

February 2, 2021 Special Council Meeting Agenda Addendum

Additional Public Submissions

Public Hearing for Bylaw C-8082-2020

This addendum to the February 2, 2021 special Council meeting agenda includes public submissions that were received before the advertised deadline of 4:30pm on January 27, 2021 but were not included in the staff report provided in the meeting agenda.

Number of public submissions in this addendum:

14 in support 75 in opposition

Posted: January 27, 2021 Revised: January 28, 2021

From: Braden Scharf

Sent: January 26, 2021 3:54 PM **To:** Legislative Services Shared

Cc: Lindsey Scharf (CA)

Subject: [EXTERNAL] - Bylaw C-8000-2020 - Braden and Lindsey Scharf - 25021 Briarwood Drive

NW

Attachments: Braden and Lindsey Scharf - Leigh hanson letter.docx; BScharf_letter_June_2020 (1).pdf;

EHCD LTD Letter.pdf; Signe Letter.pdf

Follow Up Flag: Follow up Flag Status: Flagged

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To whom it may concern,

Please find attached letter as to why our family OPOSSES the LEIGH HANSON gravel pit along with medical documentation to support our letter.

best,



Braden and Lindsey Scharf 25021 Briarwood drive T3R1C2

Date: 01/26/2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application - Gravel Mine - Bylaw C-8082-2020 We are Opposed

Our family has resided in Bearspaw for 15 +|years and therefore will be directly affected by the decision made by council regarding this application. Our Family resides within 1 to 1.5 Kms away from this site.

It is our understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply. There will be significant environmental effects, significant health consequences to residents and it will greatly interfere with the enjoyment of residences in all the properties surrounding the area.

I, Braden Scharf, also suffer from a severe disability called Environmental Illness and Mast Cell Activation Syndrome (MCAS) in Which I have severe reactions to incidental or trace exposures to environmental inhalants with one of my largest triggers being dust which was medically proven by the most accurate testing in North America. This disability has caused both a financial and mental strain not only on myself but my family resulting in our family spending 000s of dollars on treatment to live a "somewhat" normal life. I have had to travel across North America to various clinics and doctors for treatment which is described in the attached documents. Further, we are recently buying and renovating my wife's grandma's, Ilse Scharf, property at 260011 Range Rd 25 using special material and air purification systems to ensure I have the healthiest clean air to breathe which has resulted in spending 000s further to help and improve my health – which will be compromised with the build of this gravel pit. I have attached several doctors' letters for your review; will be more then happy to provide any reports upon request.

More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

In conclusion, I hope Rocky View Council will use the prudent voice used in the previous two applications and reject this application.

Thank you,

Braden and Lindsey Scharf

From:

Sent: January 27, 2021 3:20 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up **Flag Status:** Flagged

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January 27, 2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application - Gravel Mine – Bylaw C-8082-2020 We are Opposed

We have resided in Bearspaw for 7 years. When we purchased our property it was our understanding that the land across Burma Road was designated as agricultural and earmarked for future residential development and therefore will be directly affected by the decision made by council regarding this application. My family and I reside within 2 Kms away from this site. Not withstanding the issues with toxic dust, noise pollution and the intention for the land use in this area, we are extremely concerned about the underground water system. We believe that the cap rock that the applicant says is there to protect our water (we provide water to our family through a well) is not present as reported. This is of great health and financial concern to us. We want to make sure that if the applicant is allowed to proceed that they would be held legally liable for any damages caused to the aquifer.

It is our understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply. There will be significant environmental effects, significant health consequences to residents and it will greatly interfere with the enjoyment of residences in all the properties surrounding the area.

More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

In conclusion, I hope Rocky View Council will use the prudent voice used in the previous two applications and reject this application.

Thank you,

Dave and Leslie Scabar 24131 Meadow Drive Calgary, Alberta T3R1A7

From: Dr. Cheng

Sent: January 26, 2021 3:40 PM
To: Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020

Attachments: RVC Council Bylaw C-8082-2020 2021 01 26.pdf

Follow Up Flag: Follow up Flag Status: Flagged

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Please see attached a letter in response to the proposed bylaw,

Best Regards,

Dr. Xia Cheng,

76 Cheyanne Meadows Way

Calgary AB T3R 1B6

Edwin & Irene Dingha 20 Silverwoods Drive, Rocky View County

Date: January 20/2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application - Gravel Mine - Bylaw C-8082-2020

We are opposed

NO NO to gravel pit

We have resided in Bearspaw for a number of years (note: if less than 10 years then state if you built, if Rocky View approved your permit and if you purchased existing, state your understanding the land across Burma Road was designated as agricultural for and earmarked for future residential development) and therefore will be directly affected by the decision made by council regarding this application. My family and I reside across Burma Road from this site. Our well water will be affected along with the noise and dust.

It is our understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply. There will be significant environmental effects, significant health consequences to residents and it will greatly interfere with the enjoyment of residences in all the properties surrounding the area.

More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

In conclusion, I hope Rocky View Council will use the prudent voice used in the previous two applications and reject this application.

Thank you,

Re: Bylaw C-8082-2020 – A Bylaw of Rocky View County to Amend Land Use Bylaw C-8000-2020 - OPPOSED

Application Number: PL20200093 (066605001/002/003/004/005)

Dear Council;

Goodwater Utility Co. Ltd ("Goodwater") is the water cooperative that services the homes located in Crestview Estates and as such is an interested party in the above noted Application. We are concerned about the possibility of an aggregate operation on land adjacent to the well we manage.

As you are aware, the *Water Act* and *Environmental Protection & Enhancement Act* in Alberta prohibit the siltation and erosion and releases that may degrade water quality. We are not satisfied that the information provided by the applicant demonstrates the appropriate due diligence in determining that an aggregate operation would not degrade the water quality of a well on adjacent land. In fact, a comprehensive study out of Finland produced by the National Board of Waters and Environment (no such study could be found for Canada though the geological states are similar) states conclusively that an aggregate operation would degrade the water quality and we have reproduced the conclusion below:

Gravel extraction causes changes in seepwater and groundwater quality as well as in the elevation of the groundwater table and its variation. Acid rain flushes the soil, increasing the quantity of dissolved salts and seepwater and groundwater quality variations. The composition of water in groundwater ponds varies in the same way as that of surface water, seasonally. The great variations in the quality of pond water increase the variations in groundwater quality. Gravel extraction increases the pollution risk of groundwater and may cause difficulties in the treatment of the water abstracted from a groundwater intake.¹

If you would like a complete copy of the study, we are happy to provide as this study has been reviewed by many municipalities in Canada contemplating aggregate extraction applications.

Assuming that the groundwater in the vicinity of the aggregate operation will be negatively impacted, the well managed by Goodwater will obviously be impacted. We have reached out the Rocky View Water Coop and been advised that the cost to join is \$30,000 per capacity unit and a residence will require at least one capacity unit. Connecting the residence to the water distribution system is an additional cost and it is often more expensive to connect an existing residence to the water distribution system than a new build. Notwithstanding the fact that residents of Crestview Estates are happy with Goodwater and their existing water supply, it will be prohibitively expensive and time consuming if the quality of the water of the well were to degrade to a level such that connecting to the Rocky View Water Coop would become a

¹ Future Groundwater Resources at Risk (Proceedings of the Helsinki Conference, June 1994) IAHS Pub. No 222, 1994

necessity. Having said that, we also need to point out that the Rocky View Water Coop is located 1.1 km from the land referred to in the application and also has a high likelihood of being affected by the proposed project.

At no point in this notification process was Goodwater approached by the applicant or anyone representing the applicant to discuss the application or the proposed project and any potential impacts to the well we manage. We feel this was an egregious oversight and does not demonstrate good faith in creating a positive working relationship going forward. The application should be denied.

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Goodwater Utility Co. Ltd.

Effect of gravel extraction on groundwater

TUOMO HATVA

National Board of Waters and the Environment PO Box 250, SF-00101 Helsinki, Finland

Abstract Gravel extraction causes changes in seepwater and groundwater quality as well as in the elevation of the groundwater table and its variation. Acid rain flushes the soil, increasing the quantity of dissolved salts and seepwater and groundwater quality variations. The composition of water in groundwater ponds varies in the same way as that of surface water, seasonally. The great variations in the quality of pond water increase the variations in groundwater quality. Gravel extraction increases the pollution risk of groundwater and may cause difficulties in the treatment of the water abstracted from a groundwater intake. Post-extraction maintenance is recommended.

GENERAL

Most of Finland's groundwater resources suited for water supply purposes are in the same glaciofluvial deposits that are used for extracting sand and gravel for building purposes. Gravel extraction affects the groundwater and increases its pollution risk. This has created a set of problems the solving of which requires information about necessary groundwater protection measures.

The effect of gravel extraction on groundwater was monitored during five years at 30 groundwater areas where gravel extraction had terminated or was still practised. Water samples were taken four times a year from a total of 86 sampling sites consisting of observation pipes, wells, springs and groundwater ponds in gravel pits. In addition, seepwater investigations were made at 52 lysimeters. The number of samples taken was 4000 and the number of different analyses carried out on them varied between 35 and 40.

The purpose of the studies was to investigate the effect of gravel extraction on groundwater quality and quantity, pollution risk and on the use of groundwater, its usability and the need to protect it. On the basis of these studies and investigations new guidelines have been drawn up concerning groundwater protection, planning of gravel extraction as well as the post-extraction maintenance and use of the areas.

EFFECT OF GRAVEL EXTRACTION ON GROUNDWATER

Quality of seepwater

The composition of acidic rainwater that contains little dissolved salts changes as it seeps down through the podsol and the underlying ground to form groundwater. When the podsol is removed in connection with gravel extraction the number of biochemical reactions in seepwater is reduced significantly.

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The composition of seepwater in intact soil (natural seepwater) is clearly different from that of seepwater in an uncovered gravel stratum (Figs 1 and 2). Under an exposed gravel surface the values and concentrations of the main parameters describing the seepwater (conductivity, hardness, bicarbonate, nitrate, sulphate, chloride, silicon acid and calcium) are distinctly higher than in natural state. When a surface layer similar to the natural podsol layer was made on top of the uncovered gravel, the quality of the seepwater that percolated through the layer bore a close resemblance to that of natural seepwater (Sandborg, 1993).

The acidity of seepwater increased during the five-year monitoring period both in natural groundwater areas and in exposed groundwater areas. The pH of natural seepwater decreased by 0.3 and that of seepwater in an exposed groundwater area by 0.5 units. The pH of groundwater in an intact, uncovered, groundwater area also went down relatively quickly and was of the same order of magnitude as the decrease in the pH of natural seepwater.

The thickness of that part of the podsol, which can be distinguished by its colour is only about 0.3-0.5 m, while the total podsol zone where chemical changes in seepwater quality take place is at least 2 m thick. (Sandborg, 1993).

Groundwater quantity and the groundwater table

When trees, other vegetation and podsol are removed at a gravel extraction site, evapotranspiration diminishes and groundwater formation increases. At gravel extraction sites groundwater amounts to 60-70% of the precipitation, when at natural groundwater areas it amounts to about 50-60% (Sandborg, 1993; Lemmelä, 1990).

Small evapotranspiration and quick melting of snow accumulated in gravel pits increase groundwater formation. As a result groundwater table in extensive gravel extraction sites is quickly elevated in spring to exceptional levels (Fig. 3).

Groundwater quality

Groundwater extraction above the groundwater table As a result of the removal of surface soil and gravel extraction above the groundwater level the quality changes in seepwater under the exposed gravel surface are also reflected in the groundwater quality (Table 1 and Fig. 4).

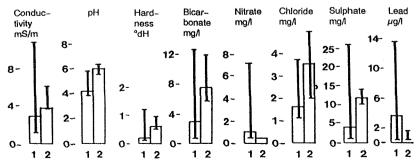


Fig. 1 The quality of rainwater (1) and natural seepwater at the depth of 2.5 m from ground surface; median, minimum and maximum values (Sandborg, 1993).

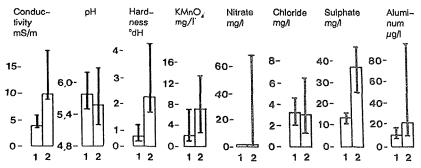


Fig. 2 The quality of natural seepwater i.e. seepwater in intact soil (1) and under an uncovered gravel surface (2) at the depth of 2.5 m from the ground surface; median, minimum and maximum values (Sandborg, 1993).

At gravel extraction sites electrical conductivity and hardness as well as the concentrations of carbon dioxide, nitrate, sulphate and chloride are distinctly higher than at the intact (natural) areas of the same esker range. Groundwater at gravel extraction sites in Southern Finland showed signs of acidification. The risk of acidification of groundwater can be said to increase with increasing gravel extraction (Hyyppä & Penttinen, 1993).

Variations in groundwater quality at gravel extraction sites are greater than at natural groundwater areas. The stability of groundwater quality is impaired as a result of gravel extraction. Water quality changes can be felt at the water intake. In all the cases studied, however, the groundwater quality met the requirements and targets set for drinking water, with the exception of organic matter which in some places exceeded the target value. This was caused by water from bogs being introduced into the gravel extraction site from outside the aquifer (Hyyppä & Penttinen, 1993).

Gravel extraction below the groundwater table In areas where availability of gravel above the groundwater table has been insufficient gravel extraction has often been extended below the groundwater table. Groundwater ponds have then been formed in gravel pits. Their number is highest in southwestern and western Finland. These ponds

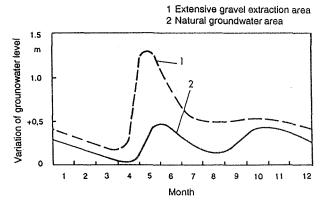


Fig. 3 Schematic drawing of variations in groundwater table at intact (natural) groundwater areas and extensive gravel extraction sites. (Hatva *et al.*, 1993a; Soveri & Ahlberg, 1989).

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Table 1 Composition of rain and groundwater at intact (natural) groundwater areas and adjacent gravel extraction sites where extraction takes place above groundwater table (Hatva *et al.*, 1993; Järvinen & Vänni, 1990).

Parameter	Rainwater $n = 12$				Natural groundwater areas $n = 43-60$			Gravel extraction areas $n = 76-240$		
		Md	min	max	Md	min	max	Md	min	max
Temperature	°C		**		4.7	1.1	6.8	5.6	0.0	8.8
Acidity	pН	4.5	4.1	6.3	6.4	5.6	7.3	5.9	5.4	7.3
Conductivity	mS m ⁻¹	4.0	2.0	9.0	6.0	3.0	9.0	7.0	4.0	19.0
Carbonic acid	mg 1 ⁻¹				11.0	2.0	44.0	24.0	2.0	62.0
Bicarbonate	mg l ⁻¹				25.0	15.0	38.0	20.0	8.0	45.0
Chloride	mg 1 ⁻¹	1.0	1.0	3.5	2.0	1.0	7.0	3.0	2.0	37.0
Sulphate	mg 1 ⁻¹	2.0	0.5	3.0	4.0	4.0	12.0	10.0	5.0	16.0
KMnO ₄ -consum	ıp-									
tion	mg 1 ⁻¹				3.0	0.0	9.0	2.0	0.0	51.0
Hardness	°ďH				1.0	0.5	1.5	1.0	0.5	3.0
Nitrate	mg l ⁻¹	2.1	1.4	6.7	0.4	0.0	4.0	1.9	0.0	11.5

are in most cases small and shallow, their surface areas varying from a few hundred square metres to some hectares. The largest ponds resemble lakes, exceed 10 ha in surface area and are more than 10 m deep.

The basic chemical composition of the water in groundwater ponds is in most cases the same as that of the groundwater. The pond water, however, is exposed to weather and immediate impacts of the physiological functions of organisms which explain the great seasonal variations in the quality of the pond water. The range of variations can be as great as in surface waters (Table 2).

The properties of individual ponds are to a great extent affected, besides the composition of groundwater, by the size and depth of the pond, its location in the groundwater area, the organisms living in the pond and the immediate surroundings (Fig. 5). Small ponds are often eutrophic and there are great variations in its water quality. Also surface runoff e.g. of bog waters from the immediate vicinity affects the water quality and increases variation. Deep large ponds located in the groundwater flow field are often oligotrophic and their water quality is stable (Hyyppä & Penttinen, 1993).

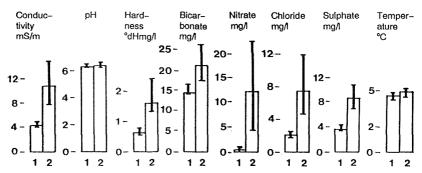
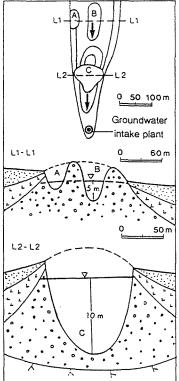


Fig. 4 The quality of groundwater in natural (1) and gravel extraction area (2) situated on the same groundwater area. High nitrate values may be a result of dumping of wastes in gravel pit; median, minimum and maximum values (Hatva et al., 1993a).

		Summer:			Winter:			
Parameter	Unit	min	Md	max	min	Md	max	
Conductivity	mS m ⁻¹	1.5	4.9	19.8	2.8	7.3	23.6	
Acidity	pН	6.5	7.2	8.9	5.9	7.4	7.1	
Hardness	°dH	0.2	0.7	3.5	0.3	1.1	3.7	
Nitrate	mg 1 ⁻¹	0.0	0.0	0.6	0.0	0.3	1.7	
Silica	$mg l^{-1}$	0.3	3.6	13.2	0.3	7.1	17.9	
Oxygen	%	86.0	104.0	142.0	0.0	60.0	116.0	
Carbonic acid	mg l ⁻¹	0.0	2.0	14,7	0.0	14.0	41.0	
Temperature	°Č	8.1	17.2	22,4	0.0	1.5	4.5	

Table 2 Water quality values in spring and summer in groundwater ponds formed in gravel pits (Hyyppä & Penttinen, 1993).

Changes in groundwater quality in the vicinity of gravel extraction sites The groundwater formed at a gravel extraction site flows into the surroundings and towards the areas where groundwater discharges by itself or towards places where groundwater is withdrawn i.e. at water intakes. The impact in the surroundings of the gravel extraction site depends, inter alia, on the following factors (Hatva, 1989; Hatva *et al.*, 1993a):



The effect of a small and shallow pond (A) on groundwater is unimportant, even if water quality in the pond is poor

The effect of a small deep pond (B) can be considerable in the vicinity of the pond, but the effect is local. Water quality in the pond is good.

The effect of a large deep pond (C) excavated across the core of the esker has an important and far-reaching effect on groundwater. Water quality in the pond is good.

Fig. 5 Different types of groundwater ponds in gravel pits and their effect on groundwater (Hatva et al., 1993a).

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- extent of the gravel extraction site and thickness of the soil layer that remains on top of the groundwater table;
- location of the gravel extraction site in the groundwater area;
- direction and velocity of groundwater flow;
- effect of water withdrawal on the flow pattern of groundwater;
- natural quality of groundwater and its variation;
- geological structure of the aquifer and its geographic location;
- other activities affecting groundwater quality such as application of salt for dust control, burying or dumping of wastes etc.

If the gravel extraction site is small, its effect on groundwater that is in natural state is small or it cannot be observed at all. The effects get more pronounced when the size of the gravel extraction site grows. If the area of the gravel extraction site is more than 50% of the groundwater formation area and the groundwater flows from the gravel extraction site towards the natural groundwater area, the effects of gravel extraction on the groundwater of the intact (natural) area will be clearly observed. The impact of groundwater ponds formed in gravel pits depends on the size and depth of the pond and its location in the groundwater area. If the pond extends across the highly permeable core of the esker, the effect may be felt as far as at a distance of 1 km (Hyyppä & Penttinen, 1993).

RISK OF CONTAMINATION AND THE NEED FOR TREATMENT

The seepwater studies revealed, inter alia, that many heavy metals and easily degrading organic substances as well as viruses and bacteria are retained relatively well in the natural podsol layer (Sandborg, 1993; Kuusinen, 1993). Under an exposed gravel surface the retention was much weaker. The seepwater studies show that the risk of groundwater contamination is clearly higher at gravel extraction sites than in natural groundwater areas.

Faecal coliform bacteria were observed more in gravel extraction areas than in natural groundwater areas. In some places nitrate was observed in groundwater; this may be a result of dumping of wastes in gravel pits. A serious factor that caused changes in groundwater quality was the seepage of surface water and especially of bog water into the groundwater area as a result of carelessness in gravel extraction. In many places the concentration of organic matter exceeded the quality target of 12 mg l⁻¹ (KMnO₄-consumption). Other direct adverse effects of gravel extraction were the elevated concentrations of chlorides, due to the use of dust-control salts, and of sulphates, due to the use of the residual sludge from gravel-washing in the post-extraction maintenance of the extraction site (Hyyppä & Penttinen, 1993).

An increase in organic matter, even in small concentrations, creates difficulties in the removal of iron when biofiltration methods are applied (Hatva, 1989). The acidity of groundwater and related variations in carbonic acid make the alkalization of water more difficult. The variations are greatest in areas affected by groundwater ponds.

The maximum limit value of 25 mg l⁻¹ recommended for chloride content can be exceeded, when calcium chloride is used for dust-control. As the sulphate content rises due to gravel extraction, the ratio expressing the corrosiveness of water is in most cases too small. It is recommended that the ratio of milliequivalents is as follows(Hedberg *et al.*, 1990):

$$\frac{\text{HCO}_3}{\text{SO}_4 + \text{Cl}} > 1.5$$

In natural groundwater areas the ratio is usually more than 1.0 and often it exceeds the value of 1.5. In gravel extraction areas the ratio usually stays clearly below 1.5. The change in the ratio is mainly caused by the elevated chloride and sulphate concentrations at gravel extraction sites. At water works the corrosiveness can be diminished by increasing the bicarbonate concentration in connection with alkalization.

GROUNDWATER PROTECTION AND GRAVEL EXTRACTION

Among the groundwater protection goals related to gravel extraction is to see to it that no such changes are caused in groundwater that make it hazardous for human health or otherwise impair its quality. In addition, the attainment of quality requirements and quality targets as well as other guidelines and recommendations that have been set for groundwater quality should be safeguarded.

In order to guarantee the supply of good groundwater with stable quality it its recommended that gravel extraction be directed to areas where the adverse effects and risks are as small as possible. Gravel extraction and the restrictions put on it are managed through a zoning system based on the need to protect groundwater intakes.

It is recommended that the intake area and its inner protection zone be left in their natural state. Should there be gravel extraction in the inner protection zone of the water

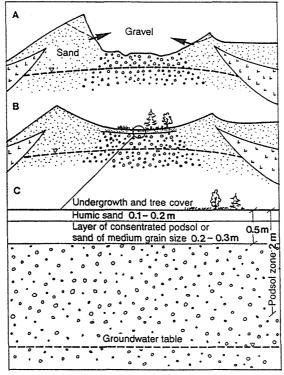


Fig 6. Earth moving (A) in connection with post-extraction maintenance, and high-level protective surface layers (B and C) (Hatva et al., 1993).

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intake, a protection layer of 4-6 m should be left on top of the maximum groundwater table. In the outer protection zone of the water intake the thickness of the protection layer should be at least 2 m. No gravel extraction below the groundwater table is allowed in groundwater areas classified as important.

The post-extraction maintenance should be carried out gradually as the extraction proceeds. The objective of post-extraction maintenance is to create a growth base for trees and other vegetation that will eventually protect the groundwater, the development of a biologically active surface layer, prevention and slowing down of acidification, controlling the variations in groundwater table, and acceleration of the development of a new podsol layer.

The protective layer should be made so that the gravel core of the esker is covered with clean sand of high permeability. On top of the sand layer a growth base of about 0.3-0.5 m in thickness is constructed consisting of organic matter and sand. On this plants characteristic of the area are planted to form the undergrowth. The tree cover should be of mixed stock (Fig. 6).

Management of gravel and groundwater resources requires that gravel extraction plans representing different levels are drawn up for different purposes. Master plans can be made for economic areas or municipalities on the use of gravel resources or groundwater resources, or detailed project plans can be drawn whose exactingness may be high-level, medium-level or basic in level.

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From: wang hui

Sent: January 25, 2021 2:17 PM

To: Michelle Mitton

Subject: [EXTERNAL] - Gravel Update # 11(Bylaw C-8082-2020)

Follow Up Flag: Follow up Flag Status: Flagged

Do not open links or attachments unless sender and content are known.

Dear Sir or Madam,

My name is Hui Wang the owner of the House, 70 Gray Way NW Calgary, AB T3R 1K7. I oppose the project of the proposed gravel pit (Bylaw C-8082-2020). The reasons are listed as follow:

- 1. Our healthy concern- We live close to the scene, daily operation will have significant impact on our personal life such as noise, waste, dust and so forth.
- 2. Long time concern With fine dust around our area, it will gradually damage our lung and cause severely healthy problem.
- 3. Property value decrease Our area will has less attractive to family .

Please Stop this project immediately and protect our personal life and human right.

Best regards,

HUI WANG

Jason Wiun 32 Silverwoods Drive Rockyview County, Alberta T3R 1E2

Date: January 25, 2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson Materials Limited – Bylaw C-8082-2020 Redesignation to facilitate an aggregate operation

I Am Opposed

I am writing this letter to voice my opposition. Bearspaw is a peaceful rural residential neighborhood. Residents can enjoy an escape from the noise and busyness of the city and relax. We have lived here for 6 years and value the peacefulness and nature like setting of the area.

Lehigh Hanson's proposals to allow another aggregate operation right in the heart of our residential community would be devastating. It would ruin the quality of life we moved here for and value so much. It would have an enormous negative impact on this community and the environment in which we live.

Our first concerns are **traffic, safety and operations**. Although the recent applications mention a conveyer belt that would run adjacent to the main road (Burma road), this seems almost a desperate approach to address previous concerns regarding additional gravel truck traffic on a narrow two lane road. A conveyer belt running adjacent to a road brings other risks, such as noise from continuous operation, impact on wildlife movements, unsightly industrial mechanical equipment, hazardous road crossings, multiple locations for failure and repair work. This would not completely address additional truck traffic that comes with the operation and in fact just adds additional components that need to be addressed.

We have already seen additional traffic due to the increase in population in nearby newly constructed residential neighbourhoods, and although located within Calgary City limits, they are still a factor for the area. Gravel trucks on these roads have already proven to be a hazard. The road is not made for heavy use, or industrial traffic. There is no shoulder, the trucks cannot keep their speed, and the truck traffic frequenting the existing operations frequently pull out in front of traffic with no regard for oncoming traffic. Additionally, cyclists use the road and regular vehicle traffic poses a hazard, let alone heavy industrial traffic.

Our Second concern is that if this application is approved, it will open this rural residential community up to additional industrial operations, or expansions of existing ones. If this application is approved, any measures put in place on this initial operation will be moot and forgotten when it comes time to expand and grow. It is a lot harder to deny an existing business any growth opportunities. These operations must be rejected and not allowed to start.

There are already multiple gravel operations in the immediate area, most notably, one owned by Lehigh Hansen, that is close enough to build a conveyor belt to. The proximity and quantity cannot be discounted even if they are in another jurisdiction. They do not cease to have an impact just because they are

technically located in City of Calgary limits. Proliferation of gravel operations in this area must be prevented – as this resource spans a large area and could see even greater concentration in the future which must be held back. The Bearspaw areas is designated residential and must be protected as such.

Over the past year, our immediate community and lifestyle has never been more important. The serene natural setting we live in has been a respite from crowds, masks, fear, restrictions and regulations. To have, and be allowed to enjoy the outdoors when all else has been regulated is a precious gift that should not be compromised by allowing industrial operations in a residential setting.

Our third concern is **noise**, **dust and pollution**. The proposed aggregate operation is located unreasonably close to existing residence. Existing area aggregate operations that are located three times farther away can be heard on a regular basis.

Dust pollution is unavoidable in these operations. Even with dust control measures at the operation site, dust settles on all equipment and transport trucks. That equipment and the vehicles release the dust during their operations and travel. Constant gravel dust (and all the known irritants and hazards that come with it), will be transmitted throughout the community on a regular and continuous basis, in even higher levels than already exist.

No reasonable person should ask or be asked to accept these conditions so close to their residential areas.

No one wants an industrial operation at their doorstep, that is why we choose our homes and neighborhoods carefully. We did not choose an industrial neighborhood to live in, and we should not be asked to accept one. We should not have to repeatedly make our opposition known with every application. The applications and proposals need to cease, and the county needs to come up with a sensible development plan that balances the needs of its voting residents and its businesses. Heavy industrial development is incompatible neighboring residential communities. If this operation is approved, it will have a severe negative impact on property values which will also cause tax leakage for the county.

Lastly, our councilor had been marginalized by petty infighting of your ineffective council, leaving our area residents without a voice. Until council resolves its internal conflicts, it should refrain from making decisions of major consequence to its residents.

I thank you for taking the time to hear our concerns and take them into consideration when making your decision about the future of our community.

