy & Woodbury's 2005 Sustainability of the Bedrock Aquifer Systems in South Central Manitoba: Implications for Large Scale Modelling.



40% of the sand will be used for Fracking in the oil and gas industry. This prevents us reaching our emission reduction targets pledged under the Paris Agreement. see Appendix I of the EAP.

The Facility is near a network of historic cart trails leading to/from the area that served as a travel corridor for Past Peoples. Development within the area has the potential to impact heritage resources, therefore the Historic Resources Branch has concerns. Pg.14 appendix d to f of EAP.

The Environment Act Proposal provides no evidence to support their claim that property values will not suffer under their Facility that increases rail and truck traffic, noise and light pollution, increased risks to groundwater and Silica related diseases, 24/7.

In closing, the effects of CanWhite Sands plans are of such a magnitude and will generate far too many environmental, socioeconomic and health issues and allowing these plans to be divided has produced an incomplete and incomprehensible Environment Act Proposal. Full impacts of the project cannot be properly assessed.

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

Sincerely,

Leslie Olsson

---

We own a greenhouse agricultural business in Vivian, Manitoba, RM of Springfield. We have been in operation for 14 years going into our 15th year. The greenhouse provides vegetables, herbs, annuals, perennials, fruit trees, shrubs, and trees to a vast population. It is our living. We are writing this letter regarding the CanWhite Sands Corp. We are not protestors. We are concerned business owners.

As a greenhouse operation we require a great volume of fresh water. Currently using up 4000 gallons per day pumped from a ground well. Our concerns fall with literature and information circulating regarding the high-volume use of water this corporation is going to be using. There has been talk of contamination to the aquifer and/or decreased water supply to the surrounding area.

Can you please provide us with some reassurance that our water system will be protected enabling us to continue to provide food products to our customers? Reassurance that we will be protected as an agricultural business within our community.

Thanks  
Marie Mozil

---

My name is Philip Ferguson. I am an associate professor, professional engineer and resident of Vivian, Manitoba.

I'm sure that you have been inundated by emails from concerned residents. I know that many have signed petitions to stop the CanWhite Sand Processing Plant, planned for Vivian. You have probably also received many form emails too

I decided not to send a form email. Instead, I wanted to write to you personally.

My engineering discipline is in space systems guidance, navigation and control. As such, I will not attempt to make any kind of analysis, prediction or statement about how "I think" the environment will be impacted. I am not qualified to say anything about this topic and I trust that you, with your training and expertise as a professional engineering, will make the right decisions on behalf of our community.

On a personal level, I would strongly prefer that the sand plant not go ahead. The grasslands and forest areas out here in Vivian are home to numerous types of wildlife and benefit our collective well-being. Further, I appreciate the serenity and peacefulness of the forests and fields that surround my property. I enjoy my well water and the clean air that I, my family and my animals drink and breathe each day. But I also understand that my "preference" for the forest and fields around me to stay the same forever is not at all binding and nothing that could (or should) prevent a project from moving forward.

My request to you is that you share with me (and other residents) the details of the studies that have been conducted that demonstrate the predicted impact to the ground water, air quality, drainage, noise levels and general landscape is understood and acceptable. Our biggest concern as residents has been the apparent lack of transparency. Last summer, heavy equipment came into our community to drill test wells without any notice. We were left wondering what was going on.

Really, we just want to be informed.

Like I said earlier, I'm not going to protest, barricade, yell and scream or any of that. I just want to be informed about the land use plans surrounding my property.

Thanks very much,  
Philip Ferguson

---

### **The CanWhite Sands Operation - Vivian, Manitoba**

I am writing this letter because I have concerns about the proposal submitted by the consultant, AeCom on the silica sand processing plant to be constructed at Vivian in the RM of Springfield. The report mentions there will be negative environmental effects to the surrounding area. They also claim they (Can White Sands & AeCom) are not be held accountable for any liability to any environmental damage(s) if it occurs. Has AeCom performed a proper environmental assessment impact study of the entire area? I believe not!

The processing plant proposal was submitted for an environmental licence approval before the extraction of silica sand from the ground has been approved. Why? The entire operation, the mining and the processing should have been submitted together as one package. This is putting the cart before the horse.

I have worked in the Vivian area as a Manitoba conservation officer 1974 to 1977 and 2000 to 2010. The entire escarpment immediately east of Vivian is sponge-like and leans directly towards the Brokenhead River. All of the surface and in between water will eventually enter into the Brokenhead River. The Brokenhead River is a major spawning bed for the Lake Winnipeg fishery. The river is also home to many protected aquatic species. This river should not become the dumping ground for industrial development in the RM of Springfield. I strongly recommend an independent party conduct a complete environmental impact study for the entire mining and processing operation. The consultant mentions no environmental damage will occur. Taxpayers should not be held responsible for any industrial damage cleanup?

It is extremely important to know more on the details on the silica sand extraction. In the proposal it was briefly mentioned directional drilling will be applied to extract the sand and slurry it over to the processing plant. Slurry can be very toxic! What is the environmental impact of the slurry and the mining operation to the Brokenhead River and the groundwater aquifer? This should be clarified before the licence is approved for the processing plant. It will be extremely difficult to assess the scope of the environmental damage once it occurs. **Contaminated groundwater can never be cleaned up!**

In closing, the consultant put forward a favourable report for the applicant to obtain governmental and municipal approval for the licence. Remember the consultant is paid by the applicant. Please reconsider and think about the well being and health of the Brokenhead River and the water in the aquifer for the entire area for all residents who may become affected by this proposal; the RM of Tache, RM of LaBroquerie, RM of Ste. Anne, RM of Hanover, RM of Stuartburn, RM of Springfield, RM of Reynolds, RM of Piney, RM of Brokenhead, RM of St. Clements, The Town of Beausejour, and The Brokenhead First Nations. Once the damage is done who will be responsible for the impossible cleanup?

  
Jack Kowalchuk

---

When Manitoba waters are of such little concern and value for future Manitobans, what must we do to secure our children's children will have adequate water and moreover healthy water to consume as water is the necessity for survival? Stop this from becoming a crisis for the generations who never asked or approve of this mining.

Margaret Waldner

---

Please intervene in this terrible ecological disaster.

Judith Morrow

---

It has come to my attention that CanWhite Sands Corp. plans to remove 3.5-million tons of sand a year from the ground, for fracking and other purposes near Anola Manitoba. It has also come to my attention that this proposed mining activity poses a significant risk to the Sandilands aquifer as well as the Brokenhead River and Lake Winnipeg.

It is my understanding that the mining process will acidify otherwise pristine water that roughly 65,000 people rely on for drinking. Given that clean water is becoming more and more scarce every year I find that that is an unacceptable risk to put on Manitobans for the financial benefit of a few select people.

Thank you for your consideration,  
Michael Zurek

---

A plan that proposes to pump sand and water up from the ground and then return the contaminated water back to the ground after passing through pyrite must never get off the ground in Manitoba including the proposed site in Springfield. I cannot understand how something like this can even be contemplated by the government of Manitoba. This has the potential to destroy several of Manitoba's water aqueducts forever just so a few "businesses" can become rich. I completely reject this proposal and would actively lobby against any government who would allow the poisoning of our water supply to happen.

Jo-Anne Gibson

---