Regards,

Jason Wiun

From: Jeff Brose

Sent: January 20, 2021 9:07 PM

To: Legislative Services Shared; Andrea Bryden

Cc: Julie Brose

Subject: [EXTERNAL] - Bylaw C-8082-2020

Do not open links or attachments unless sender and content are known.

Hello,

Regarding bylaw C-8082-2020

As a resident of Bearspaw, I am extremely concerned that council is once again considering bending to the wishes of a gravel pit developer rather than respecting the wishes of the community. It is unconscionable that council would even contemplate acting against the requests of nearby rural neighbours who have built their homes and lives on the assumption that council will respect and protect the community from gravel trucks rumbling by and the deleterious effects of gravel pit operations such as noise, dust, toxins etc.

Please don't allow this to happen.

Cheers,

Jeff and Julie Brose 55 Bearspaw Pointe Place

8 Church Ranches Close Calgary, Alberta T3R 1C1

26 January 2021

Subject: Bylaw C-8082-2020

Dear Council,

I am a resident and homeowner at the above address in Rockyview County and am opposed to Lehigh Hanson's application to redesignate the 600 acres at the NE corner of Burma Road and Range Road 25 and create an open pit gravel mine.

I believe that the development is inappropriate for the following reasons.

- Additional noise, dust and light will be generated by this development. No opportunity to question either the noise modeling or dust modeling has been provided. No modeling of snow covered conditions was included in the noise report and I don't believe that the conveyor system was included in either the noise modeling or dust modeling. The noise impact seems particularly questionable.
- New residential development has occurred near the proposed site with the understanding that the county was committed to the land use strategy in the Bearspaw Area Structure Plan. This commitment was reflected in the two previous rejections of applications for a gravel pit at the proposed location.
- Any heavy industrial industry is incompatible with residential development without an adequate buffer zone. The minimal buffer zone proposed in this development application will result in constant aggravation for the neighbouring residences. The predictable non-compliances with noise, dust and traffic commitments in the development plan and the lack of meaningful recourse will generate public rage for the life of the pit.

- I believe that the buffer zone from the existing Burnco pit is adequate.
- There are other locations where gravel development can take place without adversely affecting so many residences. An Area Structure Plan that identifies these locations will give the public plenty of notice that residential development close to the identified future gravel pits is not appropriate.

I feel strongly that Council should delay the hearing on this application until the Covid restrictions on public gatherings have been removed.

The scheduling of the Council meeting on Dec 22 during a surge in Covid infections gave the impression that Council were ramrodding this application through the approval process. The current virtual process gives the same impression. Democracy works when regulatory processes are followed and are perceived to be followed.

In conclusion I feel that the application should be rejected. If Council is planning to approve the application, it must be done after an in person opportunity for the public to address Council.

Sincerely

Jeff Perry

From: Karen Duffee

Sent: January 25, 2021 12:10 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Response to Bylaw C-8082-2020 - Letter of Opposition

Follow Up Flag: Follow up **Flag Status:** Flagged

Do not open links or attachments unless sender and content are known.

January 25, 2021

To: Rocky View Council,

I am opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

In closing, this application should be refused for a multitude of reasons, including the ones I have listed above.

Regards,

Karen Duffee 7 Church Ranches Blvd. Calgary, AB. T3R 1C1

Legal Land Description:

Plan 9511789, Block 2, Lot 54

Kevin LY 56 Silverwoods Drive Calgary, AB. T3R1E2

Date: January,21st,2021 **Bylaw C-8082-2020**

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application for an Open Pit Gravel Mine We are opposed to this application

We have resided in the Silverwoods Drive area of Bearspaw – Rocky View County and have been here only a short period of 3 years. We moved here for peace and quiet and therefore will be directly affected by the decision made by council regarding this application. In fact, our property and residence back onto Burma Road and as such all of the noise and dust will permeate down Burma Road directly to our home and property. We are opposed to the application.

It is our understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply. There will be significant environmental effects, significant health consequences for my family and to all residents and it will greatly interfere with the enjoyment of living in this area. It will have a drastic influence on everyone quality of life together with drastic effects on wildlife and the safety of our ground water.

More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

In conclusion, I hope Rocky View Council will use the prudent voice used in the previous two applications and reject this application.

Thank you,

Kevin Ly

Kieran and Kelly Moffat 261003 Bearspaw Road, T3R 1H6 Calgary, Alberta

Subject: BYLAW C-8082-2020

To Rocky View County Council,

My name is Kieran Moffat. My address is 261003 Bearspaw Road, Calgary, Alberta. My wife and I are strongly opposed to Lehigh Hanson's application to re-designate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open-pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

I have lived in Bearspaw for 31 years, recently buying my childhood home from my family. I bought a property in this community because of the peaceful rural lifestyle in which we want to raise a family. Over the years, I have witnessed the negative impacts of the current Lafarge gravel operations in Burma Road and Rocky Ridge road vicinity. The consequences have included considerable noise, air pollution, and dangerous trucking operations.

The proposed gravel pit would have an enormous negative impact by adding to the sediment washing into the wetland from runoff on the property. Airborne particulates as well as toxic emissions from trucks, equipment, and machinery may seep into the ground and contaminate groundwater, which flows into wetlands and neighbouring wells. Heavy industry such as openpit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan, which identifies this land as the location for future country residential development. Because of these earlier decisions, the County has no social license to now impose open-pit mining in this location.

I am also disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

In closing, I would like to say that the proposed Lehigh Hanson's gravel pit operation, on Burma Road and Range Road 25, would drastically affect our ability to enjoy our properties that we have invested so much money and time into. It will undoubtedly decrease our property values, and destroy the quiet, peaceful community in which we live. If the application is granted, the negative impact that this pit would have on the environment and its inhabitants is irreversible.

It would compromise the health and safety of our community and ruin the character of this unique place forever.

I thank you for taking the time to hear my concerns and hope you will take them into consideration when making your decision about the future of our community.

Kieran and Kelly Moffat

From: Larry Marshall

Sent: January 25, 2021 11:15 AM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020 Lehigh Hanson Scott Gravel Pit Application

Follow Up Flag: Follow up Flag **Status:** Flagged

Do not open links or attachments unless sender and content are known.

Re: Bylaw C-8082-2020

My wife and I wish to register our strong opposition to Lehigh Hanson's application to redesignate the "Scott Property" at the northeast corner of Burma Road and Range Road 25 in order to allow Lehigh to operate an open pit gravel mine there.

As a retired petroleum geologist, I have spent 40 years in the resource extraction business, so I am not against the responsible development of natural resources. However, it has become increasingly evident over my career that all extraction industries have a responsibility to develop these resources in a socially and environmentally appropriate manner and with the utmost consideration to the health and safety of the existing residents in the area.

We do not believe that an open pit gravel mine is a land use compatible with the adjacent residential communities in the area. Councils in 1994 and 2010 agreed by rejecting the previous Lehigh applications. Since then, the County has approved several new residential developments in the immediate vicinity. This would seem to suggest that the County is committed to following the Bearspaw ASP which identifies the subject lands for future residential development. We see no valid reasons for the County to now permit gravel mining on these lands.

The presence of a gravel pit will undoubtedly reduce the quality of life for the residents in the area. We don't believe that it's physically possible to sufficiently mitigate the negative health and safety effects (increased noise, gravel dust, traffic) of having a open pit gravel mine in the neighborhood. Foremost among these is the fact that silica laden gravel dust is a known lung carcinogen and inhalation of grave dust can shorten lifespans. We moved to Church Ranches because we wanted to enjoy the fresh air, peace, quiet and interaction with wildlife that acreage living would provide. Before we moved into the area we were pleased that the County had placed the enjoyment and physical well-being of it's existing residents over the business interests of a gravel extracting corporation.

We believe that a comment from a 1994 Council meeting sums up the situation best, "In Staff's view, a gravel pit operation in such close proximity to significant residential development areas is incompatible and would result in potentially conflicting land uses and adverse affects upon the adjacent residential lands". We believe that this comment is even more true today than it was in 1994, since now there are many more residents who would be affected by this decision. Approving the Lehigh application would set a dangerous precedent for other areas in the County where country residential development could be negatively impacted by future open pit gravel mines. We hope that the County will put the health and safety of its residents before the commercial interests of Lehigh and reject Lehigh's application.

Yours truly,

Diane and Larry Marshall 47 Church Ranches Blvd Calgary, Alberta

From: WEATHERILL, LEAH

Sent: January 26, 2021 12:26 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Attachments: 2020.10.30 Scott Property Opposition_Supporting Document.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Do not open links or attachments unless sender and content are known.

Good afternoon,

I am opposed to LeHigh Hanson's application to put a gravel pit at the Scott Property (Burma Road/Range Road 25).

I support the Submission of Opposition prepared by John Weatherill.

For additional consideration by Council, reasons for my opposition include:

- Negative human health impact from gravel dust and noise.
- It is more economically beneficial for the county and its residents if the Scott Property site not a gravel pit.
 - o Residential property values adjacent will go down.
 - o If Scott Property was a residential development, it would generate far more in taxes for the county than the gravel pit will.
- Rocky View County is blessed with large aggregate deposits, many of which are in less densely populated areas.
 - Gravel sites could be developed in less dense areas, thus still enabling a steady supply of gravel to local
 areas and benefitting the county (and perhaps a benefitting a locally owned gravel extraction company vs
 and internationally owned one).
- <u>Lack of regulations</u> to enforce respectful extraction:
 - If approved and once operational, there is nothing to hold Lehigh Hanson to their "hours of operation" or lack of crushing commitments. As we have seen with other pits/extraction, there are no regulations (impactful fines or penalties) to enforce respectful extraction (ie controlling noise and dust pollution) and protect local residents.

Supporting information attached.

Thank you for the consideration,

Leah Weatherill 51 Timber Ridge Way T3R 1B9

Gravel extraction & processing is not compatible with a country residential lifestyle.

We are blessed to have an abundance of aggregate in Rockyview, and can therefore choose to extract it only in areas of low population density.

<u>Tell</u> Rockyview Council and Lehigh Hanson that the Scott Property gravel pit <u>does not belong in</u>
<u>Bearspaw's densely populated area</u>, and must not be approved.

Lehigh Hanson's claims about Scott Property should be questioned:



HOW WILL SCOTT PROPERTY BENEFIT THE COUNTY AND REGION?

Aggregate is a scarce, non-renewable resource found in specific locations. Calgary and RVC have local, high-quality supplies of gravel, however these are depleting and large deposits for future supply are limited and rare.

Locally produced aggregate means reduced community and infrastructure impacts, reduced travel costs and greenhouse gas emissions, and significant benefit to the economy, local tax base and quality of life to those in RVC, Calgary, and throughout the province

SCOTT PROPERTY WILL CONTRIBUTE A NET COMMUNITY BENEFIT IN THE FOLLOWING WAYS:



ACCESS TO AFFORDABLE AGGREGATE PRODUCTS | A consistent supply of aggregate in the region preserves low sale costs of sand and gravel resources, reduces the need for tax dollars to support infrastructure projects and lessens potential for gravel shortages.



RVC FISCAL AND ECONOMIC DEVELOPMENT | The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.



LAND USE CERTAINTY | The site contains a gnificant source of quality aggregate and has been subject to multiple applications and land use uncertainty for years. Accepting aggregate extraction at this site will allow for an assured future.



COMMUNITY AMENITIES | Aggregate is a temporary disturbance on the land and the end-uses can create community amenities and benefits including residential / non-residential uses, parks, trails, future housing, and infrastructure facilities.



REDUCED GHG EMISSIONS AND TRUCK TRAFFIC CONCERNS | The conveyor system means a significant number of trucks won't be needed, resulting in overall emission reductions.



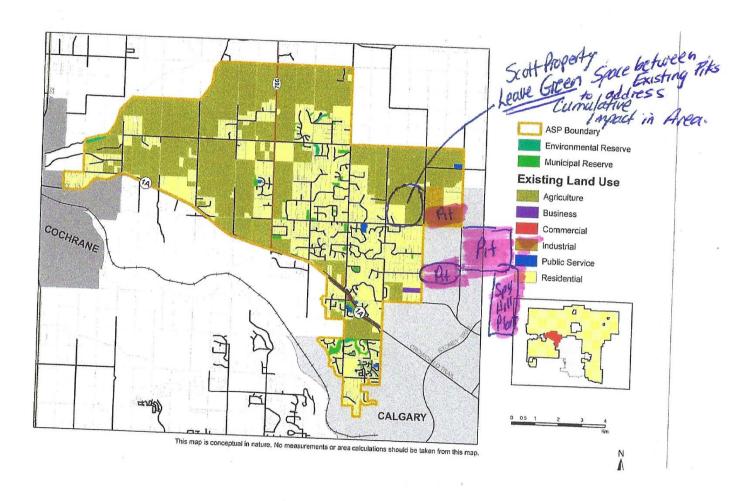
RAISING THE STANDARD OF INDUSPRY MITIGATION | Lehigh is committed to exploring solutions to potential cumulative impacts and is open to working with other companies, regulators and the municipality to achieve this.

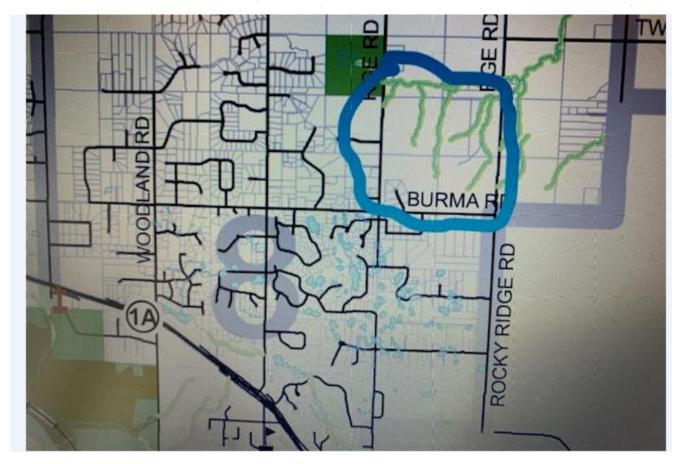


PRESERVATION OF A PUBLIC ASSET TO SUPPORT PROJECTED

REGIONAL GROWTH | According to the CMRB, demand for aggregate is expected to double over the next 50 years. Scott Property provides certain access to local aggregates for future decades.

- Aggregate is not scarce. Deposits are not limited or rare. Map 2 in Rockyview County's Draft Aggregate Resource Plan (Feb. 2018, p.19) indicates that aggregate deposits exist under roughly 1/3 of the County. Assuming half of this is close enough to the surface for extraction, RVC has enough aggregate to run quarter-section-sized pits sequentially for 30,000 years¹.
- × Aggregate deposits exist throughout RVC. Extracting gravel in Bearspaw, the most densely-populated part of the county, is unnecessary and dangerous. Quality of life will be negatively impacted by dust, particulate, noise, light pollution and traffic.
- There is no risk of gravel shortages. Gravel exists under roughly 1/3 of RVC, yet just 4% of the county's land could provide enough gravel to serve Southern Alberta's demand for the next 500 years.²
- × The Calgary Aggregate Producers Group estimates that a typical ¼ section gravel pit will generate only \$66,000 in CAP levy payments and property taxes for RVC per year.³ Meanwhile, studies show that homeowners within 1.6km of a gravel site can expect their property values to decline by 15%. There are more than a hundred homes within 1.6km of Scott Property, and with an average home value in Bearspaw exceeding \$1M, the lost value to a *single* Bearspaw family will outweigh the total annual benefit to the County.
- x The site has been subject to multiple applications because the County has consistently and rightfully rejected a gravel pit in Bearspaw. The land is zoned for agricultural use, and is contemplated for future residential use in the Bearspaw Area Structure Plan. Accepting aggregate extraction at this site assures only decades of dangerous industrial activity in the midst of a country residential setting.
- Scravel pits are not 'temporary' disturbances: they operate for many decades the recently approved Hughes Gravel Pit is expected to operate for 50 years. The proposed Scott Property pit will outlast many Bearspaw residents, depriving a generation or more of children and families of life in a peaceful country environment.
- × A conveyor system will create noise and dust, will not eliminate an increase in truck traffic to/from the site and requires regular maintenance.
- Vague promises of 'exploring solutions' will not protect Bearspaw residents from the harmful impacts of a gravel pit close by. It is foolish to rely on any such promises, which are likely to be quickly forgotten if approval is granted.
- × Calgary and Rockyview are expected to require 560M tonnes of additional gravel in the next 50 years. Assuming that RVC supplies 1/3 of this gravel (with the remainder coming from Calgary and other counties), that would require 15 quarter-section sized pits in RVC; that is equal to just 3.7 sections of land, or 0.2% of the land area of RVC. As significant gravel deposits are widespread across the County, including in areas with very low population density, it is unnecessary and irresponsible to extract aggregate in the midst of Bearspaw, the County's most densely-populated area.
- 1. Rockyview area 1,500 sq. mi. x 1/3 x 50% = 1,000 quarter section pits x 30 year operating life = 30,000 years.
- 2. Calgary Aggregate Producers Group estimates demand of 760M tonnes over 50 years. 500 year demand estimated at 760M x 10 = 7.6B tonnes, rounded to 10B tonnes for growth.
- 3. Source: CEAC Aggregate Workshop, May 25, 2015 p.17, adjusted for subsequent increase in CAP Levy to \$0.40/tonne.





From: Maria Spagnolo

Sent: January 21, 2021 9:06 AM **To:** Legislative Services Shared

Cc: mspagnolo

Subject: [EXTERNAL] - BYLAW C-80-82-2020 Spagnolo 246 Church Ranches Way OPPOSE

Do not open links or attachments unless sender and content are known.

Attention: Municipal Clerk's Office

I **oppose** the Lehigh Hanson Application Number PL20200093 - Bylaw C-8082-2020 for the following reasons:

- Expected noise levels are incompatible with a rural residential neighborhood
- Silica dust is a carcinogen and this 30+ year operation should not be emitting industrial levels of dust into residential homes and neighborhoods.
- The gravel mine will severely reduce neighborhood housing values (and tax income for the County from the most densely populated area of RVC).
- Mining will expose the drinking water aguifer to harm from pollution.
- Lehigh Hanson did not do community consultation to the degree required. This application has been rushed through during a pandemic in order to eliminate the public from a public hearing.
- There is virtually unanimous opposition by the community to application.

We trust that you will put the health of the community and the environment above all else and say NO to this gravel pit.

Sincerely, Maria Spagnolo Bearspaw Resident

From: zhang meili

Sent: January 25, 2021 10:31 AM **To:** Legislative Services Shared

Subject: [EXTERNAL] - RE: Gravel Update # 11(Bylaw C-8082-2020)

Follow Up Flag: Follow up Flag Status: Flagged

Do not open links or attachments unless sender and content are known.

Dear Sir or Madam,

My name is Meili Zhang, the owner of the House, 11 Cody Range Way NW Calgary, AB T3L 1C1. I oppose the project of the proposed gravel pit (Bylaw C-8082-2020). The reasons are listed as follow:

- 1. Our healthy concern- We live close to the scene, daily operation will have significant impact on our personal life such as noise, waste, dust and so forth.
- 2. Long time concern With fine dust around our area, it will gradually damage our lung and cause severely healthy problem.
- 3. Property value decrease Our area will has less attractive to family.

Please Stop this project immediately and protect our personal life and human right.

Best regards,

Meili

Sent from Mail for Windows 10

From: Church Ranches Homeowners Association

Sent: January 25, 2021 9:19 AM

To:

Subject: Gravel Update # 11

January 22, 2021

Residents Gravel Update #11

Now most of us have submitted our written Letters of Opposition to the Lehigh Hanson Gravel Application. We now urge all residents to record their **Audio and/or Video Recording** of the presentation they would otherwise have made in person at the Public Hearing.

This is a separate exercise to the written submission and we strongly urge all residents to voice their concerns and opposition to this project. **Trust me, it is critical!** Numbers Count!

The Public Hearing protocols can be found at the following RVC website: https://www.rockyview.ca/presenting-to-council#audio-video

In summary, RVC is requesting audio and video submissions, as follows:

- Audio: Submissions must be in MP3 file format and must not be more than 20 MB in size.
- Video: Submissions must be in MP4, MOV, or WMV format, and must not be more than 300 MB in size.

All presentations must be submitted to RVC by noon on Monday, February 1st.

The Residents Gravel Committee will help anyone record and submit an audio and/or video recording of their presentation to the virtual Public Hearing. We will make this process easy for you by taking care of all the technical aspects. All you have to do is schedule a time and then attend to record and voice your opposition! Please call or email Anne-Marie at 403-680-7452 or annemarieb@shaw.ca

All recordings will take place outside (in an open garage), in a socially distanced manner, abiding by all COVID-19 protocols.

Presentations are strictly limited to five (5) minutes or less per person (you may wish to speak for only a minute or two, or just a few seconds, to voice your opposition to this project – that is perfectly fine!). If you wish to speak for more than five (5) up to a maximum of ten (10) minutes you will require sponsorship from two others, who do not live at the same address, but live in Rocky View County. We can help you with sponsors, if you require any.

You should start your presentation by:

- 1. Stating your name
- 2. Stating your address
- 3. Say Your Piece Voice Your Opposition

If you have still not submitted a written Letter of Opposition, the County will accept written submissions up to **4:30 pm on January 27**th, in keeping with the directions they initially issued (in error) to residents. Administration has

indicated that Council will get copies of all submissions received between January 20th and 27th before the public hearing. Getting your views registered before the 27th is critical!

If you have any questions on this matter, or gravel in general, do not hesitate to contact me. Please share this with your friends and neighbours.

Thank you for your time,

Martyn Griggs

Unsubscribe

Michael Esser MD, PhD, FRCPC 40 Church Ranches Boulevard Rocky View County, AB T3R 1C1

January 18, 2021

Rocky View County Legislative Services c/o County Hall 262075 Rocky View Point Rocky View County, AB, T4A 0X2

VIA E-MAIL: legislative services@rockyview.ca

Regarding: Applications PL20200093 and PL20200094; File Numbers 06605001, 06605002, 06605003, 06605004, 06605005; Division 8

Subject: Bylaw C-8082-2020

I am writing to reiterate my very strong opposition to applications PL20200093/0094. These applications are related to file numbers 06605001, 06605002, 06605003, 06605004 and 06605005, "Division 8." The applications are for re-designation of land located at the northeast junction of Range Road 25 and Burma Road to accommodate a new gravel pit operation and to adopt the Scott Property Master Site Development Plan to "guide re-designation, subdivision and development proposals."

I am both perplexed and exasperated that the proposition of an open gravel pit on the borders of residential communities is being considered, let alone for a third time. As a practicising physician, I can say that the medical ramifications of such a pit are factual especially with the ;liberation of fine particulate matter (PM 2.5) and silica to name just a few components. These ramifications are physical, psychological and emotional. These inevitable risks to residents of Bearspaw and the surrounding areas, and the effects on their health and wellness, should be Rocky View County officials' utmost concern and consideration. I can only assume, and expect, that the council has appropriately evaluated the science behind these well-known health risks, and is being diligent in representing their constituents.

Rocky View County councils rejected similar applications by the same company for the same property in 1994 and 2010. This third application is no different and should be treated as such, with the same result. No matter how this 2021 application is framed, it is still a proposal for an open-pit gravel mine next to residential communities that threatens the health and well-being of local people. Any changes from the original two applications are distinctions without substantial differences. The ramifications of air pollution, noise pollution and environmental impact are as significant as they were when the applications were defeated before, and should be more apparent now than in the past.

In actual fact, if anything has changed since the original two applications, it is that there is an increase in the number of residences in the vicinity of the proposed pit and a school has been established. There are now more people living in the proximate radius of the intended gravel mine – so the impact is greater, particularly when compounded with the effects of the existing gravel pit at Spy Hill. These Rocky View County residents have worth. They deserve respect and protection. Rocky View County officials have an obligation to safeguard its people and their properties.

Another distinction from the previous applications is the ongoing COVID-19 pandemic. Since March of 2020, the people of Alberta have been subject to varying degrees of restrictions, the purpose of which is to try to limit the human toll that the SARS-CoV-2 virus and its emerging variants are taking. The underlying substance of the restrictions is to limit contact with people outside of one's immediate family. Out of necessity, more people are spending time at, and working from, home. Where people live has taken on even greater importance. Having a healthy neighbourhood is vital.

Further, the COVID-19 restrictions have an impact on the ability of community members to effectively engage in the process, prepare for the upcoming hearing and attend the hearing. Yet, the hearing continues to be scheduled and the company's agenda takes priority and moves forward. This is deeply concerning. Perhaps, in part, the choice to proceed with the hearing online is to push through the company's plans and avoid the hundreds of people who, based on past history, normally would have come in person at County Hall to express their concerns and grievances about the applications.

Also disturbing is what, to me, is a lack of meaningful public consultation by the gravel company leading up to this hearing. I was unable to attend the company's information session in February of 2020 and there has not been opportunity or offer for further meetings. The mailed materials that I have received from the company simply promote the merits of the company's plans and don't openly address the fact that two previous applications have been rejected. So I have to ask, what is the difference with these applications? How are the many concerns addressed? By a conveyor belt? This main change, as described in the company's *What We Heard Report* dated March 2020, does not adequately address all of the points and others have been completely ignored. The aim of this third application seems to be simply to hope for residents' fatigue and therefore their diminished engagement, and a new county council sympathetic to industry that will put profit over people.

This "consultation" process did not give me the impression that the company actually was interested in, or willing to listen to, members of the community. I have not seen any indication that the company's proposals have been adjusted based on community feedback. It seems to me that this process was a matter of the company's "checking off a box" to say that it engaged with the community for the purposes of their applications rather than having meaningful consultation and true engagement with affected people.

When it comes to the actual concept of open pit gravel mining, I am not opposed to this heavy industry in Rocky View County. I understand that gravel is needed for infrastructure and for work in Alberta, no small considerations in these uncertain times. I also know that Rocky View County can benefit financially from such industry. However, the location of this particular proposed open pit gravel mine simply is incompatible with nearby residential and agricultural use. Rocky View County created and

instituted the Bearspaw Area Structure Plan long before this most recent gravel pit application. The County cannot now backtrack and allow for heavy industry in, or adjacent to, an area that was designated as residential and developed as such. Work must be done to find other appropriate locations in Rocky View County for gravel extraction. These locations must not interfere with residential use or agricultural concerns.

As a part of a global community, we are experiencing the effects that come from pursuing initiatives like this without due consideration of long-term and wider impact. One relevant illustration is the legacy of health problems related to widespread use of asbestos, which also was initially purported to be safe despite overwhelming evidence to the contrary. At the time, industry promoted its use, similar to what is being done in relation to this gravel pit application. Other examples that come to mind are the Walkterton, ON, and Flint, MI water crises.

I have read the company's website and its written materials about the benefits that the company proposes as compensation for the pit. In my opinion, these promises do not adequately address the problems it will create. In particular, there are no long-term commitments to address or remedy either the health risks or the environmental impacts that may take years to become evident.

I have neither met anyone, nor heard of anyone, living in this area who wants a gravel pit established so near the community. No one wants it now and certainly not for a quarter of a century, the estimated lifespan of this pit. People of Rocky View County and parts of Calgary will be the ones who will have to live with the effects of air pollution, noise pollution, and environmental impact for decades to come, long after the company has moved on. Please do not let its desire for expansion and profit, its inadequate promises of monitoring and compensation, or short-sighted council objectives (however well-intentioned) overshadow the real ramifications for the people who live here.

Please do not approve these applications.

Sincerely,

Michael Esser

Perry Schuldhaus & Kori Schuldhaus Residents of Church Ranches, Bearspaw, Rocky View County

January 27, 2021

Municipal Clerk's Office Rocky View County 262075 Rocky View Point Rocky View County, Alberta T4A 0X2

Dear Sir or Madam,

Subject: Opposition to Bylaw C-8082-2020, planning application PL20200093, Lehigh Hanson's Application to have Rocky View County ("RVC") re-designate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property ("Application")

Our family are long-time residents of Bearspaw and reside in Church Ranches, located in Bearspaw, Rocky View County. We have lived in our home for over 21 years and we will be directly impacted by the subject Application. In compliance with Rocky View County's letter dated October 9th, 2020 requesting comments on the Application, we previously provided comments on October 30th, 2020.

We understand that Rocky View County has requested comments by January 27th on the Application and therefore we are providing additional written comments.

We are very strongly opposed to Lehigh Hanson's ("LH") proposed gravel pit and believe siting of a gravel pit at this location is incompatible with existing adjacent land uses which RVC, through prior approvals, established as country residential and will expose thousands of nearby residents to the risk of significant and permanent health impacts as well as other irreparable impacts to the community.

We reference the comprehensive document titled "Landowner Submission" dated January 2021 submitted by John Weatherill. We have read and fully agree with the contents of the Landowner Submission and we adopt it as our own. In our opinion, no reasoned decision maker could ignore the comprehensive evidence submitted by Mr. Weatherill; including expert evidence of independent, objective experts; on the record of this proceeding and arrive at any other conclusion than the Application must be rejected. We would like to emphasize certain aspects of the Landowner Submissions and elaborate on other elements of the LH application which concern us.

• A gravel operation at this location will threaten human health and irreparably destroy critical environmental features. It is entirely inappropriate for RVC to foist this risk onto the residents of Bearspaw and surrounding region.

- The significant health risks that RVC would risk exposing Bearspaw residents to would be:
 - Consequential risk of prolonged exposure to gravel dust which poses a real and foreseeable risk to human health as it contains crystalline silica which is a known carcinogen. Exposure to silica and other dusts are linked to kidney disease and pulmonary diseases including bronchitis, emphysema, bronchiectasis, and chronic airway obstruction. It is commonly known that the impacts to human lungs from exposure to silica are permanent and irreversible.
 - o **High risk of impacts to groundwater**, the domestic use aquifer and contamination of residential water wells.
 - o the negative effects of elevated and continuous noise levels which are known to cause stress, reduce concentration, fatigue, cognitive impairment, cardiovascular disease and high blood pressure. Individuals subjected to prolonged environmental noise are at elevated risk of psychological stress and heart attack.
- Significant environmental issues such as:
 - o **Permanent and irreversible dewatering of wetlands, pond and lakes** across the region which will be detrimental to residents and wildlife.
 - o The water table in the region will be permanently lowered which is not permitted as per the Bearspaw Area Structure Plan
 - O Disruption of, and contamination to, surface water from the Scott Property will risk contaminating Nose Creek and ultimately the Bow River.
 - Operation of a gravel pit will permanently drive wildlife out of the Bearspaw region. This wildlife is a huge part of the rural character of the region that drew residents to the area and which contributes to the quality of life we enjoy every day.
- Economic analysis indicates that the Scott Pit will have a *negative* financial impact to the County, given the significant destruction in property values (estimated at \$163 million) and commensurate reduction in residential property tax which will exceed the benefits claimed by Lehigh Hanson
- RVC rightly refused Lehigh's two previous applications (in 1994 and 2010) in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that RVC is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, RVC has no social license to now impose open pit mining in this location.

The RVC Staff Report

Given the broad nature of matters addressed by RVC staff, with gravel pit development only forming a small segment of what is reviewed, and also given the significant turnover of staff at RVC, there is an apparent lack of consistency and experience within RVC administration relating to gravel pit development on section 5. This lack of experience and knowledge combined with a heavy reliance on the Application submitted by LH without access to RVC staff independent third part expertise to augment the review, creates a significant risk that RVC staff

did not apply appropriate diligence and consideration to the facts that need to be assessed in the process of arriving at a recommendation.

It is clear that at a high level the nature of the LH Application is the same as the prior two applications that were rejected by RVC Council. However, this particular Application is actually a significant step backwards from the prior two applications. The impacts to the community have been magnified with on site crushing, reduced set backs, and increased operating hours among other heightened impacts. Meanwhile, since the prior two applications, RVC has approved, and in fact encouraged, families to establish homes in the Bearspaw area and specifically adjacent to the proposed Scott mine site. As a result, this third attempt by LH to obtain approval for this gravel pit will now amplify impacts to even more residents than was the case in the prior applications.

Bearspaw landowners were shocked to read the recommendation of staff on this Application. In 2010, staff also recommended approval but the then Council rejected that recommendation in a resounding 9-0 vote. Given the history of prior rejections, combined with the overwhelming opposition to the gravel pit from the residents of Bearspaw and the strong record of evidence submitted by Bearspaw residents (including independent, objective expert opinions) which highlight the misleading conclusions, errors and deficiencies in the LH Application, it is incomprehensible that staff can recommend approval. The submissions by Bearspaw residents and those same expert opinions clearly support that the LH proposed gravel pit is a Failed Project and the Application is not worthy of consideration by RVC given it is **deficient in numerous areas.** Further, it is apparent the Application raises technical issues involving a broad range of scientific disciplines and RVC staff does not have the resident expertise to thoroughly understand and evaluate the implications to the county and its residents from the proposed gravel pit. Specifically, we are referring to disciplines such as geological factors, ground and surface water impacts, noise, air, wildlife and economic assessments. RVC staff does not have the experts to objectively review, and challenge where necessary, opinions or representations made in the Application. Therefore, we believe Council and residents should expect, at a minimum, that staff be able to identify areas where RVC lacks resident expertise and that they retain outside experts to augment staff competencies. This should be considered crucial to ensure a proper review all of the material, both in support and in opposition to an application.

We are not aware, based on communications with RVC, that Administration took steps to retain independent experts to fill these gaps in RVC staff expertise. Without in-depth understanding of each critical issue, any recommendation is at best flawed and may even lack bona fides. The staff report must accordingly, not only be viewed with scepticism., it must be rejected.

The staff report dismisses many of the failures in the Application with the response that these can be addressed at the development permit stage. All substantive matters relating to this Application must be dealt with at this hearing. They cannot be deferred and dealt within a process that lacks both transparency and effective landowner participation.

We understand that the Staff makes recommendations. When Staff makes a recommendation, it is communicating publicly that it has made a judgment on the proponent's application. Our concern is that the recommendation has been made solely on the basis of the proponent's

application and not on the basis of the full record of evidence; including that put forward by the Bearspaw Landowners through their submissions. The recommendation by staff that technical issues can be dealt with in the development permit stage is an acknowledgement that they refuse to deal with these substantive issues at this stage of approval; very likely due to the fact that they are ill-equipped to deal with it now. This is unacceptable in that now is the time it should be dealt with to ensure full transparency for all stakeholders and effective landowner participation.

In exercising their judgment, Staff should identify the issues that must be addressed. On this Application, many of the issues raise technical questions and require evidence from independent experts (and not paid consultants) who acknowledge their duty to be fair, objective and non-partisan. This differentiation is not simply a question of semantics and has been recognized by courts and regulatory bodies.

The impacts on surface and ground water cannot be measured empirically. The dispersal and impact of particulate matter and silica dust requires professional judgement. There is no way to carry out noise measurements of actual operations when those operations are not taking place. All of these matters, plus many others, must be estimated based on credible evaluation from seasoned experts. The financial impact on landowners, community and the wealth transfer to LH that will occur if this Application is successful is again a matter of judgement. All of these matters plus a myriad of others require credible, fair, and independent expert evidence.

In making a judgement to "recommend", it is paramount that Staff consider relevant submissions of directly impacted landowners. Staff have no independent evidence to provide in this proceeding on the impacts that will be experienced by directly and adversely affected landowners. It appears that RVC staff has failed to consider the full record of evidence, including that submitted by Landowners, in arriving at its recommendation. It was just easiest to defer a thorough assessment of these critical issues to a later date. Clearly, by not considering the full record of evidence, RVC Administration has failed to fulfill its role in a diligent and comprehensive manner and therefore, the RVC staff report must be disregarded.

The comprehensive evidence presented by the landowners raises numerous issues and concerns which highlight that the LH Application is factually incorrect, extremely misleading and in numerous respects deficient and therefore cannot be relied upon by RVC. Fundamental to a procedurally fair process is the right to be heard. It is obvious on the face of the report that critically relevant evidence put forth by landowners, in full compliance with the rules of the County, was simply ignored. Ignoring relevant, credible evidence put forth by a party in furtherance of the right to be heard creates an undeniable apprehension of bias.

Bearspaw landowners were also shocked to read the conclusion by RVC administration that the Application "complies with the Bearspaw Area Structure Plan." The defects in the Application were thoroughly identified in the submission of Mr. Weatherill but again those defects were completely ignored. For example, the evidence resoundingly establishes that this mine will occur on an alluvial aquifer. That is prohibited under the County Plan as pointed out by Mr. Weatherill. The mine will permanently lower the water table in this area and that is prohibited under the Bearspaw Area Structure Plan, as again pointed out by Mr. Weatherill. The

mine creates a significant risk of contamination to water wells and that obviously should not be allowed to happen. These are but three examples of the legion of defects in the Application.

We understand that LH has a different view, and for all of the reasons set forth in the landowner submissions, we consider that opinion to be meritless. What the Staff cannot do in a procedurally fair process is to, without question, accept LH's position. while ignoring contrary independent evidence. As was the case in 2010, we fully expect that Council will reject the recommendation of Staff. Careful consideration of all of the evidence put forward would lead any reasoned decision maker to conclude the Application should not be approved. Afterall, the only credible, objective evidence is from the Landowners' independent experts and it cannot be ignored. The Application must be rejected.

Landowners intend to proceed with the February 2 virtual hearing as scheduled during these COVID times, a RVC process that effectively prevents balanced public participation. The landowners have detailed several times our concern with the process being employed. Given the obvious defects with the Staff "recommendation", and the process, landowners will participate under protest. Rather than presenting a balanced and fair view of the record before the Council, the Staff report utterly ignores the compelling and relevant evidence. This in turn foists, unfairly, yet another challenge onto landowners. We reiterate, the conclusions in the report of Staff must be completely disregarded.

LH has a high and insurmountable onus to meet to seek to change the existing land use designation for the LH lands. The only response to such a fatally flawed application is to reject it on terms that it can never be brought back again. No applicant landowner can seek and obtain such a major change and deflect the obligation to support it into the future. LH has submitted various reports, all of which have been shown to be completely unreliable. Obviously, LH submitted these reports with the hope that they would be unchallenged and relied on by Council and staff. As detailed in the submission of Mr. Weatherill, there are a myriad of present requirements that LH must satisfy and clear and cogent evidence. It has completely failed to do so and LH cannot sidestep its obligations. LH cannot obtain a redesignation on no evidence and punt that obligation into future. By then, the damage is done.

Noise Impacts from the Proposed LH Gravel Pit

Attached as Appendix A is an independent, objective expert report prepared by FDI Acoustics ("FDI") prepared for the Bearspaw Landowner Group which summarizes FDI's expert opinion on the impacts the proposed LH gravel pit will have on the neighboring communities and also, more specifically, questioning the analysis and conclusions reached by LH's acoustic consultant, SLR Consulting (Canada) Ltd ("SLR") in their report dated June 11, 2020. As you will see from the FDI Acoustic's report, FDI specializes in environmental acoustics and industrial noise control and the Principal of the firm; Mr. James Farquharson CET, INCE; has over 32 years of experience in the measurement and evaluation of environmental noise issues and he has testified at public hearings on environmental noise issues before the Alberta Utilities Commission, the Alberta Energy Regulator, and the Alberta Natural Resources Conservation Board. Clearly, Mr. Farquharson is eminently qualified to speak on

the subject of noise in relation to the proposed LH Scott pit and the likely impacts to the neighboring communities, as well as to assess the analysis and conclusions reached by SLR.

Mr. Schuldhaus is a Professional Engineer and has been a member of the Association of Professional Engineers and Geoscientists of Alberta for over 37 years and his entire career was spent in the energy industry prior to his retirement in 2020. He has reviewed LH's MSDP, SLR's June 11, 2020 report and the attached FDI report and draws the following conclusions and observations:

- The LH MSDP and SLR's report are at best, very misleading and in reality, are extremely deficient, factually incorrect and cannot be relied upon to make an objective assessment of the acoustic impacts from the proposed LH gravel pit.
- Given the lack of robust regulation of gravel pit operations in Alberta, RVC is left with the responsibility to review Lehigh Hanson's ("LH") application with respect to the noise impacts, but RVC likely lacks personnel with the knowledge and professional skills required to (i) establish industrial policy/standards in relation to gravel pit operations, (ii) assess whether the application meets any industrial policy/standards and (iii) police the performance of gravel pit operations relative to any standards. Therefore, RVC should consider standard industry practice and defer to other jurisdictions that have more robust regulations and standards to ensure the sufficiency of an application and appropriate mitigation to protect the health of those impacted by the operations. RVC should not rely on a biased consultant, who is working directly for and compensated by LH, and their "discussions with RVC" to determine acceptable sound levels.
- RVC Bylaws do not specify quantitative limits on sound levels. The SLR reports references the RVC Draft Aggregate Resource Plan which states "The lowest Permissible Sound Level (PSL) after the respective adjustments, shall be 45 dB LAeq for the daytime period". The SLR report also states that the "Ontario MOECC NPC-300" Class 3 Rural limits are set at 45 dBA daytime/evening and 40 dBA at night. Given the country residential nature of the Bearspaw area which consists of acreages and farmland, it is clear that Bearspaw should be considered rural; consistant with what Ontario would define as rural. This conclusion is also supported by FDI in its report. Given the above points, the design standard for the LH Scott Property should be established at 45 dBA in the daytime and 40 dBA at night and not the 55 dBA LH says it will strive to achieve.
- SLR attempts to mislead the reader and compare its proposed 55 dBA permissible sound level with the City of Calgary which applies a 65 dBA sound limit to gravel pits within the City. Clearly there is no comparison between ambient noise levels in Bearspaw and the ambient noise levels in a large metropolitan area like the City of Calgary and therefore SLR's argument is irrelevent. The ambient noise levels recorded by SLR unequivically support that the communities in the vicinity of the proposed LH Scott pit are country residential and rural in nature.
- SLR's proposed assessment critieria that sound levels should not exceed 55 dBA LAeq at the nearest residences at any time, is totally unacceptable and is not supported by standard industry practice of limiting the noise impact of a proposed development to a 5 dBA increase above the background sound level at the noise sensitive

¹ SLR June 11, 2020 Report Section 7.2, Assessment Criteris

- receptors. This accepted technique would establish the assessment criteria between 39 dBA and 44 dBA, depending on the receptor and yet SLR's proposed criteria is 55 dBA; a level reflecting over 10 times the acoustic energy from industry accepted practice.
- The sound modeling summarized in Section 8 of the SLR report is based on Phase 2 of the mining plan² which places the excavation and crusher equipment in the Southwest corner of the proposed pit and well below grade and the level of the perimeter berms. As the FDI report highlights, modeling of the noise levels at the sound receptors (homes) based on this set of assumptions will significantly understate the noise levels experienced at the nearest homes since it will maximize the acoustic barrier effect of the pit and the perimeter berm for the homes west and southwest of the operations which are the areas where most of the nearby residences are located. In other words, if SLR had modeled the sound impacts of phases 1, 3, 4 or 5, the predicted sound levels at the homes to the west and southwest would very likely be significantly higher since the acoustic barrier effect of the pit and the perimeter berm would be much less effective. Therefore, sound propogation modeling performed by SLR is deficient, misleading and should not be relied upon by RVC.
- SLR states "an overall ground absorption factor of 0.7 was used in the model, which corresponds to grasslands or cultivated fields, and is appropriate for the ground cover in the study area"³. As FDI concludes in its report, the use of this absorption factor is inappropriate since once the mine is opened up for aggregate extraction, these surfaces will be stripped of top soil and vegetation and will consist of a mix of compacted aggregates (pit floor working area and roads), in place raw aggregates, stockpiled raw aggregates, and crushed aggregates awaiting conveying. As a result, the modeling conducted by SLR will again understate the predicted noise levels at the homes in the vicinity of the proposed pit. Therefore, once again, sound propogation modeling performed by SLR is deficient, misleading and should not be relied upon by RVC.
- SLR states "However, the residences selected as sensitive receptors for the purpose of this assessment represent the points where the Project had the potential for causing the highest sound levels, and the remaining residences farther away will experience lower sound levels than the nearest identified sensitive receptor". This is factually incorrect as the sensitive receptors that SLR chose are homes which generally exist at an elevation within a few meters of the existing grade of the South and Southwest portions of the proposed Scott pit. Therefore, those receptors (homes) will benefit from the acoustic barrier effect from the pit itself and from the perimeter berm. What SLR completely ignored and failed to evaluate is those homes that may not be immediately adjacent to the proposed Scott property, but that are a few hunded meters away and sit up high on a hill and at an elevation 30 to 50 meters above the proposed pit. Please see the photo below taken from one of the homes on the East side of Lone Pine Crescent in Church Ranches. This photo clearly shows that the line of site from homes in this area will be directly into the proposed pit and the proposed perimeter berm will not shield the residents from crushing and operational noise emitted by the gravel extraction processes. Therefore, for much of LH's proposed 25 to 30 year gravel pit operations, those

² SLR June 11, 2020 Report Section 3, Mining Plan

³ SLR June 11, 2020 Report Section 8, Sound Propogation Modeling

⁴ SLR June 11, 2020 Report Section 5, Noise Sensitive Receptors

homes will have a direct line of sight over the perimeter berms and into the heart of the gravel pit mining operations. Therefore, those homes will experience very little acoustic barrier effect as well as ground absorption of the noise emitted by the excavator and crusher operating in the pit and in all likelihood will experience sound levels much higher than those modeled by SLR. By not considering potential impacts to homes further from the proposed site, SLR's report is deficient; the predictive modeling is flawed and cannot be relied upon by RVC.



LH acknowledges that the maximum noise generation thresholds may be exceeded during preliminary site preparation and commencement of the initial phase of aggregate operations until such time as mining activities drop below existing grades and/or the elevation of the berms. This is expected to be the first two years of operations of the gravel pit which is significant. While sound propagation modelling was completed for extraction operations in Phase 2, no modelling was conducted to predict noise levels during preliminary site preparation and commencement of the initial phase, expected to be the first two years of operation, when noise levels are expected to be at their highest. This is a significant deficiency and therefore the SLR report should be disregarded.

- SLR states: "the conveyor outside the Lehigh property will be covered over the belt and at transfer points and will be situated behind a berm. Therefore, its sound emissions are expected to be negligible at any residential receptor location in the area." At the conveyor belt transfer points further significant noise will be emitted, as will the noise generated by the drive gearbox and motor at the head of each conveyor flight. It is incomprehensible that SLR expects the reader to just accept the conclusion that sound emissions from the conveyor system will be negligible and is a clear indication of the shortcuts that LH and SLR have taken in preparing this application. This statement is not corroborated by any analysis or verification and therefore again validates that the report is deficient and should be disregarded.
- SLR states: "assuming a worst-case scenario where the sound emissions from all the nearby pits are generating noise equal to their respective PSLs, the added sound contribution from the Project at the receptors would result in "no net increase" to the total sound levels, as the contribution from the Project will be at least 10 dB below the maximum PSL established for the nearby pits." This is a grossly misleading statement and should be disregarded. Clearly SLR could not be bothered to perform the necessary and appropriate analysis to confirm the net increase from the operation of LH's gravel pit when added to the operations of the other existing gravel pits in the area.
- SLR buries their analysis of the blasting scenario in an appendix to their report "for informational purposes" and the analysis of the predictive impacts of blasting do not form the basis of the sound contour modeling that SLR generated. It is well known that the STAR gravel pit, located only hundreds of meters from the proposed Scott pit, conducts routine blasting to support its gravel extraction and it is very likely that LH will also need to utilize blasting in its operations. So it is entirely disingenuous and misleading to attach the blasting modeling as a scenario rather than a base part of the MSDP.
- Further with regard to blasting, SLR states "sound due to blasting activities may still be noticeable by nearest residents and annoyance could be experienced by them. For this reason, it is recommended to notify the residents in advance before performing any blasting activities." The modeling that SLR completed in Appendix D was based on the detonation point being located in the middle of the aggregate pit. Clearly the results of this analysis will understate the noise and vibration impact experienced by the various receptors for the 50% of the time that the detonation point is located closer to the receptor than the middle of the aggregate pit and will likely result in predicted Lpeak dBA levels above NPC-119 limit when the detonation point is near the perimeter of the pit and closer to a receptor. By not analyzing this scenario, the SLR study is deficient and should be disregarded.
- The noise impact at those times when LH is blasting in closer proximity to the homes to the South and West of the pit, will likely require that adults and children wear hearing protection when they are in their yards in order to reduce the risk of hearing damage from blasting. This is certainly not the life these residents expected when they purchased homes in the area with a reliance on the RVC Bearspaw Area

⁵ SLR Report June 11, 2020, Section 4, Operation and Equipment Details

⁶ SLR Report June 11, 2020, Section 9.3, Cumulative Assessment

⁷ SLR June 11, 2020 Report, Appendix D, Sectio 2.3, Air Blasting Overpressure Results

Structure Plan and the two prior rejections of applications to rezone the Scott property for aggregate extraction.

Summary

The proposed gravel pit will have a substantial negative impact to the quality of life of the residents who live in the Bearspaw area. To provide you with a visual of the quality of life we enjoy, below are a few pictures to drive the point home. It is interesting to note, that as we were drafting this submission, we had several deer wonder onto our driveway and we took the photo below.







It is our strong position that the application put forward by Lehigh Hanson must be denied for a third time and that any council member, when considering all of the relevant facts on the record, cannot, in all good conscience, approve the re-designation. A gravel pit located on the Scott Property is inconsistent with the quiet residential nature of this community and open pit gravel extraction will unjustifiably cause a significant negative impact to the quality of life of the neighboring residential communities with no offsetting benefit; financial or otherwise.

We therefore request that Rocky View County reject Lehigh Hanson's Application #: PL20200093/0094 (File #s: 06605001, 06605002, 06605003, 06605004, 06605005 and #: PRDPDP20202785)

Signed,

Perry Schuldhaus

Kori Schuldhaus

& Scholdhaus

Attached Appendix: FDI Acoustics Dated January 26, 2021

APPENDIX TO SCHULDHAUS SUBMISSION DATED JANUARY 27, 2021



January 26, 2021

Mr. Randall W. Block, Q.C.

Re: Bearspaw Landowner Group

Lehigh Hanson Materials Limited Scott Property Aggregate Extraction Operation Application

Acoustic Assessment Review

Mr. Block, Q.C.:

As a landowner, lawyer, and member of the Bearspaw Landowner Group, you have retained FDI Acoustics Inc. to review the public documents filed by Lehigh Hanson Materials Limited relating to the environmental noise impact of the proposed Lehigh Scott Property Aggregate Extraction Operation. This letter documents the review of those documents completed by FDI Acoustics.

Qualifications

FDI Acoustics was established in 2008 and is a consulting engineering firm specializing in environmental acoustics and industrial noise control. The principal of the firm, Mr. James Farguharson CET, INCE has over 32 years of experience in the measurement and evaluation of environmental noise issues. His aggregate operations experience includes ambient (baseline) noise monitoring surveys, compliance noise monitoring surveys, operational noise impact assessments, transportation noise modelling, rail terminal assessments, and heavy haul equipment assessments. His experiences in the aggregate operations sector are augmented with experience in open pit mining noise impact assessments and environmental noise studies coupled with construction noise assessment and control. His career has included assessments for project proponents, applicants, operators and for groups and individuals concerned with the noise emanating from these developments along with those opposed to new developments. Mr. Farquharson has testified at public hearings on environmental noise issues before the Alberta Utilities Commission, the Alberta Energy Regulator, and the Alberta Natural Resources Conservation Board. Mr. Farguharson has testified on behalf of both applicants and intervening parties as an expert on environmental noise issues. Mr. Farguharson's diverse experiences give him a unique perspective in the evaluation of environmental noise issues. Mr. Farquharson acknowledges his obligation to provide expert evidence that is fair, objective and non-partisan.

Source Documents

The publicly available documents for the project are found at www.scottpropertyproject.com. The documents include an Acoustic Assessment for the project prepared by SLR Consulting (Canada) Limited (SLR Consulting) dated June 11, 2020.



Noise Criteria

The project site is located within Rocky View County in the Province of Alberta. The proposed development is subject to Rocky View County Noise Bylaw No. C-5772-2003. Rocky View County Noise Bylaw No. C-5772-2003 contains a General Prohibition in Section 3 that states, "No person shall in either the Daytime or the Night-time: (a) make, continue, cause, or allow to be made or continued any excessive, unnecessary, or unusual Noise of any type." In Section 5 (b) the bylaw states that "the person owning or controlling the property upon or within which the activity is allowed to take place shall take all reasonable steps to ensure that the Noise created by the said activity is minimized as much as practicable in all circumstances". The bylaw does not prescribe quantitative limits for noise emissions from activities. FDI Acoustics classifies the bylaw as a nuisance noise bylaw.

In the absence of a quantitative noise regulation the Acoustic Assessment references a collection of noise guidelines and bylaws with quantitative limits by which the noise emissions from the proposed Lehigh Scott Property Project can be compared with to determine acceptability. The Acoustic Assessment also references a draft document "Aggregate Resources Plan" developed by Rocky View County between 2017 to 2019 that contained quantitative limits. The Acoustic Assessment indicates that Rocky View County Council voted against adaptation of the Aggregate Resources Plan on April 30, 2019 in favour of individual evaluation criteria for all aggregate applications.

The collection of quantitative noise guidelines and bylaws cited in the Acoustic Assessment includes the following:

- The Proposed Rocky View County Draft Aggregate Resources Plan.
- The Alberta Utilities Commission Rule 012, Noise Control.
- The Alberta Energy Regulator Directive 038, Noise Control.
- The Town of Cochrane Noise Control Bylaw 16/2011.
- The City of Calgary Community Standards Bylaw 5M2004.
- The Province of Ontario MOECC NPC-300.
- Health Canada 2017 Guidance for Evaluating Human Health Impacts in Environmental Assessment.
- World Health Organization Guidelines for Community Noise.

FDI Acoustics notes the noise sensitive receivers near the proposed Lehigh Scott Aggregate Operation are in areas that are described as rural agricultural and country residential districts and therefore it is inappropriate to apply the sound level limits found in the City of Calgary Community Standards Bylaw 5M2004 and the Town of Cochrane Noise Control Bylaw 16/2011. The limits listed in these bylaws generally apply to situations in urban settings.



FDI Acoustics notes that SLR cites the collection of guidelines and bylaws used to quantitatively evaluate the noise emissions from the project cited in the Acoustic Assessment but does not include the widely accepted technique and generally accepted standard of limiting the noise impact of a proposed development to a 5 dBA increase above the background sound level at the noise sensitive receiver. The background sound level is usually defined as the measured L_{A90} sound level. The Acoustic Terminology Section of the Acoustic Assessment defines the L_{A90} as "The Statistical Sound Level equaled or exceeded 90% of the time. This level represents a good indicator of the baseline sound the overall acoustic environment." The use of this method is described in widely used texts, including Engineering Noise Control Theory and Practice by David Bies and Colin Hansen, Third Edition, Chapter Four Criteria, Section 4.9.1 Page 166.

FDI Acoustics notes adaptations of the method are the foundation for many noise ordinances, bylaws, and guidelines including the Alberta Energy Regulator Directive 038 Noise Control and the Alberta Utilities Commission Rule 012, Noise Control. Directive 038 and Rule 012 are based on an ambient sound environment plus 5 dB for the regulated activity or facility. The ambient sound levels found in Directive 038 and Rule 012 are based research and past surveys of the environment. The regulations uniformly apply ambient sound levels to receptors based on the proximity of the receptor to transportation corridors and the dwelling unit density near the receptor using a matrix to reduce the need to measure the ambient sound level for each receptor. Directive 038 and Rule 012 include a provision to measure the ambient sound environment when it is thought that a value derived through the application of the matrix does not represent the true ambient noise environment of a receptor.

Ambient Sound Monitoring

The Acoustic Assessment indicates that as a component of the project, SLR Consulting completed an ambient sound monitoring survey at four locations inside the proposed project site. The Acoustic Assessment infers the monitoring locations were chosen based on being representative of the acoustic environment at the nearest noise sensitive receptors to the project with consideration for instrument security. The ambient sound monitoring locations are roughly at the four corners of the project site development area starting with monitoring A1 at the southeast corner, A2 in the southwest corner, A3 northwest corner, and A4 northeast corner. The ambient noise monitoring was completed from October 31 to November 4, 2019. The ambient sound monitoring survey encompasses having encompassed both weekday and weekend periods provides a representation of the noise environment during the periods when Lehigh Hanson Materials Limited propose Excavation and Reclamation activities and Crushing and Conveying activities.



Table 1 presents a summary of the results of the ambient sound monitoring as found in Table 7 of the Acoustic Assessment.

Table 1
Summary of Ambient Sound Monitoring Results
Lehigh Scott Property Ambient Sound Survey

Monitoring Location	Measured Daytime Sound Level (La90)	Measured Daytime Sound Level (dBA L _{eq})	
A1	39	56	
A2	36	43	
A3	34	42	
A4	36	49	

FDI Acoustics Project 311401

The Acoustic Assessment indicates the results represent approximately 30 hours of valid daytime data. FDI Acoustics professional opinion is the results of the ambient sound monitoring indicate a quiet daytime rural environment in the area with vehicle traffic on local roads creating the short-term louder events. This opinion is supported when examining the difference between the L_{A90} value and the dBA L_{eq} value for each location. For example, Location A1 is near Burma Road and with a large difference between the L_{A90} value and the dBA L_{eq} value experience suggests short-term high sound level events (vehicle traffic). Location A2 being further from Burma Road and Range Road 25 has a narrower difference in the two values and thus less influence from road traffic on local roads. The sound levels near Location A2 being further from the Range Road 25 and Burma Road reflect a quiet rural/country residential environment. Therefore, the data clearly supports that the existing conditions prior to development are a quiet country residential environment.

Permissible sound levels may be developed using the valid results from the ambient sound monitoring survey. Table 2 presents the L_{A90} values from the ambient survey with the 5 dB added to the value to determine the Permissible Sound Level. Table 2 also presents the Applicant Proposed Sound Level Limits as developed by SLR Consulting for noise sensitive receivers in the study area.



Table 2 Permissible Sound Levels Lehigh Scott Property

Monitoring Location	Measured Daytime Ambient Sound Level (LA90)	Permissible Daytime Sound Level ¹ (dBA L _{eq})	Applicant Proposed Daytime Sound Level Limit ² (dBA L _{eq})	
A1	39	44	55	
A2	36	41	55	
A3	34	39	55	
A4	36	41	55	

¹⁾ PSL Developed Using Ambient L_{A90} Sound Level + 5 dB

FDI Acoustics Project 311401

Table 2 presents the Permissible Sound Levels developed using the results of the ambient sound monitoring survey plus 5 dBA. The values presented in Table 2 indicate area noise sensitive receptors should be assigned values between 39 dBA L_{eq} and 44 dBA L_{eq} as compared to the 55 dBA L_{eq} values assigned to the noise sensitive receivers by SLR Consulting in the Acoustic Assessment. The applicant proposed sound level limit of 55 dBA L_{eq} ranges from 11 - 16 dB above the permissible sound levels developed using the measured ambient sound levels with a widely accepted increase for a development of 5 dB above the measured L_{A90} ambient sound level. FDI Acoustics notes that accepted research suggests an increase of 10 dB in the sound level is perceived by humans with normal hearing as twice as loud with a 5 dB increase being perceived as a noticeable increase. On an acoustic energy basis, given that noise is measured on a logarithmic scale, a 3 dB increase is approximately a doubling of the acoustic energy with a 10 dB increase reflecting 10 times the acoustic energy. An increase in the sound level of 10 dB is described by acousticians as significant. An increase of 10 dB is beyond the established widely acceptable standard.

Noise Modelling Review

The Acoustic Assessment presents the results of the sound propagation modelling for the Phase 2 operations cases in Table 9 for the Material Excavation and Reclamation activities and in Table 10 for the Crushing and Conveying activities. FDI Acoustics notes that SLR's Acoustic Assessment states the modelling considers the most unfavourable topography and that Phase 1 is completed. In review of the sound contour maps it appears the equipment is in the bottom of the pit in the northwest corner of the Phase 2 excavation. This places the equipment near the bottom of the west side pit wall slope and maximizes the acoustic barrier effect of the pit and the perimeter berm for receivers west and southwest of the operations, which are the areas where most of the nearby residences are located.

Earlier stages of Phase 2 and the initial stages of Phase 1 will result in the equipment operating at elevations far above the bottom of the pit coupled with reduced pit wall slopes that result in less acoustic barrier effect and thus will likely result in higher levels impact. As a result, it is FDI Acoustics professional opinion that the methodology employed by SLR understates the noise impacts of the proposed project.

²⁾ Applicant Proposed Sound Level by SLR Consulting in Acoustic Assessment



FDI Acoustics notes that modelling of the operations was not specifically completed for the locations selected for the sound monitoring survey. Combining the sound monitoring survey locations with the nearest modelling locations indicates that data from monitoring Location A1 could apply in viewing the R1 modelling location results. Monitoring Location A2 is near modelling Location R6 and may have a similar acoustic environment. Monitoring Location A3 is across Range Road 25 from modelling location R8 with the difference in setback from Range Road 25 having the most effect on the acoustic environment. Monitoring Location A4 is south of modelling Location R9 and the two points would share a similar acoustic environment. Figure 1 (attached) is a map of the study area generated in Google Earth using information contained in the Acoustic Assessment.

Table 3 compares the Measured Daytime L_{A90} values for the four monitoring locations to the predicted sound levels of the aggregate operations as found in Table 9 and Table 10 of the Acoustic Assessment and the applicant proposed sound level limit for the Lehigh Hanson Material operations and the permissible sound levels developed using the results of the ambient sound monitoring survey.

Table 3
Phase 2 Operational Sound Levels
Lehigh Scott Property

Monitoring Receptor Location	Measured Ambient Daytime Sound Level (LA90)	Permissible Daytime Sound Level ¹ (dBA L _{eq})	Applicant Proposed Daytime Sound Level Limit ² (dBA L _{eq})	Predicted Excavation & Reclamation Sound Level (dBA Leq)	Predicted Crushing & Conveying Sound Level (dBA Leq)
A1 / R1	39	44	55	38.4	47.1
A2 / R6	36	41	55	48.2	47.8
A3 / R8	34	39	55	34.4	34.2
A4 / R9	36	41	55	33.2	31.2

1) PSL Developed Using Ambient LA90 Sound Level + 5 dB

2)) Applicant Proposed Sound Level by SLR Consulting in Acoustic Assessment

FDI Acoustics Project 311401

The predicted aggregate operational values presented in Table 3 when compared with measured ambient sound levels indicate a significant increase in the noise environment at Receptor R6 during the Phase 2 excavation and reclamation operations. Receptors R1, R8, and R9 would experience noise impacts near the existing measured ambient or background sound levels during the Phase 2 excavation and reclamation operations. The aggregate operational values presented in Table 3 for the crushing and conveying operations when compared with measured ambient sound levels indicate a significant increase in the noise environment at Receptors R1 and R6 during the Phase 2 operations. Receptors R8 and R9 would experience noise impacts near the existing measured ambient or background sound levels during the Phase 2 crushing and conveying operations. The values presented in Table 3 also indicate the proposed operations would exceed a permissible sound level based on the background sound level plus 5 dBA at Receptor R6 during the excavation and reclamation operations and at Receptor R1 and R6 during the



crushing and conveying operations. In summary, the proposed Lehigh Hanson Materials operation at the Scott Property would exceed recommended permissible sound levels during Exclamation/Reclamation and Crushing/Conveying operations at receptors in the adjacent residential areas. The Crestview Estates community, represented by Locations A2/R6, being adjacent to the site and west of the operations would experience a significant increase in the sound level as compared with the existing measured ambient sound level in the area. The use of the applicant proposed 55 dBA sound level limit for the project attempts to mislead and dimmish the real and significant noise impact of the project to the neighbouring communities. The noise impact related to Phase 1 operations and early Phase 2 operations has not been disclosed and is likely more significant due to the higher working elevations that diminish the effectiveness of the berms.

The Acoustic Assessment employ an environmental noise propagation model that utilizes the ISO 9613 (1996) calculation method. The assessment indicates that a Ground Absorption factor of 0.7 was selected to represent "the complete modelling domain". The authors state the selection of the 0.7 value is "appropriate for the ground cover in the study area". The assessment and the Open House Boards (February 2020) indicate a maximum of 60 acres of open pit surface area. FDI Acoustics disputes the choice of a Ground Absorption factor of 0.7 being appropriate for the open pit areas as these surfaces will be stripped of topsoil and vegetation. The stripped areas and active areas will consist of a mix of compacted aggregates (pit floor working area and roads), in place raw aggregates, stockpiled raw aggregates, and crushed aggregates awaiting conveying. FDI Acoustics recommends the use of a more acoustically reflective surface in the stripped and exposed raw/stockpiled aggregates and the pit roads that would better represent these ground types. Therefore, it is FDI Acoustic's professional opinion that the modeling completed by SLR, with an inappropriate Ground Absorption Factor, understates the noise impact of the operations to adjacent noise sensitive receivers.

FDI Acoustics reviewed the source sound power levels (Appendix A, Table A-1) used in the assessment and questions if the sound power levels for the Metso Nordberg NW130 Jaw Crusher are representative of the crusher in operation at the Scott property. FDI Acoustics notes in past measurements of jaw crushers in operation that the source material can vary the sound emanating from a jaw crusher. Raw aggregate mixes with little sand and fines combined with large stones produce measured sound levels that are higher in value as compared to sound measurements where the raw aggregate mix is composed of smaller stones with a high percentage of sand and fines. FDI Acoustics questions whether the jaw crusher sound power levels used for the assessment represent a jaw crusher processing material equivalent to that found in the Scott Property deposit. Sound from the jaw crusher is the most significant source according to Appendix A, Table A-1. Our opinion is an under estimation of the sound from the most significant source would result in an understatement of the actual noise impacts from the project.

The Acoustic Assessment does not report the noise impact of operations related to the first two years of the site development. Lehigh Hanson has indicated during this period activities such as topsoil stripping and berm construction will occur. The noise impact of the activities during this period is not disclosed and it is not clear if the noise from the activities would be within acceptable levels of impact to noise sensitive receivers in the area.



FDI Acoustics questions the receptor heights used in the model. Modelling appears to only consider a standard receptor height of 1.5 metres and does not consider that many of the noise sensitive receptors in the area are two story dwellings where the use of a 4.5 metre receptor height is more appropriate. Experience indicates higher sound levels are generally predicted and experienced at the 4.5 metre second story elevation as compared with the 1.5 metre single story dwelling receptor height.

FDI Acoustics notes the topography of the area rises to the southwest beyond the project site. Noise sensitive receivers (residences) located southwest of the site beyond Crestview Estates, south of Burma Road or west of Range Road 25 may have a clear line of site to the project site. Many of these residences are two stories in height thus enhancing the clear line of sight these noise sensitive receivers have to the project site. The noise impacts for these residences may be understated in review of the Sound Contour Maps found in Appendix B of the report as the contours may reflect a receiver height of 1.5 metres above the ground elevation.

The Acoustic Assessment states in Section 9.3 of the Cumulative Assessment "There are no proposed gravel pits with a development permit that have the potential to add to the sound contributions from the project operations at the assessed noise sensitive receivers." FDI Acoustics notes the Stoney Trail Aggregate Resource (STAR) pit occupies Section 28 and Section 33 of Township 25 Range 2 West of the Fifth Meridian is east of Rocky Ridge Road and south of Burma Road. The STAR pit occupies lands east of noise sensitive receiver R1 and according to the results found in the Conceptual Noise Assessment¹ for the project operations in the Section 33 are predicted to result in an impact of 52 dBA at the northwest corner of Section 33. STAR pit operations are presently occurring in the southern half of the two-section parcel and are moving northward into Section 33 as the resource is exhausted in southern portion of the parcel. FDI Acoustics disagrees with the above statement found in Section 9.3 of the Acoustic Assessment as the STAR pit has reported the noise impact of their operations to a receiver location near one used in the Scott Property Assessment. The Conceptual Noise Assessment for the STAR pit is not referenced in the Acoustic Assessment for the Lehigh Hanson Materials Scott Property and therefore the assessment is incomplete regarding cumulative effects claims. A complete cumulative effects assessment would include the contributions of the STAR pit operations and the Burnco Burma Road Aggregate operations in Section 4 bordering the east side of the Lehigh Hanson Scott Property.

Conceptual Noise Assessment for The Spy Hill Lands Development Project Phase 1 February 24, 2003, Patching Associates Acoustical Engineering Ltd. https://www.alberta.ca/stoney-trail-land-development.aspx



Conclusion

FDI Acoustics concludes the Acoustics Assessment may understate the project noise impacts to the community based on the following points:

- The results of the Acoustic Assessment indicate receptors in the neighboring residential communities will experience significant increases to the sound environment with the development of Phase 2 of the Lehigh Hanson Scott Property Aggregate Operations when the results of the ambient monitoring survey are compared with the predicted sound levels for the Phase 2 operations.
- 2. The assessment does not present the results of calculations for the site preparation phase or Phase 1 of the operations. These two phases represent periods when operations have commenced and there are no berms in place (site preparation phase) or have not reached the planned pit bottom (Phase 1 operations). Mitigation in the form of berms and the topography of the pit will not be as effective as depicted in the results presented for the Phase 2 operations.
- 3. The sound emissions of the project exceed the well accepted criteria of a 5 dBA increase in sound level over the measured ambient L_{A90} sound level.
- 4. The use of the City of Calgary and the Town of Cochrane permissible noise levels as a basis for the permissible levels applicable to the Lehigh Hanson Scott Property project are inappropriate given these bylaws apply to urban areas and the communities in this region are rural and country residential.
- 5. The environmental noise propagation modelling does not consider the hard packed ground conditions and vegetation devoid landscape of the active areas of the aggregate operation which are more acoustically reflective as compared with the grassland landscape assumed and depicted in the assessment calculations.
- The Acoustic Assessment has not considered that many of the receptors in the area are 2 story homes with the noise impact of the project calculated for receptors at a height of 1.5 metres above grade.
- 7. The cumulative effects statement has not considered the predicted noise impact of the neighbouring STAR aggregate operations as reported by the Government of Alberta.

Receptors in the area will experience a significant level of noise impact should the proposed operations proceed. Widely accepted research in the acoustics community indicates developments that produce a 5 – 10 dBA increase over the background sound level can experience sporadic complaints to widespread complaints. The research also indicates that an increase in the 10 - 15 dBA range, as is predicted for the proposed Lehigh Hanson Scott Property Aggregate Extraction and Crushing operations, the resultant public reaction is higher with sporadic complaints to threats of community action occurring. The proposed operations are currently predicted to result in an increase that exceeds 10 dBA for some receivers. Based on the available information the professional opinion of FDI Acoustics is the proposed project in its current form is an intrusive development to the existing sound environment of the neighbouring rural and country residential neighbourhoods.



Questions regarding this review may be addressed to the writer.

Sincerely

FDI Acoustics Inc.

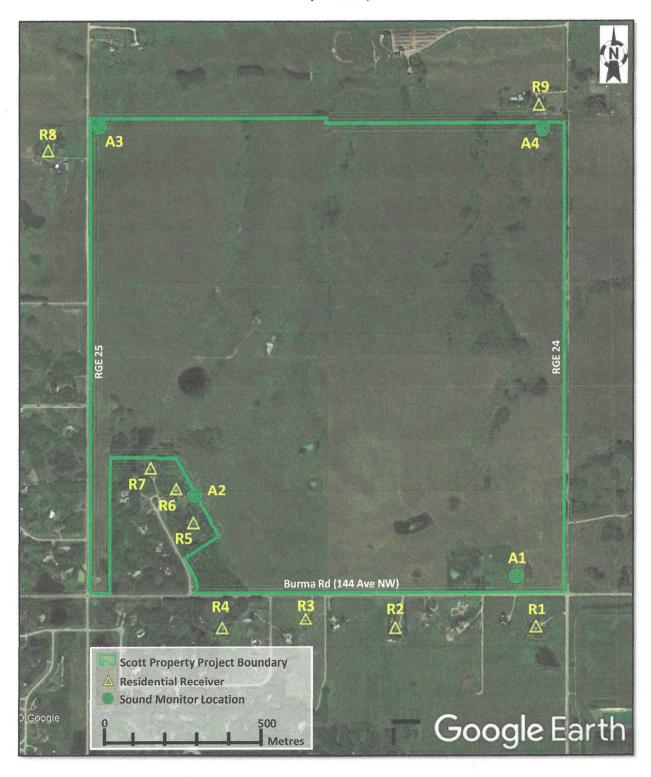
James Farquharson, CET, INCE

Principal Consultant

jgf/ Attachment



Figure 1
Study Area Map



Michelle Mitton

From: Robb Fransoo

Sent: Wednesday, January 27, 2021 12:10 PM

To: <u>Legislative Services Shared</u>

Cc:

Subject: [EXTERNAL] - BYLAW C-8082-2020 (Planning Application PL20200093) - Formal

Opposition Letter

Attachments: R&S Fransoo Bylaw C80822020.pdf

Follow Up Flag: Follow up Flag Status: Flagged

Do not open links or attachments unless sender and content are known.

Good Afternoon,

My Name is Robb Fransoo I am a resident of Rocky View County living at 27 Cheyanne Meadows Way.

Please find attached our Letter outlining our Opposition to the Land Use Change application for the Scott Property in the Bearspaw Community of Rocky View County.

I had previously submitted an email outlining my family's opposition. However I have learned more about the situation and have updated my communication. I wish to have the attached letter submitted to Council and the Planning Department of Rocky View.

Please confirm receipt of this communication in its entirety, and that it will be included in the information distributed to Council for the February 2, 2021 Special Council Meeting.

Thank you,

Robb Fransoo

Robb & Sarah Fransoo

27 Cheyanne Meadows Way Rocky View County AB, T3R 1B6

To Whom it may concern

Rocky View County 252075 Rocky View County Point Rocky View County, AB T4A 0X2

Email: legislativeservices@rockyview.ca

SUBJECT: BYLAW C-8082-2020:

To: Rocky View Council & Planning Services,

I am responding to the letter I received from the County regarding Bylaw C-8082-2020 noted in the subject of this letter.

My family are residents of the Bearspaw Community living at 27 Cheyanne Meadows Way. We moved to Rocky View just under 7 years ago (May 2014). We did so to live in a space that was rural, peaceful, and supportive of outdoor family living and health. Further we moved here to support and participate in a growing rural residential community.

I oppose the application by Lehigh Hanson to redesignate the 600 acres at the north-East corner of Burma Road and Range Road 25 to an open pit gravel mine and the accompanying Master Site Development Plan.

The proposed mine is not compatible, nor complimentary to the existing residential land use. At the root of Lehigh Hanson's application is an open pit mine, and a heavy industrial land use. Simply put these developments are not meant to exist side by side, (residential & heavy industrial) hence the existing land use designation of the "Scott Property". The long term existing Residential Communities must be respected and protected from heavy industrial land use on properties in the Community and adjacent properties.

I participated in the Lehigh Hanson mail outs/requests for community involvement. Given the Covid-19 Pandemic and health concerns, our involvement was reduced. I submitted written questions, and I have never received a response. I believe I was not alone in the content of the questions. It was disrespectful for Lehigh Hanson to avoid answering (with facts and details) as to the direct and indirect benefit for adjacent communities to the lands they seek to destroy by open pit strip-mining. So, at this point I have the facts that the community has outlined (multiple times over the years) about the negative impacts this type of development would have on the Bearspaw Community.

Not only is the land use change unacceptable, but Lehigh Hanson is also negligent and has misrepresented the community involvement in their application. The community has provided facts that lead any competent business owner to see that the existing communities which are filled with Ratepayers do not seek to destroy the health and community by allowing these applications to proceed.

In the Lehigh MSDP they openly state that they are trying to "mitigate the potential negative impacts to the adjacent lands" they have presented zero benefits to the Bearspaw Community. They only reference future potential benefits but no long-term firm commitments. It is unacceptable and negligent to contemplate a land use change wherein the County; the Applicant and the Community have facts and direct knowledge that the change to the land use will decreasing the quality of life and health for the for the Community. Lehigh Hanson is the only party that will benefit from this project, citizens of Bearspaw will not.

Allowing the Lehigh Hanson applications to move forward would be a material breach to the social and community covenants that have existed since the beginning of the residential development plan in Bearspaw. Further these covenants have been supported by the conduct of the County relating to the approval of further residential development on the land(s) adjacent to the Scott Property.

As a small business owner and someone who develops projects that are classified as heavy industrial, I can speak firsthand as to the mandatory need to have full community buy in to have a successful development (Especially in a situation where a land use change is needed to start any development.) This application has been brought forward in the past and has constantly failed to receive buy in. Heavy industrial development does not fit with existing residential communities. We have industrial parks and segregated land use away from residential communities across Canada for this very reason.

In summary for the reasons, I have provided and many more that have been communicated by other residents now and in the past, I respectfully ask that the County to decline the applications made by Lehigh Hanson. Further I ask that Council and the County direct aggregate developers to focus their efforts on aggregate extraction on lands that do not require a land use change, and locations that are not adjacent to rural residential properties. We do not need to spend the County's the Citizen's time resources addressing applications that to not benefit our Communities and Citizens again and again.

Thank you for your time,

Robo & Sarah Fransoo

Michelle Mitton

From: Scott Deibert

Sent: January 25, 2021 10:36 AM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Flagged

Do not open links or attachments unless sender and content are known.

I am sending this email today to let you know I fully oppose Bylaw C-8082-2020 because of the affect it will have on the air quality in the area, the extra noise, and the potential decrease in property value.

Scott Deibert 15 Bearspaw Hills Road Calgary, Alberta T3R 1B3 SE Quarter 36-25-3W5 Lot 1 Block 8 Plan 9410041

Michelle Mitton

From: Shayne Foster

Sent: January 26, 2021 12:47 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Flagged

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Shayne Foster & Tina O'Connor 24170 Meadow Drive Calgary, AB T3R 1A8

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application - Gravel Mine - Bylaw C-8082-2020

We are Opposed

We have resided in Bearspaw for 11 years. Our family of 7 resides within 2 Kms of the proposed site.

It is our understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply. There will be significant environmental effects, significant health consequences to residents and it will greatly interfere with the enjoyment of residences in all the properties surrounding the area. More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

We trust Rocky View Council will use the prudent voice used in the previous two applications and reject this application.

Thank you,

Tina O'Connor & Shayne Foster

Kraljak, Slavko & Heather

103 Cheyanne Meadows Way

Calgary, Ab T3R 1B6

QTR NW-LSD31-SEC25-TWP02-RGE/M05

LOT41-BLOCK 3 PLAN 9810168

RE: SCOTT PIT PUBLIC HEARING:

SUBJECT: Bylaw C-8082-2020

I am opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future county residential development. Because of these earlier decisions, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents health, safety, and quality of life, as well as serious environmental costs.

I am disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

In closing, this application should be refused for a multitude of reasons, including the ones I have listed above.

All the best,

Slavko Kraljak

Michelle Mitton

From: Steve Goodfellow

Sent: January 26, 2021 11:33 AM

To: Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C - 8082-2020,

Follow Up Flag: Follow up Flag Status: Flagged

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Attention: Michelle Mutton.

I would like to go on record as being in opposition of the proposed ammendment of Land Use Bylaw C- 8000-2020 as proposed in PL20200093 (066605001/002/004/005). Proposed Lehigh Hanson Gravel operation.

The reasons for my opposition are as follows:

- concern for potential damage to the aquifer of our water well.
- noise polution from gravel extraction operations.

Our residence is approx. half mile west of the proposed pit and many days we can already hear the existing operation that is much further away.

- excessive dust from the site
- additional truck traffic that tracks dust onto the paved roads and the dust is turned to mud when they spray it with water. Additionally I have experienced many broken windshields from spilled aggregate.

Please rely to my email to confirm that it has been received.

Sincerely,

Steve Goodfellow, 25201 Bearspaw Place, Calgary, T3R 1H5 Steven and Melinda Olliver 28 Crestview Estates

Date January 25, 2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application for an Open Pit Gravel Mine - OPPOSED

We purchased our property in Bearspaw in 2018, completely gutted and renovated the home and moved in in 2019. As you all know, our property will border the proposed site so we are directly affected by the application. We are not opposed to gravel operations in Rockyview County, but we are opposed to this particular application in this particular location.

We would not have purchased the property we now love if we had known there was the possibility of living next door to an aggregate operation. However, we live here now and we love it. We love the privacy, we love the wildlife that visit daily and we love the Bearspaw area. We do notice sound from the nearby gravel pits but it is not everyday. We do notice dust from the nearby gravel pits and we often keep our windows closed, even in the summer.

More worrisome, though, than the significant environmental and health effects that an aggregate pit will have (because my understanding is that every gravel pit will have the same effects) is that this particular applicant, Lehigh Hanson, has not engaged with the community. We are in the middle of a pandemic with the vast majority of residents in the surrounding area being home most of the time. We have been home almost exclusively since the middle of March and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application. This does not constitute proper community engagement and consultation and does not demonstrate good faith on the part of the applicant. Moreover, in their materials, they use very soft language on what they 'may' do which is not binding language nor is it a promise.

More than 25 residential properties will have an eyeline on the aggregate pit, if approved, and more than 250 residences will be within 2 km of the aggregate pit. This is an unacceptable number of personal residences within that close of vicinity of an aggregate pit. Additionally, more than 1000 personal residences will be within 5 km of the aggregate pit. The Rockview Water Coop, which supports hundreds of personal residences, is 1.1 km from the proposed site.

In short, the site is too close to existing residential communities. This application should be denied.

Thank you,

Steven and Melinda Olliver

Susan Snow 32 Silverwoods Drive Rocky View County, Alberta T3R 1E2

Date: January 25, 2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson Materials Limited – Bylaw C-8082-2020 Redesignation to facilitate an aggregate operation

I Am Opposed

I am writing this letter to voice my opposition. Bearspaw is a peaceful rural residential neighbourhood. Residents can enjoy an escape from the noise and busyness of the city and relax. We have lived here for 6 years and value the peacefulness and nature like setting of the area.

Lehigh Hanson's proposal to redesignate these lands with the intent to facilitate another aggregate operation right in the heart of our residential community would be devastating. It would ruin the quality of life we moved here for and value so much. It would have an enormous negative impact on this community and the environment in which we live.

Our first concerns are **traffic, safety and operations**. Although the recent applications mention a conveyer belt that would run adjacent to the main road (Burma road), this seems almost a desperate approach to address previous concerns regarding additional gravel truck traffic on a narrow two lane road. A conveyer belt running adjacent to a road brings other risks, such as noise from continuous operation, impact on wildlife movements, unsightly industrial mechanical equipment, hazardous road crossings, multiple locations for failure and repair work. This would not completely address additional truck traffic that comes with the operation and in fact just adds additional components that need to be looked at.

We have already seen additional traffic due to the increase in population in nearby newly constructed residential neighbourhoods, and although they are located within Calgary City limits, they are still a factor for the area. Gravel trucks on these roads have already proven to be a hazard. The road is not made for heavy use, or industrial traffic. There is no shoulder, the trucks cannot keep their speed, and the truck traffic frequenting the existing operations regularly pull out onto the main road with no regard for oncoming traffic. Additionally, cyclists use the road and regular vehicle traffic poses a hazard, let alone heavy industrial traffic.

Our Second concern is that if this application is approved, it will open this rural residential community up to **additional industrial operations, or expansions of existing ones**. If this application is approved, any measures put in place on this initial operation will be moot and forgotten when it comes time to expand and grow. It is a lot harder to deny an existing business any growth opportunities. These operations must be rejected and not allowed to start.

There are already multiple gravel operations in the immediate area, most notably, one owned by Lehigh Hansen, that is close enough to build a conveyor belt to. The proximity and quantity cannot be discounted

even if they are in another jurisdiction. They do not cease to have an impact just because they are technically located in City of Calgary limits. Proliferation of gravel operations in this area must be prevented – as this resource spans a large area and could see even greater concentration in the future which must be held back. The Bearspaw area is designated residential and must be protected as such.

Over the past year, our immediate community and lifestyle has never been more important. The serene natural setting we live in has been a respite from crowds, masks, fear, restrictions and regulations. To have and be allowed to enjoy the outdoors when all else has been regulated is a precious gift that should not be compromised by allowing industrial operations in a residential setting.

Our third concern is **noise**, **dust and pollution**. The proposed aggregate operation is located unreasonably close to existing residence. Existing area aggregate operations that are located three times farther away can be heard on a regular basis.

Dust pollution is unavoidable in these operations. Even with dust control measures at the operation site, dust settles on all equipment and transport trucks. That equipment and the vehicles release the dust during their operations and travel. Constant gravel dust (and all the known irritants and hazards that come with it), will be transmitted throughout the community on a regular and continuous basis, in even higher levels than already exist.

No reasonable person should ask or be asked to accept these conditions so close to their residential areas.

No one wants an industrial operation at their doorstep, that is why we choose our homes and neighbourhoods carefully. We did not choose an industrial neighbourhood to live in, and we should not be asked to accept one. We should not have to repeatedly make our opposition known with every application. The applications and proposals need to cease. Heavy industrial development is incompatible with neighbouring residential communities. If this operation is approved, it will have a severe negative impact on property and market values which will also cause tax leakage for the county.

I thank you for taking the time to hear our concerns and take them into consideration when making your decision about the future of our community.

Regards,

Susan Snow

Michelle Mitton

From: Teri Lipman

Sent: January 27, 2021 4:29 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020, APPLICATION NO. PL20200093 - OPPOSED

Follow Up Flag: Follow up Flag **Status:** Flagged

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12 Crestview Estates T3R 1E1

To Whom it may concern:

I am opposed to Lehigh-Hanson's application for gravel extraction on the Scott Property because it would be an inappropriate incompatible land use. The County itself in 1994, decided gravel at this site would be too close to homes, information I have long become aware of since moving to Crestview in 2003.

I can't express adequately in writing how angry I feel about this issue. Having to engage in a "third" go-round with Lehigh-Hanson is inane, time-wasting and stress-inducing--I genuinely don't understand why it's come to this again.

The fact that a multinational corporation like Lehigh is not limited in how often it can apply for the same development on the same site, does actually "favour" industry. There's a big gap between Lehigh's corporate financial "professional expertise proposal" resources (in pursuit of profit) and my human two-cent letter in defence of our home and preservation of lifestyle.

The Scott Property site is most convenient for Lehigh but it hasn't been convenient for me or my husband or the community, living with the knowledge since 2016 that once again we'd be facing an unwanted aggregate proposal.

Preventable Conflict

I respectfully submit that it's the job and duty of municipal planners to make reasonable and responsible planning decisions, so that over the long-term development occurs in a cohesive way. Communities near the Scott site are Silverwoods, Church Ranches and Briar Woods, defined as country residential areas and all approved and built after 1994. Our Crestview community was approved and built in 1978.

In the years following 1994, County planning staff would have had access to relevant history on file, to inform them of conflicting land use disputes that may arise, and to utilize and apply to decision making with new development proposals. So as concerns Bearspaw and the Scott Pit proposal, if conflict between potential aggregate development and residents was predictable, why were the above-named communities approved?

Since they WERE approved and enhanced the community of Bearspaw and brought many more people to the area, in my opinion that should further inform County planners as to what would constitute any future compatible development.

These communities are harmonious with the local natural landscape and wildlife isn't inhibited by fencing--it's quiet and animals are plentiful.

Part of this Picture

In 2008 Lehigh-Hanson purchased the last chunk of the Scott Property section, knowing residents were against gravel extraction there and knowing there were additional communities, hence more residents than in 1994.

In 2010 Lehigh submitted their second application, to extract gravel on the Scott Property 600-acres. This proposal was also defeated, my husband and I were at the public hearing.

Lehigh's Due Diligence

Lehigh's own community engagement sessions in 2015, which were small group meetings arranged by appointment only, were unsuccessful in getting anyone onside with gravel. My husband and I attended a session at the old Bearspaw School, Sophie Mullen was the Lehigh rep, and everyone in our group asked whether management could be approached to consider either selling the land, or donating it. It was a sincere and polite "ask" from our group that Lehigh "hear" that a gravel pit could never be a neighbour, per common sense. (Also per the Bearspaw Area Structure Plan). In hindsight our request was altruistic but naive.

The Follow-up

In 2016 heard that Lehigh-Hanson planned to submit a third application to redesignate the Scott Property. That couldn't have been a decision based on their community engagement/feedback findings. Disingenuous.

Poor Corporate Ethics

Lehigh has demonstrated an impervious attitude towards residents; as a corporation Lehigh is comfortable using a strategy to "force" residents to accept the idea that gravel extraction at the Scott site is inevitable. The application policy enables that approach. Again, in my opinion it favours industry over residents.

Since their 2016 announcement, no one from Lehigh has attempted to consult either myself or my husband, about how the Scott Property project operations would impact us personally, yet their property's to the back of ours.

Greater Good

I believe a "greater good" example to be something like a national or provincial park, a university or a hospital or an airport. I appreciate that aggregate is needed for construction and roads, but of itself a gravel pit can't be to be for the "greater good." The Scott pit would be the opposite of good for me and my husband and neighbours--it would bring not a single benefit to Bearspaw.

The Great Negatives

This mining operation would mean industrial noise throughout all of our waking day, likely also during the night; water problems because Lehigh cannot guarantee zero impact to the quality/quantity of our well water; silica dust, proven as irreparably harmful to human lungs (animals too); loss of wildlife habitat and population; risk to the many trees on our property that border the proposed pit area and will likely die eventually (witness dead trees on Burma Road across from Burnco that were once alive and healthy); devaluation of property; an abrupt end to quality of life.

This proposal also includes crushing and blasting, which is just ludicrous given the proximity. It's my hope that these impacts won't be thought trivial or be minimized by County staff or Councillors. The effects on people aren't exaggerated, and health is so important to everyone and a big component of quality of life.

The Long View

The Scott Pit would marginalize our Bearspaw community permanently and it would come to be seen more as an industrial area rather than a desirable country residential area, as it is today. (35-40? or 50 years? is a big chunk of human lifespan). Industry here is a misfit.

Perspective

Six hundred acres is massive--we live on a 4-acre lot within the 34 acres that makes up Crestview. The map in Lehigh's proposal is misleading because the size of Crestview Estates within the 600-acre site is not to scale. Our community is tiny by comparison, more correctly about 5.7% not the 12% as depicted. Knowing the right perspective makes a difference in understanding how huge this pit would be.

Personal Cost

A mine of this size behind us would annihilate everything of meaning from our lifestyle here. The enjoyment would disappear. In 2003 when we bought our home we anticipated staying and aging here, we had no thoughts to move again. We would like to one day leave our home to our three children.

Mitigation and Code of Practice for Pits

I'm very glad that Lehigh and all mining companies in Canada have rules and guidelines to mitigate their operations. However this mining operation would be too big and too close to where people live, so what difference would mitigation measures make? In my opinion and practically speaking, mitigation won't do anything for us who'll be hearing the noise and inhaling the dust, noticing the decrease to wildlife and birds and driving by the lost view on account of a big UGLY pit.

In Conclusion

There are a number of gravel pits within 2 to 5 km of our home; a large pit or other industrial use on the Scott site, would be an unreasonable encroachment into community. It's my opinion that Lehigh-Hanson, as a multinational corporation, should not have more influence over decision making than I do. My husband and I live here and pay taxes. Our concerns and opinions should have merit and be valued.

I'm aware that it's provincial government policy that allows numerous application proposals. I referenced it because in my opinion in practice ordinary taxpayers are at a disadvantage going up

against large corporations.
I'm not a NIMBYist though "actually speaking" the Scott Property shares our back fence-line.
I'm not against business or industry in general, but I'm against industry in this location.
I ask that Council consider our lives first; we who bought our homes here aren't responsible for prior planning decisions. If this pit is approved it will change our future and force us to move, not something we would choose.
Alberta has plenty of aggregate (something I learned and saw proof of via maps) so the Scott Pit gravel isn't essential or rare or for the "greater good."
Council, please reject this proposal.
Sincerely,
Teri Lipman Bearspaw Resident
In my letter of November
Sent from my iPad

Michelle Mitton

From: Yuling Dai

Sent: January 26, 2021 4:18 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - oppose the project of the proposed gravel pit (Bylaw C-8082-2020)

Follow Up Flag: Follow up Flag Status: Flagged

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Dear Sir or Madam,

My name is Tracy Dai, the owner of the House, 35 Cheyanne Meadows Way Calgary, AB T3R 1B6. I oppose the project of the proposed gravel pit (Bylaw C-8082-2020). The reasons are listed as follow:

- 1. Our healthy concern- We live close to the scene, daily operation will have significant impact on our personal life such as noise, waste, dust and so forth.
- 2. Long time concern With fine dust around our area, it will gradually damage our lung and cause severely healthy problem.
- 3. Property value decrease Our area will has less attractive to family.

Please Stop this project immediately and protect our personal life and human right.

Best regards,

Tracy Dai

35 Cheyanne Meadows Way Calgary AB T3R 1B6

Trevor Seidel 24 Crestview Estates

Date: January 27, 2021

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application - Gravel Mine - Bylaw C-8082-2020 We are Opposed

I have been a resident in Bearspaw for most of my life; 12 years of my childhood, 6 years as a young adult taking advantage of my loving parents and their generosity, and another 12 years raising my family in the community I've grown to love. My wife and I chose to move our family to Bearspaw to give our children a quiet and safe place to grow up. My family's property (24 Crestview Estates) is on the same section of land Lehigh Hanson is currently making an application on, we will be directly affected by the decision made by council regarding this application. We are literally adjacent to the property in question.

It is my understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply, and as such, I expect the results to be the same. There will be significant environmental effects, significant health consequences to residents and it will greatly interfere with the enjoyment of residences in all the properties surrounding the area. My family is significantly concerned that the benefits of living in the country we have come to enjoy will be harmed. Gravel pits are noisy, they produce airborne silica (which is a very real concern for how close we will be living to the site) and increased traffic (if not now, it will come later).

Having grown up in Bearspaw I have been able to watch the changes in the area, new homes, new communities, and approvals of subdivisions; all in the surrounding area to the land in question. Since the early 80' when I moved to Bearspaw Rocky View has approved the communities of Briarwood, Church Ranches and Silverwood as well as many smaller private subdivisions to the west and south of Lehigh Hanson's section of land; allowing landowners to create smaller acreages. The only separation from the lands in question is a road. All of these decisions have been in favour of residential growth in the form of country style acreage living. It is the responsibility and duty of our elected officials to protect the rights of the individuals and families they have allowed to move, build and invest in these areas. The idea of allowing neighbouring lands, to these previously approved residences, to conduct activities that would diminish from our standard of living and potentially introduce an unsafe environment would be a gross departure from the direction Rocky View has been leading its residents to believe. You can't continually allow residential growth and suddenly turn neighbouring farm/pasture land into a mile by a mile gravel pit. The precedence has already been set, future growth in the area would be in the form of residential expansion.

More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the

global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

In conclusion, I hope Rocky View Council will use the prudent voice used in the previous two applications and reject this application. WE SAY NO!

Thank you,

Trevor Seidel

January 27, 2021

Legislative Services Rocky View County 262075 Rocky View Point Rocky View County, AB T4A0X2

Re Bylaw C-8082-2020 Lehigh Hanson Open Pit Gravel Mine in Bearspaw (The Application)

INTEREST

My wife and I reside at 260061 Range Road 25, in Rocky View County (RVC or the County) a 20-acre parcel, directly to the west of section 5, the site of the proposed 600 acre +- open pit gravel mine. We are the owners of the property and have resided on it for in excess of 40 years. Our two children grew up on our acreage as did numerous horses and dogs. We moved to RVC from Calgary for the rural residential lifestyle, and the fact we have remained on our acreage speaks to our embracing of that lifestyle. We did not consider a move to Ogden or another similar area in Calgary because we did not wish to reside in an industrial environment with its attendant noise and pollutants.

During that 40-year time frame, we have seen major changes in the character of the area. When we moved to our acreage the area was predominantly 20- acre parcels and quarter sections. The area is now predominately smaller rural residential properties with a proliferation of 2- and 4-acre parcels. However, Bearspaw has maintained its rural residential ambience — we enjoy relative quiet, wildlife, and dark skies. We are on a water well and have enjoyed good quality water without a problem since moving to Bearspaw.

We understand that life is not static and things change. We can no longer safely ride our horses along the Burma Road right of way, but that is just part of change. We have not opposed responsible development, including the subdivision of three adjacent 20-acre parcels including one into 2-acre lots.

OPPOSITION TO THE APPLICATION

We strenuously oppose the Application. We have read and reviewed and we adopt the submissions and expert reports contained in the Landowner Submission filed on January 20, 2021 by John Weatherill (the Landowner Submission). We, along with many other residents, contributed to the costs of such expert reports in order to provide independent and accurate evidence to Council. Our submission speaks to matters that may not have been addressed in that submission and/or matters that from our perspective require additional emphasis.

PROCESS AND THE ROLE OF COUNCIL IN LIGHT OF PROCESS LIMITATIONS

The Application, in substance, is for an open pit mine that will operate in Bearspaw for in excess of 30 years. It will have a fundamental impact on the character of the area and the health and lifestyle of existing and future residents. However, the current process for such applications does not adequately address the many consequences of an aggregate development. Some members of Council, as rural landowners, may have experience with the process of the former Energy Resources Conservation Board

and the current Alberta Energy Regulator. If the product being developed was a hydrocarbon such as oil and gas or coal, which development would have similar temporal, environmental and social consequences, the application process would include:

- Extensive and effective consultation with impacted landowners;
- A detailed review by the Alberta Energy Regulator of the application and the reports filed in support through technical staff with expertise to assess the reports over and above what is often a perfunctory review by other government agencies;
- Funding for those affected by the process to retain experts and counsel which funding is paid by the applicant;
- The formal ability to generate information requests;
- Most importantly a structured and balanced hearing process where the applicant and its experts
 are required to give evidence under oath in support of the application which evidence is subject
 to cross examination to test both its accuracy and credibility.

Unfortunately, an open pit gravel mine is not subject to the same review. Instead, the applicant files its application and may or may not make the reports filed in support of the application available to the public. Alternatively, it may pick and choose what reports it will make available. Reports are reviewed by County staff who do not have the technical expertise to assess their accuracy or credibility. As is obvious from even a review of the list of material in support of the Application, analysis of the diverse material is simply beyond the expertise of any resident. However, an applicant is not required (although they can certainly do so in order to ensure fairness) to provide funding for affected residents to obtain expert advice on the information contained in the reports. These reports are not substantiated under oath nor are they subject to the rigors of cross examination. Instead, staff prepare a report to be relied upon by Council based on information which may not even be available to the public. The result is a process heavily weighed in favor of an applicant with no real review or testing of the material in support of the application.

Staff, in consultation with the applicant generate the language in the proposed bylaw, all with no similar consultation with affected residents. Statements from the applicant's material are incorporated in the language of the bylaw without real and effective vetting.

This unbalanced and questionable process creates a heavy obligation on Council. Council should view all material filed by an applicant with suspicion and recognize the folks preparing such material are being paid by the applicant and are often advocates for an applicant's position. Statements or opinions in the material are not given under oath and are not tested by cross examination. Council is placed in a difficult position by the process but must recognize the frailties of the process in fulfilling its obligations Councillors must familiarize themselves with all of the material filed and evaluate its credibility recognizing that much of it may be advocacy disguised as expert evidence. We cannot over emphasize the importance of the Landowner Submission. A detailed understanding of the matters addressed and the expert reports attached is critical for a proper assessment of the impacts of the Application on RVC. This obligation cannot be delegated to others. This hearing is the only real opportunity for residents' concerns to be raised and addressed. It is part of Council's duty to maintain safe communities and protect the environment. Residents' concerns raise live issues in relation to both of these obligations. It is not an

answer to say that an issue will be dealt with at the development permit stage. By then the train has left the station and effective participation by residents is a fiction.

We have raised with RVC our objection to the proponent and staff having live feeds during the "public hearing" portion of the process without a similar opportunity being provided to residents. We suggested as a minimum alternative, that no live feed be provided to the proponents so that all participants are on an equal footing. Our letter to Legislative Services details our concerns which we adopt by reference in this submission. By participating in the "public hearing" we are not waiving our right to object to the lack of procedural fairness or other failures of the process chosen by RVC.

THE PROPONENT AND ITS MATERIALS IN SUPPORT OF THE APPLICATION

As Council is aware, this is the third application for the development of an open pit gravel mine on all or a portion of section 5 by companies associated with Lehigh Hansom Materials Limited (LH) a private, wholly owned subsidiary of Heidelberg Cement a German multinational corporation. Previous applications, in 1994 and 2010 met near unanimous opposition from residents and were rejected by two different Councils. Community involvement in the failed Aggregate Resource Plan process reinforced the Bearspaw community's rejection of aggregate mines in rural residential neighbourhoods. Rather than accepting those decisions and community feedback as being determinative of the wishes of the residents as to the inappropriateness of an open pit mine in a rural residential area, LH has doubled down with the present application. We did not expect that we would be spending retirement years, emotion and funds in battling yet another gravel application. In our opinion these sorts of repeated applications speak to an attempt to wear down and bully residents into "giving up".

The timing of the Application and the hearing are also questionable. Would an applicant who actually wanted to interact with a community, obtain the input of the community and find ways to accommodate the concerns of that community proceed with an application for a major project in the midst of a world wide COVID-19 pandemic that imposes major restrictions on public communication? The obvious answer is no. At least one, perhaps cynical explanation is that proceeding at such a time minimizes participation of the public. Similarly, the hearing processes implemented by RVC restrict effective public participation. Would a responsive corporate citizen even want to proceed with a hearing under those circumstances?

As pointed out in the filed Landowner Submission, Heidelberg Cement and its subsidiaries have an "interesting" record of environmental and safety infractions. In the United States, over a 20-year period Heidelberg and/or its subsidiaries and or associated companies. have been fined in excess of \$132,000,000 for environmental and safety violations. Schedule 1 is a report providing details of the infractions and fines. Is this an organization that RVC or the Bearspaw Community want operating an open pit gravel mine, which will generate significant environmental and safety issues, in a heavily populated rural residential community?

Throughout the Application process, LH has claimed: it is "Good Neighbour" or a "neighbour", operates on values of transparency and responsiveness, and pursues a respectful dialogue with the community. While LH is prepared to use these "virtue signalling" words, its actions tell a different story.

Good neighbours or those pursuing a respectful dialogue do not publish an advertisement attacking residents who oppose its application with the heading: "ANTI-BUSINESS ACTIVISM AND NIMBYSM HAS TO STOP". Nor do they suggest that those who oppose an open pit gravel mine in a rural residential community are to be equated with "...activist types to defame, degrade and discredit those who make a living providing the rest of us with the resources we need to build our homes....". Nor do they attempt to link those who oppose an open pit gravel mine in a rural residential community with "eco-hypocrites".

Good neighbours and a company wanted to build a respectful dialogue with the community do not publish an advertisement with a headline about what a good neighbour they are from a person who is not even a resident of Bearspaw or even RVC. That individual appeared to be totally uninformed about the concerns of RVC residents who would actually have to live with the project and failed to provide any response to a request for his understanding on a number of project issues.

Notwithstanding having filed in excess of 1500 pages of technical material in support its application, when funding to review and understand that material was requested, not even the courtesy of response came from LH. More respectful dialogue and transparency LH style?

Similarly, when a series of questions were asked of LH in relation to the material and its application, a copy of which attached as schedule 2, once again LH did not have the courtesy to respond. LH's approach to being a good neighbour, one can only assume.

Transparency for LH means refusing to make available to the public a copy of the economic study that it provided to the County and wants the County and this Council to rely on. When a request for that same material was made to the County, the request was refused and a FOIP request suggested. To allow material to be relied upon by Council (either by making it available to Council or by staff using it to generate a report that is relied upon by Council) while refusing to make it available to members of the public (on demand) who will be adversely affected by a Council decision is unacceptable. It is prejudicial to residents and is procedurally unfair.

In our opinion, LH simply created an illusion of consultation without actually meeting the basic requirements of consultation as that term is understood in current public hearing processes. The Landowner Submission details the failures of the LH "consultation" as I expect will the submissions of others. The Landowner Submission describes what LH did as simply a notice of intent, not consultation, and we believe that accurately captures the essence of what occurred. In addition, key information was not provided, once again as detailed in the Landowner Submission. The process lacked transparency, responsiveness and respect for the Bearspaw community and its residents. The section of the MSDP dealing with stakeholder consultation illustrates the same lack of credibility that is seen in other portions of the Application material. The "findings" section (page 52-53) states in referring to concerns or objections, uses "some" but fails to provide any details including the numbers of residents who totally objected to the project and its many negative consequences. Requests for details of the consultation were made of LH in sections 1.25-1.27 of Schedule 2. No response was received. An adverse interest should be drawn both from the lack of detail in the MSDP and the failure to respond to the subsequent

requests, that the development received near unanimous rejection and that LH took no actual steps to address residents' concerns.

We consider LH's conduct to be an embarrassment to it, its parent, Heidelberg Cement, and their corporate reputations.

As noted above LH generated and provide to RVC in excess of 1500 pages of material much of which is opinion. The Landowner Submission addresses the key opinions provided (and in the case of the economic study not provided to at least the public) and identifies the flaws that make them unworthy of reliance. However, in addition, reliance upon these opinions is problematic for several even more fundamental reasons. The Aecom opinions which make up the bulk of the LH assessments contain, at the beginning (the back of the first page or the second page) of each, a Statement of Qualifications and Limitations. These should not be ignored and are critical to an understanding of why and how the assessments were generated and the weight, if any that should be given to them. The first and second sentences refer to the Agreement between Aecom and LH and notes that the Aecom opinion is:

- "...subject to the, scope, schedule, and other constraint and limitations in the Agreement...
- May be based on information provided to AECOM which has not been independently verified:
- Represents AECOM's professional judgement in light of the Limitations...
- was prepared for the specific purposes described in the Report and the Agreement..."

In numerous other paragraphs in that Statement of Qualifications and Limitations reference is made to the Agreement between Aecom and LH in relation to the services being provided by Aecom. The terms of agreements with consultants are important in determining what weight, if any, is to be given to the assessments provided by Aecom and others. Are they to be prepared "in support" (as apparently was the economic assessment) i.e., to bolster or buttress a particular position or result that is sought by LH? In such circumstances the assessment or report is a work of advocacy and has no evidentiary value.

In schedule 2 section 1.4 information was requested in relation to the agreements with, and circumstances surrounding, the preparation of the consultants' reports for the specific purpose of determining what weight Council should give to much of the material provided by LH. As indicated previously in this submission, we did not receive the courtesy of a response from LH. If there was nothing in the agreements with Aecom and others that turned the assessments into works of advocacy one would have expected the agreements and the information requested in section1.4 to be provided. What is there to hide? LHs failure to provide the requested information mandates the finding of an adverse inference, which is that the agreements substantiate our concerns. The result is that all of the reports should be treated as simply advocacy statements and are, therefore of no evidentiary value.

In addition, unlike the expert reports filed with the Landowner Submission, and conspicuous by its absence is the expected statement the authors are "...unbiased, non partisan, and impartial..." raising further concerns about the scientific independence of the authors of those reports.

Finally, Aecom states that it "...accepts no responsibility, and denies any liability whatsoever, to parties other than the Client... arising from their use of, reliance upon, or decisions or actions based on the

Report...". LH wants Council and the public to rely on its filed material but the authors specifically deny any responsibility to anyone other than LH who does rely on the reports. Should Council, and should the public, rely on reports where the authors take "no responsibility" for what is in their own reports? This is an attempt by LH and its consultants to ride the proverbial galloping horse in two directions at the same time and should be rejected. The reports should not, and cannot be relied upon.

THE APPLICATION MUST BE SUMMARILY AND PERMANENTLY REJECTED

The multitude of submissions and reports filed in opposition to the Application identify numerous reasons why it should be rejected. In particular the Landowner Submission filed by John Weatherill, along with its accompanying expert reports raises unassailable reasons for rejection of the Application. We do not propose to repeat the Landowner Submission but as indicated previously, we adopt it and the expert reports accompanying it. However, we will identify a number of matters that are of particular concern to us.

The starting point for an assessment of the Application is the historical use of section 5. When we moved to Bearspaw, the section 5 land was designated and used as agricultural purposes. The SW1/4 of section 5 was purchased by a realtor who subdivided out what is now known as Crestview Estates. As a condition of the subdivision, and in accordance with then RVC policy, the rest of the quarter had to remain as agricultural land. It has carried that designation through to the present date. However, as shown on County planning documents its future has always been as a rural residential community. Previous attempts to develop an open pit gravel mine on section 5 have been rejected by the County. As pointed out in other submissions, development has proceeded and major life decisions have been made based on the County's representation as to the future use of section 5.

The Applicant now comes to the County with a request to insert into a rural residential community a major industrial development that will have a catastrophic impact on Bearspaw residents. As a friend of ours with extensive experience in resource development indicated, if you changed the product being mined from gravel to coal, or even gold, such a mine would not even be considered by the appropriate regulatory authorities.

It is not the obligation of residents to make a case for the rejection of the Application, it is for the Applicant to show that there are not just compelling, but overwhelming reasons for its open pit mine to be approved in the face of unanimous opposition from those that are going to have to bear the risks and negative consequences of the mine.

On that issue it is important for Councillors to remind themselves that even though they may represent a different division whose residents are not adversely affected, they have a statutory obligation under the Municipal Government Act (MGA) to act in the best interests of the municipality as a whole which, of course, includes the residents of Bearspaw. Think about how you would react if this mine was moving into your community. Is this what you and your residents would want next to your homes?

THE ELEPHANT IN THE ROOM

A sensitive matter that we were initially hesitant to raise is the three to six voting split that has often been seen in Council voting patterns since the last election. From the outside at least, there appear to be deep seated and irreconcilable personality and/or ideological conflicts amongst Council members and amongst "the three" and some members of RVC administration. We have heard it stated that LH's Application will be approved to "punish" the Division 8 Councillor or that "if Samanntha supports it the six will vote against it". The fact that these sorts of comments are even being made should be of concern to Council as a whole and Reeve Henn, as leader of Council, in particular. It is our expectation that these comments will be found to be totally unjustified and that Council will put aside any conflicts, act in the best interests of the Bearspaw community and reject the Application. We don't believe we overstate the importance of the Application by saying this is an existential issue for Bearspaw as an attractive and viable rural residential component of RVC.

THE PRECAUTIONARY PRINCIPLE

The Application and the reports in support of it are so fundamentally flawed, as detailed in the Landowner Submission and numerous resident submissions, that it should be summarily dismissed. Application of the precautionary principle to the Application further validates that conclusion. The precautionary principle is simple: lack of complete scientific certainty should not be used to justify lack of action to prevent environmental degradation or potential health risks. Looking at the Application in the best possible light its rejection is mandated by the application of the precautionary principle. Numerous risks to the environment and health have been identified and none of the mitigation measures proposed by the Applicant eliminate those risks. Council, by a decision in favor of the Application would be offloading these risks on the environment of RVC and its residents. All of this to provide a competitive advantage to LH and to generate revenue for its German parent.

THE ECONOMICS OF GRAVEL

We have been advised that when one of our Bearspaw ratepayers questioned a member of Council as to why RVC had so much gravel development; the answer was; "money". Of course, we have no way of knowing whether this conversation ever took place but a purported economic advantage to RVC is front and centre in the Application. LH has refused to make its economic analysis available to the public so we must turn to the MSDP to determine what LH alleges are the economic benefits flowing to RVC. There is a one bullet description on page 7 which is expanded upon for one page later in the report.

Unfortunately, but consistent with much of the Application the representations made about the economic benefit to RVC have been exaggerated, as more specifically addressed in the Ayres report attached to the Landowner Submission. We have several concerns. The actual direct economic benefit to RVC claimed in the LH Fiscal Impact Analysis is \$21,350,000 (page 48) made up of \$1350,000 in County taxes and a \$20,000 000 CAP levy contribution. Dealing first of all with the municipal tax component; over the 30-year life of the pit, we are looking at County taxes of about \$45,000 per year. Based on the County's revenue of approximately \$109,000,000 in fiscal 2019 that is .04% of the County's revenue; an infinitesimal amount in the context of the damage, at all levels, that will be done by the pit. The CAP Levy is alleged to contribute \$666,667 a year which equates to .6% of the RVC 2019 revenue;

certainly, a larger number but nothing in comparison to the damage the pit will do to RVC and the Bearspaw community.

However, that number is suspect for a number of reasons. First of all, there is no guarantee that the CAP levy will continue. This is spoken to in more detail in the Ayres report. Secondly, if the Application is rejected, and if the market demand is as claimed by LH, that demand will be satisfied by other pits, likely in RVC, either owned by LH or by others. The CAP levy will be paid on the gravel produced irrespective of whether the pit is in Bearspaw or outside Cochrane (Burnco). There will be no additional CAP levy income generated for the County by approving the Bearspaw open pit mine.

Similarly, the other benefits claimed in the economic analysis such as jobs, GDP and labour income will occur in the region if in fact there is a demand for the gravel. As is pointed out in the Landowner Submission there is lots of gravel in RVC and there are numerous applications for pits in areas that do not conflict with existing rural residential communities. Some of these pits will be approved and the demand will be satisfied from these pits with largely the same overall economic consequences to RVC and the Calgary region. The only difference is the potential impact to LH – it will not have the economic advantage and additional profits realized by having its pit located closer to market. LH wants to generate additional profits (the magnitude of which is undisclosed by LH) at the environmental, economic, and social cost of others. This is unacceptable.

The LH economic analysis is further flawed by failing in any way to address the costs to Bearspaw families, of its open pit mine. The Ayres report contains unchallenged independent expert evidence that the open pit mine will have a major negative impact on property values. It is a reality that gravel pits negatively impact property values. Do you know anyone who would suggest that they are looking for property to build a rural residence and at the top of their priority list is for it to be close to a gravel pit that will operate 6 days a week between 7 AM and 8 PM, stopping 2 hours earlier on Saturdays? Another plus could be blasting at irregular hours, the ongoing crushing of aggregate and the noise of a 4.5 K conveyor system. Add on dust and diesel exhaust, berms, and piles of gravel and it is easy to see why our property could be reduced in value by up to 25%. It is unclear to us why we should bear this loss to enable extra profit to be generated by LH for the benefit of shareholders, the majority of which don't even live in Canada let alone RVC.

LH attempts to rap itself in several virtue signalling arguments. The first seems to be that gravel is a finite resource and section 5 must be developed. Wrong. There is gravel in any number of places in RVC where development will not have the catastrophic impact on the community that would occur if the Application is approved. The second is the conveyer will save trucking impacts on the environment. Wrong again! Once the gravel gets to Spy Hill and is processed it has to be moved for sale by truck. Finally, LH alleges a substantial economic benefit to RVC. Wrong once again! Fulsome economic analysis reveals that the cost of this development exceeds, by orders of magnitude, any actual benefits to RVC.

TRUST US, EVERYTHING WILL BE JUST FINE

The Weatherill Landowner Submission details the many requirements missing from the Application. Some of these are simply not addressed and others, it is suggested, will be addressed at some future time, possibly at the development permit stage.

For example, the proponent knows that it will have to carry out extensive site preparation over the 30-year lifetime of the Bearspaw open pit gravel mine. Rather than actually providing some information to Council, Administration, and the residents on what levels of noise will occur LH causes to be inserted in the proposed bylaw general language that creates no enforceable obligation but gives it the right to require residents to live with noise levels that are so excessive that LH won't even disclose them (S 3.8.0).

LH refers to incorporating "best practices" of the gravel industry but lacking are specifics of what these best practices entail. This creates no actual enforceable obligation (even if there was an enforcement arm in RVC charged with monitoring and enforcing the representation). It is ambiguous and meaningless. In addition, the Landowner Submission identifies several examples of where LH has back tracked on implementing so called best practices.

Another example of a meaningless representation as to future intent is found in section 3.9.0 of the proposed bylaw where LH is supposed to develop and implement a Property Value Protection Plan and Water Well Indemnification Program as described in the LH MSDP. The "plans" are capitalized in the bylaw suggesting they are defined somewhere but no definition is in the bylaw nor are the terms defined in the MSDP. Turning to the MSDP, at page 37 s 14 in the Groundwater section there is one sentence at the end of the section that refers to Property Value Protection Program. Presumably the so called "Program" relates to water issues as the accompanying diagram shows the very limited geographical limits of the "program" which is identified as "water boundary".

The only other references to anything that could bear a relationship to the language in the proposed bylaw is found in section 22 (pages 54 and 55) of the MSDP. Under the heading "groundwater" reference is made to an "indemnification agreement to any landowner who requests it" if you are within a limited area. Presumably this relates to water and nothing else, but who knows. Section 6 (page 55) under the heading "Visual Impacts" refers to a "property value protection plan" (no caps) which only applies to residences "within or adjacent to Section 5, and those with direct views into the area post mitigation". This representation would have very limited geographical application and would appear to be limited to loss of value related to visual impacts but once again who knows.

Notwithstanding the reference in the proposed bylaw to a Water Well Indemnification Program as described in the MSDP, nowhere in the MSDP is that term even used. When asked to proved details of what it was actually proposing, LH refused, advising that the information would be provided at a later date. Staff confirmed they had no additional information about the so called "plans" other than what was in the MSDP.

The language used in section 3.9.0 of the proposed bylaw would lead one to believe that LH was providing wide ranging protection for residents, but when one looks at the matter in detail, the

"protection" is illusory. There are serious questions as to whether even a properly worded commitment would create legally enforceable rights for residents. Compounding the problem is the lack of any detail as to what is actual being proposed. LH can use language to describe a plan or an agreement but what protection (or lack thereof) is created by the actual language used. LH refuses to provided any such language and the "details" in the MSDP are confusing and inconsistent.

These, and the many other issues identified in the Landowner Submission and other resident submissions must be addressed and cannot be left to be dealt with in the future based on ambiguous, confusing and vague unenforceable representations from the proponent. The failure of LH to properly address those issues mandates a dismissal of the Application.

REVENUE PROTECTION PLAN/AGREEMENT FOR ROCKY VIEW COUNTY

If the Application is rejected, we intend to create a Revenue Protection Plan/Agreement for Rocky View County (the RPP). We will provide the County with details of the RPP, including what revenue will be covered, its duration, and limits on amounts in due course. We expect Council to rely on our RPP in its deliberations. We of course don't actually expect Council to so rely but neither should Council rely on vague, ambiguous and unenforceable representations from LH as to its future conduct.

THE STAFF REPORT

We would like to preface our comments of the staff report with two observations. The first is that Council members appear to be unduly protective of County staff. We recognise that staff should not be subject to verbal abuse nor should they be disrespected. However strong criticism of opinions or process is neither abuse nor disrespectful. Anyone expressing an opinion or making a judgment on matters that impact the public good should expect to have those opinions or judgments subject to review and, where warranted, criticism.

Based on our observations, as well as feedback from others, the RVC planning department appears to have been a bit of a revolving door, that is there is an unusually high turnover of planning staff and management. This turnover results in a lack of consistency in staff recommendations relating to gravel pit development on section 5. No matter how the applicant attempts to repackage the current Application it is essentially the same; a proposal for the development of an open pit mine in a rural residential community. While the open pit mine is the same, the impacts to the community have been magnified with on site crushing, reduced set backs, and increased operating hours among other heightened impacts. This, same application, resulted in 2 different recommendations from planning staff in 1994 and 2010 with now a third recommendations. The only real change during that period has been the burgeoning rural residential development in the area. Unfortunately, because of the planning staff turnover RVC has no real corporate knowledge, that is the combined tacit, tribal, documented and undocumented knowledge, in relation to section 5. However, many Bearspaw residents have been dealing with Bearspaw gravel issues for in excess of 25 years. They are more knowledgeable about gravel issues as they relate to Bearspaw than County staff who lack

corporate knowledge because of staff turnover. Council should embrace that resource. It is found in the numerous individual resident submissions. Local knowledge is well understood in this day and age to be a critical input for decision makers.

Bearspaw landowners were shocked to read the recommendation of staff on this application. In 2010, staff also recommended approval but the then Council rejected that recommendation in a resounding 9-0 vote. Now the same application for an open pit mine but with heightened impacts negatively affecting more people is again recommended for approval. That makes no sense and is indefensible. As is apparent from a review of the staff report and the filed material, the application raises technical issues involving a wide range of scientific disciplines. County staff have acknowledged that the material was reviewed by personnel with planning qualifications and engineering degrees. RVC does not have geologists with expertise to weigh complicated geological reports. It does not have economists with expertise to carry out a balanced economic cost benefit analysis of the Application. It does not have noise, air, wildlife or environment experts to objectively review, and challenge where necessary, opinions or representations made in the Application. We understand that RVC cannot, in house, have all of the expertise necessary to properly evaluate the wide range of technical issues critical for a thorough assessment of any complex applications such as an application for an open pit gravel mine. However, both Council and residents should expect, at a minimum, that staff be able to identify areas where RVC lacks in house competence and retain outside experts with that missing expertise. This expertise is required in order to properly review all of the material, both in support and in opposition to an application. Understanding and evaluation are critical to a proper review and in order to do either, an in depth understanding of the technical material is required. Notwithstanding the lack of expertise, insofar as we are aware, based on communications with RVC, Administration took no steps to retain independent experts to fill these gaps in RVC expertise. Without understanding and an evaluation founded on understanding, any recommendation is at best flawed and may even lack bona fides. The staff report must accordingly, not only be viewed with scepticism., it must be rejected.

The staff report dismisses many of the failures in the Application with the response that these can be addressed at the development permit stage. The problem with that approach is addressed earlier in this submission Under the "Trust Us" heading. All substantive matters relating to this Application must be dealt with at this hearing. They cannot be punted forward to be dealt within a process that lacks both transparency and effective landowner participation. As both Staff and Council are aware "regulatory slip" where obligations are modified by bureaucrats, with no public consultation together with lack of effective enforcement mechanisms have been a longstanding problem with aggregate developments. Residents should not be left to the mercy and charity of a German multinational with what would appear from schedule 1, to have a questionable environmental and safety record.

We understand that the Staff makes recommendations. When Staff makes a recommendation, it is communicating publicly that it has made a judgment on the proponent's application. How else can it make a recommendation? Of course, a judgment should be based on evidence; it should not be plucked out of the air. It should not be capricious.

As we detailed in the Information Request delivered to LH on November 18, 2020, LH relies on statements of opinion. It does so through consultants (and not independent experts) that are paid by, work on behalf of, and (to use language from the Nichols report "support") LH. Opinions offered that do not meet the standards required of independent expert evidence are worthless. If the consulting agreements had been produced as requested, this would be readily apparent although as we have outlined above this seems perfectly clear on the face of the reports.

In exercising their judgment Staff should identify the issues that must be addressed. On this application, many of the issues raise technical questions and require evidence from independent experts (and not paid consultants) who acknowledge their duty to be fair, objective and non-partisan. This differentiation is not simply a question of semantics and has been recognized by courts and regulatory bodies.

The impacts on surface and ground water cannot be measured empirically. The dispersal and impact of particulate matter and silica dust requires professional judgement. There is no way to carry out noise measurements of actual operations when those operations are not taking place. All of these matters, plus many others, must be estimated using credit The financial impact on landowners, community and the wealth transfer to LH that will occur if this Application is successful is again a matter of judgement. All of these matters plus a myriad of others require credible, fair, and independent expert evidence.

In making a judgement to "recommend", what the Staff should not do is ignore relevant submissions of directly impacted landowners. Staff have no independent evidence to provide in this proceeding on the impacts that will be experienced by directly and adversely affected landowners. Their job is to collate and objectively assess, for Council, the evidence that has been provided to them. I. The Staff has failed to do so.

Landowners have presented extensive evidence from highly qualified experts that refute every position advanced by LH. Individually, each report compels the application to be dismissed. Collectively, the evidence is overwhelming. No decision on a "recommendation" can be made by ignoring substantial evidence that speaks to the question of whether or not the recommendation should be made.

The Staff Report ignores virtually all of the landowners' evidence. It presents only the position of the LH and appears to accept that position without question. Fundamental to a procedurally

fair process is the right to be heard. It is obvious on the face of the report that critically relevant evidence put forth by landowners, in full compliance with the rules of the County, was simply ignored. Ignoring relevant, credible evidence put forth by a party in furtherance of the right to be heard creates an undeniable apprehension of bias.

Bearspaw landowners were also shocked to read the conclusion that the application "complies with the Bearspaw Area Structure Plan." The defects in the application were thoroughly identified in the submission of Mr. Weatherill but again those defects were completely ignored. For example, the evidence resoundingly establishes that this mine will occur on an alluvial aquifer. That is prohibited under the County Plan as pointed out by Mr. Weatherill. The mine will permanently lower the water table in this area and that is prohibited under the Bearspaw Area Structure Plan, as again pointed out by Mr. Weatherill. The mine creates a significant risk of contamination to water wells and that obviously should not be allowed to happen. These are but three examples of the legion of defects in the Application.

We understand that LH has a different view, and for all of the reasons set forth in the landowner submissions, we consider that opinion to be meritless. What the Staff cannot do in a procedurally fair process is to, without question, accept LH's. while ignoring contrary independent evidence. As was the case in 2010, we fully expect that Council will reject the recommendation of Staff. The evidence compels no other result. Council cannot delegate to planning staff the decision on the Application. Based on the totality pf the material the only credible evidence is from the Landowners' independent experts and it cannot be ignored. The Application must be rejected.

Landowners intend to proceed with the February 2 virtual hearing as scheduled during these COVID times, a RVC process that effectively prevents balanced public participation. We and other landowners have detailed several times our concern with the process being employed. Given the obvious defects with the Staff "recommendation", and the process, landowners will participate under protest. Rather than presenting a balanced and fair view of the record before the Council, the Staff report utterly ignores the compelling and relevant evidence. This in turn foists, unfairly, yet another challenge onto landowners. We reiterate, The conclusions in the report of Staff must be completely disregarded.

LH has a high and insurmountable onus to meet to seek to change the existing land use designation for the LH lands. The only response to such a fatally flawed application is to reject it on terms that it can never be brought back again. No applicant landowner can seek and obtain such a major change and deflect the obligation to support it into the future. LH has submitted various reports, all of which have been shown to be completely unreliable. Obviously, LH submitted these reports with the hope that they would be unchallenged and relied on by Council and staff. As detailed in the submission of Mr.

Weatherill, there are a myriad of present requirements that LH must satisfy and clear and cogent evidence. It has completely failed to do so and LH cannot sidestep its obligations. LH cannot obtain a redesignation on no evidence and punt that obligation into future. By then, the damage is done.

SUMMARY

The LH application should be summarily dismissed. The material filed in support, is flawed, inadequate and cannot be relied upon. It is not worthy of Council's consideration. By contrast the Landowner Submission and the accompanying expert reports create an unassailable case for rejection. There is unanimous and overwhelming community opposition the project. This a failed project and if allowed to proceed, will not only be a blight on Bearspaw for decades, it will also be a source on ongoing conflict and cost to RVC. Council needs to send a clear message to LH that it has had had its three strikes and that it is time to move on.

William T. Corbett

Sharon D. Corbett

SCHEDULE 1

Violation Tracker Parent Company Summary		
Parent Company Name:		
HeidelbergCement		
Ownership Structure:		
publicly traded		
Headquartered in:		
Germany		
Major Industry:		
building materials		
Specific Industry:		
building materials		
Penalty total since 2000:		
\$132,229,089		
Number of records:		
671		
Top 5 Offense Groups (Groups Defined)	Penalty Total	Number of Records
environment-related offenses	\$124,724,709	114
safety-related offenses	\$6,404,738	548
employment-related offenses	\$599,642	8
government-contracting-related offenses	\$500,000	1
Top 5 Primary Offense Types	Penalty Total	Number of Records
environmental violation	\$124,724,709	114
workplace safety or health violation	\$6,404,738	548

Top 5 Primary Offense Types	Penalty Total	Number of Records
labor relations violation	\$599,642	8
False Claims Act and related	\$500,000	1

Notes:

Parent-subsidiary linkages are based on relationships current as of the latest revision listed in the Update Log, which may vary from what was the case when a violation occurred. The penalty totals are adjusted to account for the fact that the individual entries below may include both agency records and settlement announcements for the same case; or else a penalty covering multiple locations may be listed in the individual records for each of the facilities. The totals are also adjusted to reflect cases in which federal and state or local agencies cooperated and issued separate announcements of the outcome. Duplicate or overlapping penalty amounts are marked with an asterisk in the list below.

Associated Names:

CALAVERAS MATERIALS; ESSROC; ESSROC / NAZARETH CEMENT 3; Essroc Cement Company; ESSROC CEMENT CORPORATION 240210001300314; ESSROC CEMENT CORPORATION 240210001300346; ESSROC CEMENT CORPORATION 240210001300348; ESSROC CEMENT CORPORATION 540030000600150; ESSROC CEMENT FORMERLY: HOLCIM US; ESSROC CEMENT PERMIT MD0002038 ADMINISTRATIVE CONSENT ORDER; ESSROC CEMENT PERMIT MD0002038 STIPULATED PENALTY / PENALTY NOTICE; ESSROC-Essexville; ESSROC-Logansport; ESSROC-Middlebranch; ESSROC-Nazareth; ESSROC-S [...]

Company	Primary Offense Type	Year	Agency	Penalty Amount
Argos San Juan Corp	workplace safety or health violation	2015	MSHA	\$5,300
Lehigh Cement Company, LLC	workplace safety or health violation	2019	MSHA	\$5,239
Lehigh Southwest Cement Co.	workplace safety or health violation	2010	MSHA	\$5,211
Lehigh Southwest Cement Co.	workplace safety or health violation	2014	MSHA	\$5,211
Essroc Cement Corp.	workplace safety or health violation	2012	MSHA	\$5,211

Company	Primary Offense Type	Year	Agency	Penalty Amount
Lehigh Cement Company LLC	workplace safety or health violation	2003	MSHA	\$5,175
HANSON AGGREGATES OF ARIZONA	workplace safety or health violation	2019	OSHA	\$5,114
Lehigh Southwest Cement Co.	workplace safety or health violation	2017	MSHA	\$5,111
LEHIGH CEMENT COMPANY LLC 180930000200438	environmental violation	2010	EPA	\$5,100
Lehigh Cement Company LLC	workplace safety or health violation	2006	MSHA	\$5,100
Lehigh Cement Company LLC	workplace safety or health violation	2005	MSHA	\$5,100
Argos San Juan Corp	workplace safety or health violation	2007	MSHA	\$5,080
Lehigh Cement Company, LLC	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Cement Company, LLC	workplace safety or health violation	2009	MSHA	\$5,080
Hanson Aggregates LLC	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Cement Company LLC	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Cement Company, LLC	workplace safety or health violation	2010	MSHA	\$5,080
Lehigh Cement Company LLC	workplace safety or health violation	2010	MSHA	\$5,080

Company	Primary Offense Type	Year	Agency	Penalty Amount
Lehigh Southwest Cement Company	workplace safety or health violation	2008	MSHA	\$5,080
Lehigh Cement Company LLC	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Northeast Cement Company	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Cement Company, LLC	workplace safety or health violation	2010	MSHA	\$5,080
Essroc Cement Corp	workplace safety or health violation	2008	MSHA	\$5,080
Lehigh Cement Company, LLC	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Cement Company LLC	workplace safety or health violation	2009	MSHA	\$5,080
Lehigh Cement Company LLC	workplace safety or health violation	2009	MSHA	\$5,080
Essroc Cement Corp.	workplace safety or health violation	2008	MSHA	\$5,080
Hanson Aggregates LLC	workplace safety or health violation	2009	MSHA	\$5,080
Essroc Cement Corp	workplace safety or health violation	2011	MSHA	\$5,080
Essroc Cement Corp.	workplace safety or health violation	2014	MSHA	\$5,080
Argos San Juan Corp	workplace safety or health violation	2012	MSHA	\$5,080

Company	Primary Offense Type	Year	Agency	Penalty Amount
Argos San Juan Corp	workplace safety or health violation	2012	MSHA	\$5,080
Hanson Aggregates BMC Inc	workplace safety or health violation	2012	MSHA	\$5,080
Hanson Aggregates Pennsylvania LLC	workplace safety or health violation	2014	MSHA	\$5,080
Lehigh Southwest Cement Company	workplace safety or health violation	2012	MSHA	\$5,080
Hanson Aggregates Southeast, LLC	workplace safety or health violation	2013	MSHA	\$5,080
Lehigh Southwest Cement Co.	workplace safety or health violation	2012	MSHA	\$5,080
Hanson Aggregates Southeast, LLC	workplace safety or health violation	2013	MSHA	\$5,080
Argos San Juan Corp	workplace safety or health violation	2012	MSHA	\$5,080
Argos San Juan Corp	workplace safety or health violation	2012	MSHA	\$5,080
Argos San Juan Corp	workplace safety or health violation	2012	MSHA	\$5,080
Lehigh Southwest Cement Company	workplace safety or health violation	2013	MSHA	\$5,080
Essroc Cement Corp.	workplace safety or health violation	2014	MSHA	\$5,080
Lehigh Southwest Cement Company	workplace safety or health violation	2015	MSHA	\$5,080

Company	Primary Offense Type	Year	Agency	Penalty Amount
Lehigh Cement Company LLC	workplace safety or health violation	2019	MSHA	\$5,049
Lehigh Southwest Cement Co.	workplace safety or health violation	2017	MSHA	\$5,008
Lehigh Cement Company, LLC	workplace safety or health violation	2017	MSHA	\$5,008
Lehigh Southwest Cement Co.	workplace safety or health violation	2017	MSHA	\$5,008
Lehigh Southwest Cement Co.	workplace safety or health violation	2017	MSHA	\$5,008
LEHIGH SOUTHWEST CEMENT COMPANY	environmental violation	2008	EPA	\$5,000
LEHIGH SOUTHWEST CEMENT COMPANY	environmental violation	2014	EPA	\$5,000
LEHIGH SOUTHWEST CEMENT COMPANY	environmental violation	2014	EPA	\$5,000
Hanson Aggregates Gainesville Quarry	environmental violation	2017	EPA	\$5,000
HANSON AGGREGATES - WALTON QUARRY	environmental violation	2017	EPA	\$5,000
HANSON AGGREGATES/PENNS PARK PLT	environmental violation	2002	EPA	\$5,000
HANSON AGGREGATES BMC INC/DUNNINGSVILLE ASPHALT PLT	environmental violation	2006	EPA	\$5,000
LEHIGH CEMENT CO LLC/EVANSVILLE CEMENT PLT & QUARRY	environmental violation	2007	EPA	\$5,000
HANSON PIPE & PRECAST, INC.	workplace safety or health violation	2007	OSHA	\$5,000

Company	Primary Offense Type	Year	Agency	Penalty Amount
Lehigh Cement Company LLC	workplace safety or health violation	2007	MSHA	\$5,000
Lehigh Cement Company LLC	workplace safety or health violation	2007	MSHA	\$5,000
Lehigh Cement Company LLC	workplace safety or health violation	2006	MSHA	\$5,000
Lehigh Southwest Cement	workplace safety or health violation	2008	MSHA	\$5,000
Hanson Aggregates BMC, Inc.	workplace safety or health violation	2010	MSHA	\$5,000
Lehigh Cement Company LLC	workplace safety or health violation	2009	MSHA	\$5,000
Hanson Aggregates Southeast, LLC	workplace safety or health violation	2011	MSHA	\$5,000
Lehigh Northeast Cement Company	workplace safety or health violation	2012	MSHA	\$5,000
Lehigh Southwest Cement Company	workplace safety or health violation	2012	MSHA	\$5,000
Essroc Cement Corp.	workplace safety or health violation	2014	MSHA	\$5,000
Essroc Cement Corp.	workplace safety or health violation	2014	MSHA	\$5,000
Essroc Cement Corporation	workplace safety or health violation	2015	MSHA	\$5,000
Lehigh Southwest Cement Company	workplace safety or health violation	2017	MSHA	\$5,000
Essroc Cement Corp. Essroc Cement Corp. Essroc Cement Corporation	workplace safety or health violation workplace safety or health violation	2014 2014 2015	MSHA MSHA	\$5,000 \$5,000 \$5,000

SCHEDULE 2

Landowners (Corbett et al) Information Request (IR) No. 1 to Lehigh Hanson Materials Limited (LH)

November 18, 2020

Bearspaw Redevelopment Application by LH Applications PL20200093/0094

- 1.1 Provide details of all communication between representatives of LH and representatives of all consultants contacted by LH in connection with the Applications including copies of all correspondence.
- 1.2 Please confirm that all third-party reports provided by LH are opinions with the intent that these opinions be relied upon by Rocky View County (RVC) Rocky View Council, those affected by the Applications, and the public at large.
- 1.3 Please confirm that the authors of all third-party reports provided by L.H have a duty to be objective and non partisan, and if not why not.
- 1.4 In relation to each consultant retained by LH, provide the following:
 - The retainer agreement or contract entered into between LH and the consultant, including all terms of compensation and whether or not LH has agreed to indemnify the consultant;
 - All drafts of each report;
 - All correspondence or input from LH on each draft of the consultants' report;
 - Any written confirmation that LH approved the final form of the reports prior to submission;
 - Details of the entire compensation paid by LH to each consultant.
- 1.5 Advise the total costs of preparing the Applications, including internal costs and fees paid to consultants.
- 1.6 The Alberta Court of Appeal has stated as follows:
 - "Granting standing and holding hearings is an important part of the process that leads to development of Alberta's resources. The openness, inclusiveness, accessibility, and effectiveness of the hearing process is an end unto itself. Realistically speaking, the cost of intervening in regulatory hearings is a strain on the resources of most ordinary Albertans, and an award of costs may well be a practical necessity if the Board is to discharge its mandate of providing a form in which people can be heard. In other words, the Board may well be

"thwarted" in discharging its mandate if the policy of costs is applied restrictively. It is not unreasonable that the costs of intervention be borne by the resource companies who will reap the rewards of resource development."

Does LH agree with the Alberta Court of Appeal?

- 1.7 LH has filed upwards of 1500 pages of opinion material that it asks RVC to rely on. Does LH agree that it is reasonable for LH to bear the costs of intervention by potentially and directly adversely affected landowners to ensure an effective and balanced analysis of its Applications and material in support?
- 1.8 Effective public engagement requires funding where technical issues are engaged. For example, the Alberta Utilities Commission often provides advance funding for intervener experts where "legal or technical" assistance is required to effectively participate in the proceedings. In light of the 1500 pages of consultants' reports, does LH acknowledge that much of its material addresses a wide range of technical matters?
- 1.9 Is LH prepared to provide funding to affected residents to allow a review of the opinion material filed in support of its Applications and if so, in what amounts?
- 1.10 Does LH acknowledge that consulting opinions can and often do vary materially? Has any of the material filed by LH been subject to a third-party peer review and if so, provide details of same?
- 1.11 Provide details of the shareholding of LH and advise what entity is the ultimate beneficial shareholder of LH.
- 1.12 Confirm the jurisdiction of incorporation and head office of the ultimate beneficial owner of LH.
- 1.13 Confirm that the profits from the open pit gravel mine subject to the Applications will ultimately accrue to the beneficial owner of LH.
- 1.14 Advise of the relationship between LH and any entity associated with LH and those entities that initiated similar applications in 1994 and 2010. Confirm that LH is beneficially owned by the same beneficial owner that initiated those previous applications.
- 1.15 Advise whether any of the gravel mined from the proposed pit(s) that could result from the Applications is planned to be exported from the Province of Alberta.
- 1.16 Advise when the processes giving rise to the Applications were initiated.
- 1.17 Provide particulars of any meetings between LH and RVC (staff or Council members) since 2010 in relation to the Applications.
- 1.18 Provide similar information in relation to communications between LH and the Province of Alberta.
- 1.19 Has LH paid any amounts to RVC specifically for the purpose of carrying out an independent review of the reports filed in support of its Applications and if so, in what amounts and in

- relation to what reports. Provide copies of any such reports.
- 1.20 Please produce all reports and documents provided by LH to RVC in relation to the Applications, including all reports or documents that LH is now claiming to be confidential.
- 1.21 Confirm that LH wants RVC to rely on the opinion reports it has provided to RVC, including material it refuses to make available to directly and adversely affected landowners.
- 1.22 Confirm that LH understands it is a breach of natural justice and procedural fairness for any body charged with making a decision that adversely affects the rights of others to rely on secret material.
- 1.23 Confirm that LH is aware that landowners in RVC and in particular Bearspaw rely on prior decisions of RVC and existing land designations.
- 1.24 Confirm that LH is aware that multiple land purchases, sales and developments within the vicinity of the land subject to the Applications have occurred since 1994 and 2010.
- 1.25 Produce all records of personal consultation with directly and adversely affected landowners. Provide details of date, time, and individuals involved, concerns raised, and the specific steps taken by LH to accommodate the concerns raised through the consultation process.
- 1.26 Produce LH's initial consultation plan and any amendments to it. Provide details of when it was prepared, who prepared it, what input LH provided for the plan, the retainer agreement in relation to the plan, and the area of potentially directly and adversely affected landowners.
- 1.27 Many proponents of resource development have paused their consultation efforts and projects in response to the COVID outbreak. Provide details of all personal consultation by LH during the COVID pandemic.
- 1.28 Does LH acknowledge that cumulative effects include changes to the environment caused by an activity in combination with other past, present, and reasonably foreseeable human activities?
- 1.29 Does LH agree that all assumptions utilized to define temporal and spatial boundaries must be clearly identified?
- 1.30 Does LH agree that all reasonably foreseeable conditions, including industrial activities and their growth must be taken into account in a cumulative impact assessment?
- 1.31 Does LH acknowledge that a failure to include foreseeable activities may result in under estimating cumulative impacts?
- 1.32 LH drilled 54 wells/holes on the property subject to the applications, but only provided complete information for 10 of those wells/holes. Please provide complete technical information on the remaining 44 drill holes/wells on the property including field parameters (name of well, well status i.e., cased, plugged, abandoned, etc.) location in UTM or Lat/Long coordinates, ground and casing elevations, depth drilled to, casing/liner run and depths run to, core data including analysis and most importantly sample descriptions or sample logs.

This information request is made by William and Sharon Corbett, 260061 Range Road 25. Calgary, AB on their own behalf and on behalf of certain other landowners adversely or directly affected by the Applications.

Failure to respond to any of these requests will be understood to be a refusal by LH to provide the requested information.

To whome it may concern

Most people use a computer, since Jam not, Jwill write this letter by hand.

Imight 90 into a bit of detail, but this is the only way I can express myself, as my native language is from the Netherlands

Please readit, as it truly comes from the heart.

Myname is Adri Edwards and Jam 82 years old.

Probably Jam one of the oldest residents in the Bearspan Area that has witnessed 2 defeats ingravel pib.

One in 1992 and again in 2010.

The festivities at RU chambers, were packed, standing room only and people sitting on the floor including media and TU camera's That meeting lasted over 8 hours and ended with Council listened to the people and voted - no more gravelpits.

In a residential area.

People went home happy, went on with their lifes, bought acreages and build houses.

Meanwhile Silverwoods, Briarwoods, Church Ranches were build more than 200 beautiful homes decorated the area

This time out of the blue - a third applecation, this time by LH Hansen?

they plotted, did things they did not let us know. They kept us inthedark, certainly in Crest view Estates.

Do they care

if property values godown? if we can't sell our homes does any body in the rightmind want to letterly live right next to a gravel pit?

Do they care

if we breath freshoir

if the dust accumelate in the little lungs of

kids - face cancer later on?

Do they care

if we lose our drinking water, most que are on wells, and even if we still have water, will it be contaminated?
Will we get sick? Who then will take care of us?

Do they care

about our safety on the roads?
I witnessed many times that truckdrivers
are not shopping at a stops ian at intersections,
They go to fast They just keep a oing.
Is that because they try to get in another
load before dark?

Do they care about

our broken wind shields? not formy knowledge have they volunteered to pay por it.

Do Heycare

if we cannot sleep at night because of the constant noice?

Jinuite any one to spend anight in my bedroom with the window open.

Send us at least some good ear plugs free of charge ---

We are angry frustrated people, we are fed up, we want to live and breathe just like you.

we came to livenere in 1984.

For 36 years we worked our fingers to the bones we dragged wheel barrels, full of branches up and down the hill we made our place into a theme park, with gnomes, benches to sik on our pathes, landarns, flower boxes. We regular mowed the pathes with our tractor so we had our own trails to walk on we were young then and ambitious.

We build retaining walls, flower beds, vegetable garden We build balkonies, benches, picknick tables.

green drop came every year to control our weeds, we painted the house regular.

We build a splitrail fence. 3 sections at a time every night we went after supper until we had it done all around the property, and we were proud, as we did It ourselves,

We obtained a permit, drove an hour to get to the designated area allowed, to dig trees to replace our dead ones with at least 230 little 1 foot evergreens which NOW are huge Some make good shelter in winter when the deer come through. - , our deer the manney and the two little ones -

was all this work for nothing? would the gravel pit really do thatus? now that we are old, don't we even have the time left to enjoyit? so hurtful.

This letter is long but -- (50) were (36 years)
we want you to know what we went through
THAT, one cannot mention in a sminute presentation

Really now, how unfair is this public meeting zdays before Xman in the midst of the Covid Pandemic.

Whose idea was this?

Poor planning, Idsay. Honestly

Can anyone sit around the Christman tree in good concious and sing Silent night Holy night?

Council members, we pay a lot of taxes, I suggest instead of leaning towards the gravelpit, put in a park, amini golf a succerfield, an outdoor sleating rink. That at least will enhance our area. And all can breathe?

Please no more berms to disquize these pits or place produnick benches where people have their "lunch"? Rather see dogs running with their owners having fun.

It bugs me every time when I pass Birma road to see the broken upside down birdhouses No body ever came to repair them. "They" promised upkeep. Did they? Not!

4) Is L. H promise us the same? When we came and live here in 1984 across from where now the Burnco pitis, there was a long row of beautiful lucious trees growing. The trees were mature and sheltered the road from snow drifts

NOW there are just fallen ones left and stumps, as it hit by a nornedo. I can fell you that gravel dust, that killed them.

How can we bring forth in 5 minutes why we are so angy about gravel pits

Then THIS you should know and readon.

One very dry summer, my neighbour called me and asked me it I saw a bunch of cows on our property. Cows? Yeh Cows? They are pooping all over our place she said.

I went and walked to the back, a heard of 40 or so cows had

bushed through our fence

They were thirsty and (looking for water Our pond was dry and the grass was brown. Where did these cows come from?

To who did they belong? And why not provide them with water? Another neighbor in Crestview Estates came home from holidays. The smell was awful.

He pound a (DEAD COW in the mud)

No explination
No apology
They just let it go. We got the feeling - so what? Do you think Gravel Compagnies are such good herabors? They daim they are!

Let them go dig for gravel where there are no people

5/ Then to top it all of

Does the gravel comp care if there is a dead moose or deer laying in front of their entrance!

Those animals, they are family to us.

They graze on our property, they feel safe here

They drink out of our rain barrel.

One even came and said hello on our deck.

We came face to face through our Kitchen window.

We gave these guys names We recognized every single one including their babies.

We are heartbroken, when we have to call the wildlife people to come and "scoop" them up.

These animals are (displaced) All those gravel pits in our area took their place where they usually roamed. They don't move on as suggested by LH That is why they come to us in our backyards.



- Marvin-

The wording in my letter are humble words, thoughts Somany reasons why we are Opposed to another gravel pit Idon't need to speak my 5 minutes, I would need at least one whole hour, besides the 5 minutes J will leave tomore professional people with better vocabular words

But thank you for reading this letter and listen to my say. Surely it was different from all other correspondence. Hopefully you saw it from a different perspective.

WHY WE ARE OPPOSED. , All ofus.

Sincerely Adri Edwards in Crestview Estates

January 19, 2021

Ailsa Le May, P.Geo.

Plan 8810932, Block 4, Lot 1 Rocky View County, AB

Rocky View County

262075 Rocky View Point Rocky View County, AB T4A 0X2

Attention: Municipal Clerk's Office

Dear Sir or Madam:

RE: Opposition to Application No. PL20200093, BYLAW C-8082-2020

I am submitting this letter of opposition as a landowner and also as a professional geologist with 30 years of geoscience experience.

As a landowner, I **strongly oppose** Application Number PL20200093 for redesignation of the lands located in Section 5, Twp. 26 R2W5, known as the Scott Property from Agricultural, General District, to Direct Control District in order to facilitate an industrial aggregate operation.

I strongly oppose this redesignation of the Scott Property lands for an aggregate operation for the following reasons:

- 1. This operation will severely impact human health and the environment:
 - Expected industrial noise levels are incompatible with a rural residential neighbourhood and far exceed levels acceptable for physical and mental health.
 - Silica dust is a Group 1 carcinogen and will severely impact the health of children, adults, livestock, wildlife, and the surrounding ecosystems.
 - The gravel mine will breach the groundwater table and permanently alter the drinking water source for thousands.
 - Mining will expose the drinking water aquifer to irreparable harm from contamination.
 - The groundwater table will be permanently and irreversibly lowered and this will affect water supply.
 - The lands proposed for redesignation for mining of gravel are within a designated "Environmentally Significant" area and contain 48 wetlands, slopes>15%, a high water table, and riparian setbacks. This area will not be able to be reclaimed. No reclamation plan was presented by the Lehigh Hansen as is required.

- 2. The lack of proper community engagement and consultation by the proponent is completely inadequate, especially for a project of this size with such serious human and environmental health impacts.
- 3. This is a failed project as there is virtually unanimous opposition by the community to the project.

As a landowner and taxpayer, I look to you to honour your duty to the community and vote NO to this application.

Who Am I and What Are my Qualifications?

My name is Ailsa Le May and I live within 2 kilometers of the Scott Property with my family, pets and horses. My ill mother moved in with us 6 months ago to recover from cancer in a quiet setting with help from family. We have a large vegetable garden that is open to family and friends who need a space to grow food. We enjoy our rural setting and all the wildlife (fox, coyotes, deer, moose, ducks, geese, birds) that visit on a daily basis. I get my drinking water from a water supply well on my property, as do all of my adjacent neighbours. On my street, there are 9 individuals who have horses and cattle that rely on the ponds and well water for watering their livestock.

I have a B.Sc. in Geology from the University of Saskatchewan, a Master of Business Administration from Golden Gate University in San Francisco and am currently an M.Sc. candidate at Royal Roads University. I have been a practicing professional geologist for 25 years and hold licenses to Practice Geoscience in Alberta (APEGA P.Geo. member #136562), Saskatchewan, British Columbia, Manitoba, Nunavut, Northwest Territories, and the State of California. My area of expertise is soil and groundwater contamination assessment and remediation.

I am the Corporate Safety Officer at my firm, which means I am responsible for drafting, implementing and following the guidelines that ensure the safety of our staff, our contractors, and the public for all work we carry out associated with a project site. These safety elements include noise evaluation and abatement, dust suppression and mitigation, construction safety, waste management, and contaminated soil and groundwater safe handling and disposal.

Statement of Adoption of Omnibus Submission

I agree with and fully adopt the omnibus submission titled "Landowner Submission, Bylaw C-8082-2020, prepared by John Weatherill, dated January 2021".

Summary and Focus of My Opposition Letter

As a geologist with 30 years of experience, I have significant concerns about the quality of work, missing data, misrepresentations and conclusions presented in the report: "Lehigh Hanson Materials Limited, Scott Property – Hydrogeological Technical Assessment, prepared by AECOM Canada Ltd., dated July 2020" (referred to in my letter as the HTA).

The following conclusions shown in *italicized blue* are presented in the HTA (P.21) by AECOM. My comments are presented in non-italicized red.

"Two main hydrostratigraphic units are present: the Tertiary Sand and Gravel Aquifer and the Paskapoo Aquifer. The Tertiary Sand and Gravel deposits are thick, porous and permeable materials found to generally be dry from top to bottom due to limited recharge. These materials are also restricted by low precipitation and the thick Till blanketing the Project Area. Where present, basal water within the Tertiary Sand and Gravel Aquifer sits on top of the sandstone and siltstone water bearing units of the

Paskapoo Aquifer. During this study, no lateral gradients could be clearly established for the Tertiary Sand and Gravel Aquifer; therefore, this has been interpreted to suggest the two hydrostratigraphic units are isolated from one another." This statement that "the two hydrostatic units are isolated" is false. The proponent's own data as presented in the HTA were misinterpreted and the conclusions are incorrect. The data actually show that basal water is directly connected to the Paskapoo drinking water aquifer.

"A Shale-Siltstone Caprock layer is discontinuously present within the Project Area. The sandstone of the Paskapoo Formation is presumed to be in direct local contact with the Tertiary Sand and Gravel Aquifer where Shale-Siltstone Caprock is absent. The Tertiary Sand and Gravel Aquifer may require additional delineation to confirm the extent and capacity of the aquifer. Pending results of this delineation, dewatering may be considered at later stages of the Phase Six Mining block. The potential impact on water quantity is assumed to be restricted to the basal water within the Tertiary Sand and Gravel Aquifer with no major disruption in the Paskapoo Aquifer. This is due to the anticipated low dewatering rate, the short-term dewatering scheme, and the potential induced recharge of the Paskapoo Aquifer present elsewhere within the pit. Most local residential wells draw water from water bearing units of the Paskapoo Aquifer." These statements are misleading. The report clearly demonstrates that there are no continuous protective layers or caps present above the Paskapoo aquifer. Mining operations will further increase the vulnerability of the aquifer.

"The impacts on groundwater quality are anticipated to be minimal:

- Current quality of the basal water within the Tertiary Sand and Gravel Aquifer does not meet the TDS criteria for drinking water." This statement is false as Federal and Provincial guidelines specifically stipulate that total dissolved solids (TDS) are not valid criteria for determining drinking water. In addition, the aquifer is already under heavy use as drinking water. The basal water is hydraulically connected to the Paskapoo Aquifer. "Although chloride concentrations are low, the salinization process with calcium, magnesium, sulphate and sodium seems to have been occurring locally since 2016 at MW11-02.
 - Historical data from residential water wells adjacent to the Burnco Burma Pit operations (Golder, 1995, 1997, 1998, and 1999) and the results of the 2020 monitoring program conducted at Burnco1-Elderfield also suggest that groundwater quality from the Paskapoo Aquifer is undergoing a salinization process. – The salinization process could be reversed by long-term recharge through the uppermost water bearing units of the aguifer commencing in the early stages of the development." This statement is absolutely false and is based on misinterpretation of the groundwater geochemistry data by AECOM as presented in their own report. The data clearly show that the "salinization process" is representative of freshwater that has travelled deeper and aged through natural processes. AECOM also suggests that the offsite wells to the east would be desalinized by mining operations at the Scott Property, inferring massive water pumping of potentially contaminated water into the drinking water aquifer.
 - o "Groundwater at MW11-02 is also impacted with PHC factions F3 and F4, which may be associated with unknown influences. Though basal water within the Tertiary Sand and Gravel Aquifer may be subject to dewatering, this may benefit groundwater quality through induced recharge and exposure to oxygen, thus promoting some levels of in situ

remediation of the PHC fractions F3 and F4." This statement is incredibly misleading and false. "This phenomenon may extend laterally to remediate potential impacted zones of the uppermost water bearing units of the Paskapoo Aquifer, if hydraulically connected." The statements regarding petroleum hydrocarbon contaminants and remediation are egregious. The concentrations are barely detectable and do not represent contamination from fuel so there is **nothing** to remediate. These statements clearly show a lack of understanding of contaminant hydrogeology.

- "The potential impact on surface water quantity and quality is anticipated to be minimal:
 - The stormwater management system will promote regular infiltration to the unnamed tributary of West Nose Creek." This statement is completely inappropriate as the HTA does not address any stormwater management or dewatering activities. There are zero data associated with it. In addition, this requires expertise from a hydrologist (surface water) not a hydrogeologist (underground water).
 - "Extraction of the aggregate material is also considered to be a clean activity. The limited sources of potential contaminants (e.g., lubricants and fuel) will be managed in accordance to a site-specific SPRP." These statements are wildly misleading and are made without supporting data. In addition, potential contaminants in such an industrial operation are not limited to lubricants and fuels.

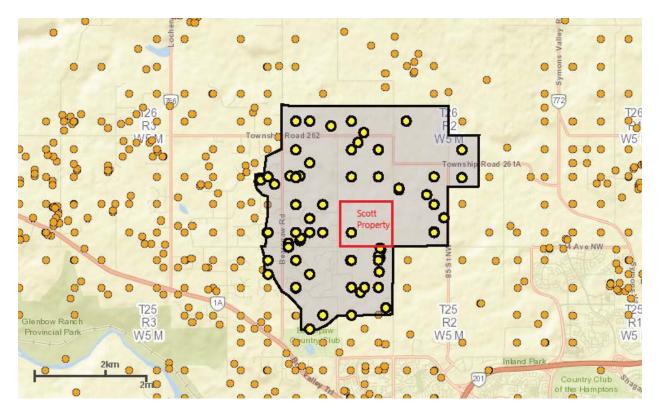
Below I will delve more deeply into the following areas:

- The HTA indicates that a shale-siltstone caprock and clay aquitards protect the Paskapoo Formation which hundreds of drinking water wells rely on. They do not
- The HTA indicates that the basal gravel aquifer is separate from the Paskapoo Formation and is of lower quality. It is not.
- The HTA indicates that removing all of the natural filtering soils/gravels above the Paskapoo Formation does not pose a risk to the Paskapoo Aquifer. It does.
- The HTA is supposed to be a full hydrogeological study of the project. It is not. The data collected were grossly insufficient to support their conclusions.

The Paskapoo Aquifer is a Precious Resource Supplying Drinking to Water Thousands of Albertans

"The Paskapoo Aquifer supports more groundwater wells than any other aquifer system in the Canadian Prairies. Located in a region of rapid population growth and straddling watersheds where no new water licenses are available, this aquifer system is under increasing pressure to provide water supply" (Grasby et al, 2009).

I draw my drinking water from this aquifer as do many others in the area. A quick data pull of the Alberta Water Well Database for the area included in the Rocky View County (RVC) Landowner Circulation Area is shown below:



The yellow circles shown above represent the **333** water well records within the landowner circulation area. As there are so many, they are shown as clusters (one dot represents multiple well records). While not all of them are active water wells, most of them are. The information also shows that there are thousands of additional wells in the area outside the circulation area that could also be affected. I have included the detailed water well report in the appendix so you can look at the data yourselves. This is publicly available information available online (http://groundwater.alberta.ca/WaterWells/d/).

Putting this aquifer at risk by exposing it to industrial gravel operations is not an option if we want to maintain drinking water security.

Geology and Groundwater

Geology controls and protects surface water infiltration to groundwater. Geology also controls how water flows horizontally and vertically through the subsurface. The geology beneath the Scott property consists of topsoil, glacial till and alluvial sands and gravels overlying stratified sedimentary units of the Paskapoo Formation. There is basal gravel water at the bottom of the gravel layer, sitting on top of the Paskapoo bedrock Aquifer. There is no regional-scale flow system associated with the Paskapoo Formation rather it is dominated by local-scale recharge processes, so local recharge is very important and introducing pollution would be locally devastating.

As part of the balanced natural water cycle, water is always on the move above and below the surface of the earth. Precipitation and surface water seep into the ground. This is called recharge. The ground cover and surficial materials act as a filter and slow down the rate at which water infiltrates down to the aquifer. The higher the porosity, the faster water can move. The thinner the cover, the faster it gets through to the aquifer. In Alberta, the acceptable recharge rates (infiltration rates) to use in calculations are 0.012 m/year for fine-grained soils and 0.06 m/year for coarse-grained soils. A fine-grained soil is used where there is at least 1 m thick of cover over

coarse-grained soils (AEP, 2019b). The acceptable values for moisture-filled porosity are 0.168 for fine soil and 0.119 for coarse soil (Table C-2, AEP, 2019a). The average of the two for variable soils is 0.143.

The velocity at which water moves through the ground can be expressed using the equation:

$$V_u = I / \theta_w$$

 V_u = Average Linear Velocity Unsaturated Zone (m/year) I = recharge rate (infiltration rate) (m/year) θ_w = moisture-filled porosity (unitless)

Using the above simplified equation, the velocity at which water would travel downward ranges between 0.0714 m/year and 0.101 m/year, or an average of 0.084 m/year.

Imagine one drop of water that falls to the surface at the Scott Property and seeps into the ground. The drop would take the following time to make its way to the Paskapoo Aquifer, approximately 40 m below:

Thickness of surficial material $(40 \text{ m}) \div \text{Velocity of travel to the aquifer } (0.084 \text{ m/year}) = 476 \text{ years.}$

The drop of water would evolve and undergo changes during those hundreds of years. Any contaminants that may have hitched a ride will get filtered off and undergo biodegradation. Water from deeper groundwater typically has a much longer trip to its destination and thus it is usually more mineralized (higher dissolved solids [TDS])). While shallow groundwater typically has lower levels of TDS, it does have higher levels of calcium, magnesium and iron than deeper wells.

Now remove all the surface soils to the groundwater table:

Thickness of surficial material (0 m) \div recharge rate (0. 084 m/year) = **0** years.

An aquitard is a generally horizontal layer of lower permeability material such as rock or clay that prevents or inhibits water from moving from one aquifer to another. Discontinuous lower permeability layers can slow down the water, change or alter its vertical seepage, but ultimately the water will migrate through discontinuous layers.

Imagine a tarp full of holes and rips and tears upon which you have turned a garden hose. You probably have no expectation that it will hold water, just as a discontinuous geologic layer does not hold back water in the subsurface.

Now imagine spilling some fuel or other contaminant onto the tarp. There is no way to stop that from flowing through the tarp and damage is inevitable, swift, and extensive.

Aguitards Do Not Protect the Aguifer Beneath the Scott Property

AECOM discusses the discontinuous shale-siltstone caprock that they state will protect the Aquifer. They also discuss clay aquitards. The evidence they present does not support that either of these layers offers protection of the Paskapoo Aquifer.

• The caprock as shown in the HTA cross-sections is discontinuous and therefore does not offer protection of the Paskapoo Aquifer. AECOM tries to imply that the caprock is only absent in a few discrete areas. The data presented are simply not sufficient to support this. The majority of the logs identify "bedrock" at the base of the hole but do not specify what it is and no mapping has been attempted to identify specific stratigraphic units.

• Moreover, there is absolutely no evidence that the shale-siltstone caprock when present is actually acting as a barrier layer because there is no actual borehole data from the underlying Paskapoo, and no nested well pairs to assess vertical connectivity. No acknowledgement has been made that sub-vertical fracturing in the Paskapoo means that units with low matrix permeability cannot be assumed to be acting as a confining layer. The strongest evidence presented about the connectivity of the Basal water and the Pasakapoo aquifer is the similarity in water levels between the Project area wells in the Tertiary sands and gravels and the regional wells in the Pasakapoo Aquifer, which actually suggests that two units are hydraulically contiguous.

The caprock is not fully investigated to verify properties as a viable aquitard and is discontinuous, therefore cannot ensure protection of the Paskapoo Aquifer.

- AECOM identifies till and clay aquitards in the HTA in their Figures 5 and 6. Please understand that these cross-sections have been drafted by AECOM based on data that are NOT PRESENTED in the report. AECOM even refers the reader to Appendix A to look at the log for borehole log 94-02, but it is absent. In fact, only a handful of logs are presented, once again this is not acceptable practice and does not meet the standards required. It is not possible to create these diagrams without data and based on the poor lithologic detail in the few borehole logs presented in Appendix A of the HTA, defining clay layers would not have been possible. Note that no geological logs or information is included for the boreholes that show the discontinuous "clay aquitards". This is very misleading presenting information to the readers that implies they have performed work, when no actual data are included in their report. In Alberta, where a domestic use aquifer is at risk of contamination there must be:
 - 1. At least 5 metres of massive, undisturbed, unfractured fine-grained material meeting appropriate guidelines with a bulk hydraulic conductivity that is less than or equal to 1 x 10^{-7} m/s, or
 - 2. An equivalent thickness of natural, undisturbed geologic material that is more than 5 meters thick and is supported by technical information regarding the lithological properties prepared by the professional conducting the site assessment and accepted by Alberta Environment and Parks (AEP, 2019).

Even if clay aquitards existed as AECOM describes, they are discontinuous, too thin to offer adequate protection, and are proposed to be dug out anyway.

The Basal Gravel Water is in Communication with the Paskapoo Aquifer

Not only is there no evidence of aquitards protecting the Paskapoo, there actually is evidence that there is communication between the basal gravel water and the Paskapoo Aquifer. One of the main points that AECOM tries to push in the HTA is that there are two hydrostratigraphic units with different groundwater, although the basal gravel sits directly on top on the Paskapoo Formation. They characterize the basal gravel water as lower quality with high Total Dissolved Solids (TDS), salinization, and fictitious hydrocarbon contamination. They use these assertions of lower quality to suggest it is distinct and separate from the Paskapoo water.

This is absolutely false, and an evaluation of the geochemical data presented by AECOM support the opposite. Virtually no discussion on the geochemistry of the groundwater was present in the HTA.

AECOM states on P. 17 of the HTA that the groundwater levels in the drinking water wells adjacent to the property are the same as the levels measured in the basal water:

"The nearest water wells are within the SW quadrant of Section o5 and located outside the Project Area. These wells draw water from the water bearing units of the Paskapoo Aquifer and are at least 30 m deeper than the basal water within the Tertiary Sand and Gravel Aquifer at MW11-o2. The hydraulic head of the water wells south of Burma Road appears to be high (e.g., approximately 30 m above screen elevations) suggesting that groundwater may be the same elevation as the basal water within the Tertiary Sand and Gravel Aquifer."

Further on P. 17 AECOM makes this statement that interaction of the basal gravel water and the Paskapoo Aquifer water is unknown but if they are interacting it is not a big deal:

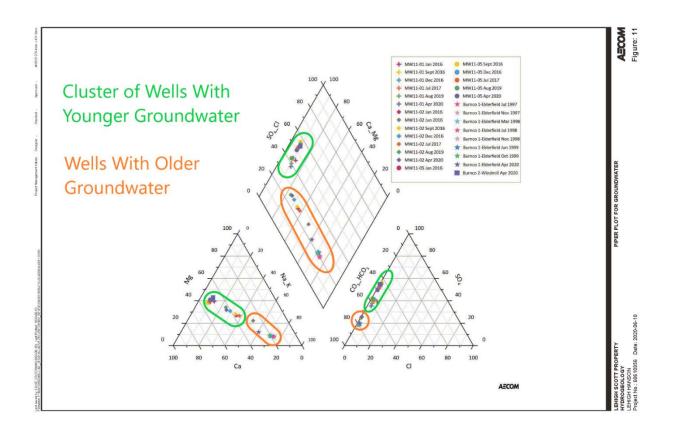
"The interaction between the basal water within the Tertiary Sand and Gravel Aquifer and deeper water bearing units of the Paskapoo Aquifer could not be confirmed. In the event that the basal water within the Tertiary Sand and Gravel Aquifer and the uppermost water bearing units of the Paskapoo Aquifer are hydraulically interacting, the impact associated with potential dewatering of the basal water within the Tertiary Sand and Gravel Aquifer is considered negligible."

And finally, AECOM concludes that the basal gravel water is unsuitable for drinking water. They also imply that the chemistry of the drinking water within the Paskapoo needs to be "remediated." This is absolutely false as they fail to recognize that the basal water and the Paskapoo drinking water are related and the chemistry in the groundwater represents natural processes within a freshwater system:

"Current quality of the basal water within the Tertiary Sand and Gravel Aquifer does not meet the TDS criteria for drinking water. Although chloride concentrations are low, the salinization process with calcium, magnesium, sulphate and sodium seems to have been occurring locally since 2016 at MW11-02.

- Historical data from residential water wells adjacent to the Burnco Burma Pit operations (Golder, 1995, 1997, 1998, and 1999) and the results of the 2020 monitoring program conducted at Burnco1-Elderfield also suggest that groundwater quality from the Paskapoo Aquifer is undergoing a salinization process.
- The salinization process could be reversed by long-term recharge through the uppermost water bearing units of the aquifer commencing in the early stages of the development."

From these above statements it is clear that the AECOM is not confident in their conclusions that there is separation between basal gravel water and the Paskapoo drinking water aquifer. This uncertainty is justified since no investigation was actually carried out in the Paskapoo. However, if we look at the data as presented in their report it is clear that the groundwater from the basal gravel and the Paskapoo are one and the same.



The piper plots shown above are pulled from Figure 11 of the HTA. Piper plots are a graphical way to represent groundwater geochemistry. There are 5 wells included in the plots; three from the Scott Property (11-01, 11-02, & 11-05) and two from the Burnco property to the east. AECOM states that the Burnco wells are representative of the Paskapoo and the Scott property wells of the basal gravel groundwater. In fact, the chemistry plots shown are a textbook example of freshwater that has undergone aging and ion exchange as it moves vertically and laterally through the aquifer over time. Clusters (11-01, 11-05, and Burnco2-Windmill) indicate similar younger freshwater, and the chemistry in 11-02 and Burnco 1-Elderfield represent older and deeper water. This is further supported by the groundwater elevation measurements present by AECOM in Table 5 of the HTA and shown below.

Well Name	Groundwater Elevation (Apr. 2020) in metres above sea level
11-01	1228.50
11-02	1231.15
Burnco2-Windmill	1227.30
11-05	1207.92
Burnco1-Elderfield	1172.38 (deepest/oldest)

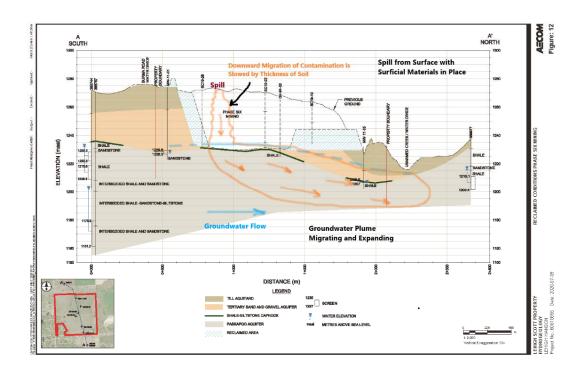
AECOM suggests that the offsite wells to the east would be 'desalinized' by mining operations at the Scott Property, inferring massive water pumping of potentially contaminated water into the drinking water aquifer. As the data above shows, the wells' chemistry is typical of freshwater undergoing aging and migration. To suggest altering natural drinking water by pumping millions of gallons of water into an aquifer to unnecessarily alter its natural chemistry and introduce contaminants is outrageous and reckless.

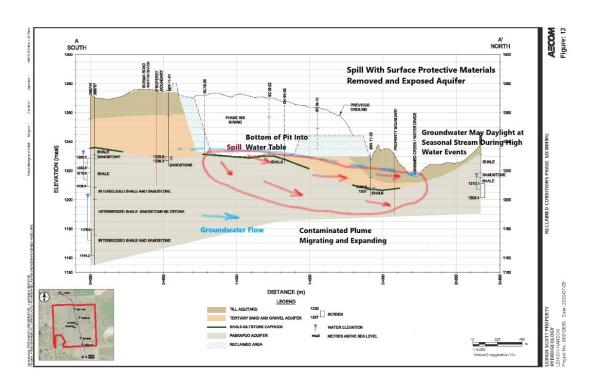
And finally, AECOM states that petroleum hydrocarbons have impacted the aquifer and infer that it is contaminated and therefore removing the protective soils to expose the groundwater to oxygen would help "remediate it". These statements are egregious and false. Petroleum hydrocarbons consist of different fractions (F1, F2, F3, & F4). It is unusual to analyse F3 and F4 in groundwater due to their low aqueous solubility and subsequently they do not have associated regulatory guidelines. F3 and F4 can represent biogenic (natural) or anthropogenic (man-made) sources but typically with a lack of F2 fraction present in samples (there is no F2 in the groundwater), the fractions are more typically seen in biogenic sources such as peat or manure. Regardless, the values in 11-02 are barely above the laboratory method-detection limit. Remediation would neither be required nor warranted and suggesting such is ludicrous.

Removing the Surficial Materials to Expose the Aquifer to Pollution Could be Devastating

Mining into the drinking water aquifer will permanently alter the groundwater table, groundwater chemistry, and water balance of the largest drinking water Aquifer in Western Canada. In addition, removing the protective surficial layers from on top of the aquifer exposes the Aquifer to irreparable damage.

For example, in Alberta, a <u>reportable</u> fuel spill is anything 200 L and above. To put this in perspective, <u>one L of gasoline can contaminate one million litres of water (Government of Canada, n.d.)</u>. With no protective soil cover, contamination will breach the Paskapoo Aquifer immediately, dissolving into the groundwater and fouling drinking water, moving and spreading as contaminated water and potentially discharging to streams and wetlands as it migrates. Drinking water wells will draw in the toxic water. Figure 12 of the HTA was used to illustrate this point. Based on the groundwater elevation data shown at the Scott Property, it is possible that groundwater and the unnamed creek seasonally interact.

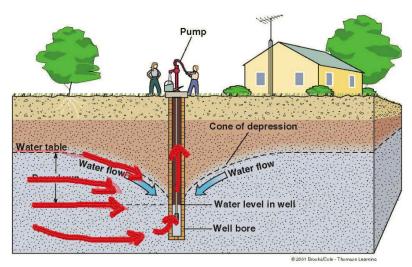




In addition, nearby water wells will draw the contaminated water into homes and permanently ruin the drinking water.

Pumping wells create a cone-of-depression in the water table

Contamination Will be Pumped into the Well



http://www.uwsp.edu/geo/faculty/ozsvath/images/cone_of_depression.htm

Groundwater Inflow to the Scott Pit and Permanent Lowering of The Water Table

Excavating high volumes of gravel and breaching the water table as proposed by Lehigh Hanson for their gravel pit will permanently alter the groundwater table and the natural water balance. "Whenever a mine is operated below the water table, water inflow occurs from the surrounding layers towards the mining excavation. When a pit penetrates an aquifer, significant amounts of groundwater flow occur toward the pit" (Aryafar et al., 2007). As explained above, water above and below the surface of the earth is in balance. Just as removal of the surficial layers of protective materials above the groundwater table will increase the flow from surface, so will it increase the speed and volume of water moving horizontally into the pit. Add dewatering onto that and you have a bigger "pull" on the water table from the surrounding land, permanently lowering the groundwater table.

Reclamation of a pit of this size will not be possible, nor is it proposed by Lehigh Hanson as required by the Rocky View County Plan (Rocky View County, 2018). The future water management issues will be devastating to the environment, the community, and the taxpayers.

But the precipitation and recharge from surface soils will carry on in the surrounding area as before; the travel time of 500 or so years is not changing, and nature will not be able to keep up with pumping and water pull into the pit. Increased vertical hydraulic pressure will be put on wetlands, and this may result in ponds and streams eventually drying up. My family and horses rely on these water sources for drinking. Albertans have a right to maintain a safe drinking water supply. Potential impacts are devastating and irreversible. The mining will permanently lower the groundwater table, and this is prohibited under Section 8.3.15 of the Bearspaw Area Structure Plan (Rocky View County, 1994).

Conclusions

As a landowner, <u>I strongly oppose</u> Application No. PL20200093, BYLAW C-8082-2020 for the following reasons:

- The proposed industrial gravel mine will have huge adverse effects on human health and the environment.
- An industrial gravel mine is incompatible with a rural residential neighborhood.
- The proposed mine will permanently and irreversibly lower the groundwater table.
- Removal of the protective soils above the Paskapoo drinking water aquifer will put the drinking water supply of thousands of Albertans at risk of irreparable harm from pollution.
- Reclamation will not be possible and has not even been proposed by the proponent as required by the County.

In addition, as a professional geologist with 30 years of professional experience, I find the following:

• The hydrogeological study and report (HTA) put forth by AECOM on behalf of Lehigh Hanson is unworthy of any credit and reliance.

I look to you to honour your duty to the community and vote NO to this application.

Sincerely,

Ailsa Le May, P.Geo.

Resident of RVC

References

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- Alberta Environment and Parks, 2019a. Alberta Tier 1 Soil and Groundwater Remediation Guidelines, January 10, 2019.
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- Aryfar, A, Ardejani, F.D., Singh, R., and Shkri, B.J., 2007. Prediction of Groundwater Inflow and Height of the Seepage Face in a Deep Open Pit Mine Using Numerical Finite Element Model and Analytical Solutions, *IMWA Symposium 2007: Water in Mining Environments*, R. Cidu & F. Frau (Eds), 27th 31st May 2007, Cagliari, Italy.
- Government of Alberta, n.d. Alberta Water Well Information database, Retrieved on January 13, 2021 from (http://groundwater.alberta.ca/WaterWells/d/).
- Government of Canada, n.d. *Groundwater contamination*, retrieved from https://www.canada.ca/en/environment-climate-change/services/water-overview/pollution-causes-effects/groundwater-contamination.html
- Grasby, S. E., Chen, Z., Hamblin, A. P., Wozniak, P. R. J., and Sweet, A.R., 2009. Regional characterization of the Paskapoo bedrock aquifer system, southern Alberta. *Canadian Journal of Earth Sciences*, 13 February 2009.
- Rocky View County, 2018. Rocky View County Plan, Bylaw C-7280-2013, Amended April 10, 2018.
- Rocky View County, 1994. Rocky View County Bearspaw Area Structure Plan, Adopted 1994.

Appendix

Alberta Water Well Information Database Search, January 13, 2021 and Additional Discussion as to Why the HTA Cannot Be Relied Upon



View in Metric

Export to Excel

Groundwater Wells

Please click the water Well ID to generate the Water Well Drilling Report.

GIC Well	LSD	SEC	TWP	RGE	М	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
<u>341566</u>	SE	6	26	2	5	BECK DRILLING & ENVIRONMENTAL SERVICES LTD.	2003-02-11	262.00	Existing Well- Decommissioned	Domestic				WALIACHE, BALBAR			0.00
349016	SW	6	26	2	5	AARON DRILLING INC.	1989-04-13	300.00	New Well	Domestic		9		MURRY, WAYNE	125.00	4.50	6.62
349017	SW	6	26	2	5	AARON DRILLING INC.	1989-04-06	300.00	Test Hole- Decommissioned	Unknown		7		MURRY, WAYNE			0.00
349165	NW	32	25	2	5	AARON DRILLING INC.	1991-03-07	230.00	New Well	Domestic		6		ALEXANDER, PERCY	135.00	8.00	6.62
349193	SW	32	25	2	5	AARON DRILLING INC.	1989-02-08	260.00	New Well	Domestic		8		FELTHAM HLDG LTD	170.00	7.00	6.62
349194	SW	32	25	2	5	AARON DRILLING INC.	1989-12-21	300.00	New Well	Domestic		8		FELTHAM HLDG LTD	205.00	5.00	6.62
349195	SW	32	25	2	5	AARON DRILLING INC.	1989-02-13	285.00	New Well	Domestic		8		FELTHAM HLDG	195.00	5.00	5.56
349196	SW	32	25	2	5	AARON DRILLING INC.	1989-01-19	300.00	New Well	Domestic		15		FELTHAM HLDG	205.00	3.00	6.62
349197	SW	32	25	2	5	AARON DRILLING INC.	1989-01-02	300.00	New Well	Domestic		11		FELTHAM HLDG	175.00	5.00	6.62
349254	SE	1	26	3	5	AARON DRILLING INC.	1988-09-21	155.00	New Well	Domestic		11		LANDOVER HLDG LTD	125.00	10.00	6.62
349276	SW	32	25	2	5	AARON DRILLING INC.	1988-05-12	300.00	New Well	Domestic		11		STOCKWOOD, DONALD	175.00	3.00	6.62
349572	NE	32	25	2	5	AARON DRILLING INC.	1987-03-13	200.00	New Well	Domestic & Stock		10		THOMPSON, GORDON	140.00	10.00	6.62
349590	SW	6	26	2	5	AARON DRILLING INC.	1985-11-13	225.00	New Well	Domestic		7		SCHLEFENDORF, HARRY	10.00	5.00	6.62
349667	NW	32	25	2	5	AARON DRILLING INC.	1994-07-26	208.00	New Well	Domestic		9	17	ALEXANDER, PERCY #2484	149.40	6.00	6.62
<u>349706</u>	SW	6	26	2	5	AARON DRILLING INC.	1985-07-18	200.00	New Well	Domestic		12		BIGGAR,EDIE/BIGFEILD INVEST	140.00	10.00	6.62
<u>349707</u>	SW	6	26	2	5	AARON DRILLING INC.	1986-04-03	190.00	New Well	Domestic		9		BIGGAR,EDIE/BIGFEILD INVEST	140.00	10.00	6.62
<u>349708</u>	SW	6	26	2	5	AARON DRILLING INC.	1986-04-14	250.00	New Well	Domestic		9		BIGGAR,EDIE/BIGFEILD INVEST	125.00	3.00	6.62
<u>349710</u>	SW	6	26	2	5	AARON DRILLING INC.	1985-07-12	250.00	New Well	Domestic		9		BIGGAR,EDIE/BIGFEILD INVEST	130.00	3.00	6.62
<u>349740</u>	NE	8	26	2	5	AARON DRILLING INC.	1986-01-08	210.00	New Well	Stock		8		CHURCH, STAN	125.00	10.00	6.62
349741	SW	31	25	2	5	AARON DRILLING INC.	1985-12-20	240.00	New Well	Stock		8		CHURCH, STAN (CHURCH SIMMENTAL	175.00	10.00	6.62

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GIC Well ID	LSD	SEC	TWP	RGE	М	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
350178	NE	30	25	2	5	ALKEN BASIN DRILLING LTD.	1990-03-27	420.00	New Well	Domestic		18		MURPHY, GRANT	187.00	6.00	5.50
350179	SE	32	25	2	5	AARON DRILLING INC.	1990-02-25	340.00	New Well	Domestic		13		BUCHWITZ, ALFRED #1322	145.00	1.50	5.56
<u>350180</u>	SE	32	25	2	5	AARON DRILLING INC.	1990-03-05	360.00	New Well	Domestic		15		BUCHWITZ, ALFRED #1320	165.00	1.50	6.62
<u>350366</u>	NW	29	25	2	5	ALKEN BASIN DRILLING LTD.	1990-03-22	430.00	New Well	Domestic		17		WHITAKER, VAN	320.00	15.00	5.50
<u>350457</u>	SW	6	26	2	5	RURAL WATER WELL SERVICES (1983) LTD.	1990-02-22	250.00	New Well	Domestic		12		LAING, R	140.00	6.00	5.56
<u>350459</u>	SW	6	26	2	5	RURAL WATER WELL SERVICES (1983) LTD.	1990-03-06	405.00	Dry Hole	Domestic		14		LANG, R.			0.00
<u>350460</u>	SW	6	26	2	5	RURAL WATER WELL SERVICES (1983) LTD.	1990-03-18	315.00	Dry Hole	Domestic		9		LANG, R.			0.00
350567	NW	29	25	2	5	AARON DRILLING INC.	1990-04-17	390.00	New Well	Domestic		10		DIEGEL, GIL #1382	249.00	6.00	6.62
350568	NW	29	25	2	5	AARON DRILLING INC.	1990-04-24	460.00	New Well	Domestic		15		DIEGAL,GILBERT #1387	215.00	5.00	7.00
350570	NE	30	25	2	5	ALKEN BASIN DRILLING LTD.	1990-04-04	320.00	New Well	Domestic		18		MCCLEOD, DON	150.00	20.00	5.50
350737	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1990-05-09	300.00	New Well	Domestic		21		SPRATT, LORI	175.00	4.00	5.50
350739	NE	4	26	2	5	ALKEN BASIN DRILLING LTD.	1990-05-03	300.00	New Well	Domestic		9		MOSCHENROSS, CARL	195.00	4.00	5.50
350742	SE	12	26	3	5	ALKEN BASIN DRILLING LTD.	1990-05-02	440.00	New Well	Domestic		24		SINCLAIR, DAVID	222.00	8.00	5.50
350869	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1990-05-15	240.00	New Well	Domestic		7	9	SUNDBERG, BOB	164.00	3.50	5.50
350870	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1990-05-16	300.00	New Well	Domestic		5	10	SUNDNBERG, BOB	209.00	15.00	5.50
350871	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1990-05-18	340.00	New Well	Domestic		14	10	GRANACHER, JOE	186.00	8.00	5.50
351492	SW	6	26	2	5	RURAL WATER WELL SERVICES (1983) LTD.	1990-04-30	160.00	New Well	Domestic		8		HARRISON, A	120.00	6.00	5.56
351515	SE	9	26	2	5	DEN-ALTA DRILLING LTD.	1989-12-15	200.00	Dry Hole	Domestic		3		SCHULTZ, LEN			0.00
<u>351516</u>	SE	9	26	2	5	DEN-ALTA DRILLING LTD.	1989-12-18	150.00	New Well	Domestic		2		SCHULTZ, LEN	90.00	5.00	5.56
<u>351559</u>	NE	30	25	2	5	ELGIN EXPLORATION COMPANY LIMITED	1990-05-26	440.00	Dry Hole	Domestic		18		MCDONALD, GARY#HOLE			5.56

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GIC Well ID	LSD	SEC	TWP	RGE	M	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
<u>351813</u>	SE	12	26	3	5	ALKEN BASIN DRILLING LTD.	1990-04-27	380.00	Existing Well- Decommissioned	Domestic		14		SINCLAIR, DAVID	0.00	2.00	0.00
<u>351891</u>	NE	30	25	2	5	ELGIN EXPLORATION COMPANY LIMITED	1990-07-06	480.00	Dry Hole	Domestic		7		MCDONALD, GARY			0.00
352123	NW	32	25	2	5	ALKEN BASIN DRILLING LTD.	1990-09-11	290.00	New Well	Domestic		10		CLAYDEN, NANCY	218.00	15.00	5.50
352126	SE	1	26	3	5	ALKEN BASIN DRILLING LTD.	1990-09-13	300.00	New Well	Domestic		10		BIGGAR, EDIE	191.00	5.00	5.50
<u>352242</u>	NE	30	25	2	5	C.H. NELSON DRILLING LTD.	1990-09-18	300.00	Existing Well- Decommissioned	Domestic		14		MUZYKA, JOHN W.	190.00	5.00	5.56
352738	NW	32	25	2	5	AARON DRILLING INC.	1990-10-15	240.00	New Well	Domestic		8		ALEXANDER, PERCY	138.00	6.00	6.62
<u>353163</u>	5	7	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1990-10-17	222.00	New Well	Domestic		13		BERNAKEVITCH, JOE	140.00	8.00	6.62
353371	NE	30	25	2	5	AARON DRILLING INC.	1990-09-08	460.00	New Well	Domestic		15		MCDONALD, GARY	140.00	4.00	5.56
353416	NW	29	25	2	5	UNKNOWN DRILLER		290.00	Chemistry	Domestic				HICKS, W.R			0.00
<u>354217</u>	SW	6	26	2	5	C.H. NELSON DRILLING LTD.	1990-12-05	320.00	New Well	Domestic		17		HOLZEL, SEBASTIAN/ERIKA	145.00	6.50	5.56
<u>354218</u>	SW	6	26	2	5	C.H. NELSON DRILLING LTD.	1990-11-19	260.00	New Well	Domestic		20		HOLZEL, SEBASTIAN/ERIKA	140.00	7.00	5.56
<u>354362</u>	SE	1	26	3	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1989-05-09	240.00	New Well	Domestic		19		PAGE, JIM	160.00	6.50	6.62
354519	SE	32	25	2	5	ALKEN BASIN DRILLING LTD.	1990-11-22	360.00	New Well	Domestic		11		JOHNSTON, YVONNE	150.00	4.50	5.50
354520	SE	32	25	2	5	ALKEN BASIN DRILLING LTD.	1990-11-21	240.00	New Well	Domestic		9		JOHNSTON, YVONNE	170.00	5.00	5.50
<u>355937</u>	NW	32	25	2	5	AARON DRILLING INC.	1991-03-11	230.00	New Well	Domestic & Stock		10		DALTORIO, ELISEO #1474	130.00	8.00	6.62
<u>356081</u>	SW	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1989-05-26	220.00	New Well	Domestic		15		SMITH, BOB	168.00	6.00	6.62
<u>356376</u>	SE	32	25	2	5	UNKNOWN DRILLER		220.00	Chemistry	Domestic				MORROW, ROBERT			0.00
<u>356388</u>	NE	4	26	2	5	UNKNOWN DRILLER		175.00	Chemistry	Domestic				UPSHAW, BLAINE			0.00
<u>356389</u>	SW	6	26	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				KNOLL, KIM			0.00
356390	SW	7	26	2	5	UNKNOWN DRILLER		280.00	Chemistry	Domestic				BORESKI, CHARLES			0.00

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GIC Well	LSD	SEC	TWP	RGE	м	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
357227		1		3	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1985-03-27	` '	New Well	Domestic		13		BIGGAR HEIGHTS CO-OP ASSOC #1	(,	(.9p)	6.62
357370	SE	6	26	2	5	ELGIN EXPLORATION COMPANY LIMITED	1991-05-10	320.00	New Well	Domestic		8		SIMONS, BARRY	146.00	5.00	5.56
<u>357371</u>	SE	6	26	2	5	ELGIN EXPLORATION COMPANY LIMITED	1991-05-13	340.00	New Well	Domestic		10		SIMONS, BARRY	127.00	3.00	5.56
<u>357653</u>	NE	4	26	2	5	AERO DRILLING & CONSULTING LTD.	1991-05-16	400.00	New Well	Domestic		21		UPSHAW, BLAINE	290.00	10.00	5.50
<u>358493</u>	3	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1991-07-04	180.00	New Well	Domestic		17		LAING, R.#WELL 1	115.00	18.00	6.62
<u>358494</u>	3	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1991-07-23	500.00	New Well	Domestic		24		LAING, R.#WELL 2	140.00	2.00	6.62
<u>358746</u>	SW	32	25	2	5	AERO DRILLING & CONSULTING LTD.	1991-06-20	320.00	New Well	Domestic		12		SWIHART, GARRET	191.00	1.00	5.56
<u>359643</u>	SW	32	25	2	5	AERO DRILLING & CONSULTING LTD.	1991-07-04	400.00	New Well	Domestic		18		SWIHART, GARRET	181.00	1.50	5.56
360076	NE	4	26	2	5	KRIEGER DRILLING LTD.	1991-08-03	480.00	New Well	Domestic		14		RICHTER, CHRIS	273.00	10.00	6.62
<u>360655</u>	NE	4	26	2	5	KRIEGER DRILLING LTD.	1991-07-31	160.00	Test Hole- Decommissioned	Domestic		4		RICHTER, CHRIS			6.62
361460	SE	32	25	2	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				SIRUCEK, RUSSEL			0.00
<u>361467</u>	SW	6	26	2	5	UNKNOWN DRILLER		295.00	Chemistry	Domestic				WALKER, BRUCE			0.00
<u>361472</u>	SE	1	26	3	5	ALKEN BASIN DRILLING LTD.	1988-11-22	220.00	New Well	Domestic		16		BIGGAR E. HUDSON \REDMAN, M.	150.00	4.00	5.50
<u>362061</u>	SE	32	25	2	5	AERO DRILLING & CONSULTING LTD.	1992-01-08	400.00	New Well	Domestic		25		MUNROE, D	181.00	1.50	5.50
363678	SE	4	26	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				LOUDEN, LONA			0.00
363679	NW	8	26	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				ROSENKE, JODY/DAVID			0.00
<u>364092</u>	4	9	26	2	5	DEN-ALTA DRILLING LTD.	1992-04-08	200.00	New Well- Decommissioned	Stock		2		MILLER, VIC			0.00
364093	4	9	26	2	5	DEN-ALTA DRILLING LTD.	1992-04-08	115.00	New Well	Stock		4		MILLER, VIC	85.00	6.00	5.56
<u>366428</u>	SW	32	25	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				LYONS, MICHAEL/MICHELLE			0.00
<u>367433</u>	3	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1992-11-03	240.00	New Well	Domestic		8		BOISVERT, J.S.	140.00		6.62

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GIC Well ID	LSD	SEC	TWP	RGE	м	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
<u>368923</u>	SW	18	26	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				GARYK, MITCH/MAUREEN			0.00
372402	NW	32	25	2	5	KRIEGER DRILLING LTD.	1993-06-10	220.00	New Well	Domestic		10		D'ALTORIO, ELISEO	162.00	10.00	6.62
<u>376329</u>	SE	12	26	3	5	BIG QUILL DRILLING LTD.	1985-03-09	320.00	New Well- Decommissioned	Unknown		15		ALTA ENV #TH 1	0.00		6.62
376330	SE	12	26	3	5	BIG QUILL DRILLING LTD.	1985-02-15	37.00	New Well	Domestic		4		ALTA ENV #WELL 2	30.00	8.00	6.62
376332	SE	12	26	3	5	BIG QUILL DRILLING LTD.	1985-02-14	140.00	Test Hole	Unknown		4		ALTA ENV #TH 1	30.00	0.50	5.56
<u>376333</u>	SE	12	26	3	5	BIG QUILL DRILLING LTD.	1985-03-11	400.00	Test Hole- Decommissioned	Unknown		11		ALTA ENV #TH 2	0.00		6.62
<u>376576</u>	NE	6	26	2	5	NORTHERN WATER SUPPLY CO.	1975-07-31	166.00	New Well	Domestic	<u>3</u>	11		D&S INVESTMENTS#HARVEY PLACE	138.00	15.00	5.50
<u>376576</u>	NE	6	26	2	5	NORTHERN WATER SUPPLY CO.	1975-07-31	166.00	New Well	Domestic	3	11	44	D&S INVESTMENTS#HARVEY PLACE	134.70	5.00	5.50
<u>376576</u>	NE	6	26	2	5	NORTHERN WATER SUPPLY CO.	1975-07-31	166.00	New Well	Domestic	<u>3</u>	11	29	D&S INVESTMENTS#HARVEY PLACE	139.80	6.80	5.50
376582	SW	6	26	2	5	PARSONS DRLG	1975-07-31	249.00	New Well	Domestic	1	6		LAING, ROLAND	123.00	10.00	7.00
376582	SW	6	26	2	5	PARSONS DRLG	1975-07-31	249.00	New Well	Domestic	1	6	41	LAING, ROLAND	130.60		7.00
376615	SW	7	26	2	5	DEL'S DRILLING	1979-05-17	183.00	New Well	Domestic	<u>3</u>	13		BERNAKAVITH, JOE	160.00	18.00	7.00
376627	SW	8	26	2	5	DEL'S DRILLING	1984-04-01	201.00	New Well	Domestic		10		WENNGATZ CONSTR			7.00
<u>377351</u>	NE	36	25	3	5	AERO DRILLING & CONSULTING LTD.	1993-11-10	300.00	New Well	Domestic		17		SUNDBERG, BOB	225.00	12.00	5.50
<u>377356</u>	6	7	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1993-11-12	340.00	New Well	Domestic		21	22	BERNAKEVITCH, J.	110.00	6.10	6.62
<u>385002</u>	NE	4	26	2	5	PEE WEE DRILLING (2004) LTD.	1994-05-30	180.00	New Well	Domestic		5	22	RICHTER, H. CHRIS	113.20	4.00	5.56
388244	NW	29	25	2	5	STAR DRLG CO	1974-04-01	305.00	New Well	Unknown				PETERS, PETE	210.00	4.00	0.00
388245	NW	29	25	2	5	DEL'S DRILLING	1976-08-20	315.00	New Well	Domestic		11		FELTHAM HLDG	225.00	2.20	7.00
<u>388248</u>	NW	29	25	2	5	DEL'S DRILLING	1978-12-05	340.00	New Well	Domestic		17		DUBORG, KLAUS/UY, VICTOR	220.00	2.50	7.00
<u>388251</u>	NW	29	25	2	5	M&M DRILLING CO. LTD.	1980-03-06	410.00	New Well- Decommissioned	Domestic		22		JOUDRIE, H.E.			0.00

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<u>388254</u>	NW	29	25	2	5	M&M DRILLING CO. LTD.	1980-02-27	497.00	New Well- Decommissioned	Domestic		23		JOUDRIE, H.E.			0.00
<u>388261</u>	NW	29	25	2	5	NORTHERN WATER SUPPLY CO.	1980-07-02	345.00	New Well	Domestic & Stock		16		D&S INVESTMENTS	195.00	4.00	5.50
388265	NW	29	25	2	5	M&M DRILLING CO. LTD.	1980-03-12	397.00	New Well	Domestic		22		JOUDRIE, HE	317.00	4.00	0.00
388272	NW	29	25	2	5	DEL'S DRILLING	1978-11-22	281.00	New Well	Domestic		7		FELTMAN, DOUG	210.00	8.00	7.00
388275	NW	29	25	2	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				HARRIS, DAVE			0.00
388277	NW	29	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1987-10-22	395.00	New Well	Domestic		12		HICKS, BOB	205.00	4.50	5.50
388281	NW	29	25	2	5	MANORA DRILLING SERVICE	1987-07-30	188.00	New Well	Domestic		11		FELTMAN, DOUG	156.00	14.00	7.00
388285	NW	29	25	2	5	ALKEN BASIN DRILLING LTD.	1988-06-27	360.00	New Well	Domestic		15		EADIE, JOHN	200.00	8.00	5.50
388292	NW	29	25	2	5	ALKEN BASIN DRILLING LTD.	1988-05-02	360.00	New Well	Domestic		19		EADIE, JOHN			0.00
<u>388293</u>	NW	29	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1989-09-13	290.00	New Well	Unknown		8		GRAY, L.	220.00	6.00	5.50
388296	NW	29	25	2	5	UNKNOWN DRILLER		395.00	New Well	Domestic				WASSON, JOHN W.			0.00
<u>388478</u>	NE	30	25	2	5	NORTHERN WATER SUPPLY CO.	1980-05-30	340.00	Test Hole	Domestic		15		D&S INVESTMENTS LTD #1	195.00	3.00	2.50
388576	NE	30	25	2	5	DEL'S DRILLING	1974-05-01	220.00	New Well	Domestic		9		DANIELS, DENNIS	177.00	15.00	0.00
388578	NE	30	25	2	5	FLINN DRILLING LTD.	1972-06-01	250.00	New Well	Domestic		7		MUZYKA, J.	162.00	4.00	0.00
388582	NE	30	25	2	5	FLINN DRILLING LTD.	1972-07-01	278.00	New Well	Domestic		8		MUZYKA, J.	155.00	10.00	0.00
388584	NE	30	25	2	5	DEL'S DRILLING	1973-01-01	307.00	New Well	Domestic		9		MCLEOD, DON	248.00	10.00	0.00
<u>388585</u>	NE	30	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1989-05-02	200.00	New Well	Domestic		7		MUZYKA, JOHN	160.00	6.00	5.50
388592		30	25	2	5	UNKNOWN DRILLER		173.00	Chemistry	Domestic				VLA	163.00		0.00
388595	SW	31	25	2	5	PARSONS DRLG	1974-04-29	246.00	New Well	Domestic		11		CHURCH, STAN	165.00	5.00	7.00
388629	SW	31	25	2	5	NORTHERN WATER SUPPLY CO.	1977-04-28	312.00	New Well	Stock		15		CHURCH, STAN	160.00	5.00	5.56

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388632	SW	31	25	2	5	DEL'S DRILLING	1979-07-07	350.00	Deepened	Unknown		4		CHURCH, STAN	166.00	5.00	
388635	NW	31	25	2	5	NORTHERN WATER SUPPLY CO.	1976-07-12	240.00	New Well	Stock		17		CHURCH, STAN	172.00	7.00	5.50
388639	NW	31	25	2	5	FLINN DRILLING LTD.	1971-05-01	180.00	New Well	Domestic		8		BRAYBROOK, J.N.	124.00	8.00	0.00
388641		31	25	2	5	TWO WAY DRLG	1975-09-02	70.00	New Well	Domestic		2		STRATHAN, JACK	30.00	5.00	0.00
388643	SE	32	25	2	5	STAR DRLG CO	1971-09-01	98.00	New Well	Domestic		2		LEROUX, J.	62.00	5.00	0.00
388645	SE	32	25	2	5	UNKNOWN DRILLER		245.00	Chemistry	Domestic				PEDERSON, LORNE A.			0.00
388646	SE	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1988-10-04	495.00	New Well	Domestic		16		STOCKWOOD, HERB	200.00	3.00	6.62
<u>388704</u>	SE	32	25	2	5	MANORA DRILLING SERVICE	1988-10-07	280.00	New Well- Decommissioned	Domestic		13		STOCKWOOD, H.			0.00
388705	SH	32	25	2	5	STAR DRLG CO	1972-04-01	215.00	New Well	Domestic		4		RICHARDS, BRUCE	160.00	7.00	0.00
388706	SH	32	25	2	5	UNKNOWN DRILLER		260.00	Chemistry	Domestic				METZ, CARL M.	159.00		0.00
388707	SW	32	25	2	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				GATHERCOLE, DON			0.00
388708	SW	32	25	2	5	UNKNOWN DRILLER	1972-04-01	200.00	Chemistry	Domestic				MORFORD, B.S.	170.00		0.00
388709	SW	32	25	2	5	UNKNOWN DRILLER		200.00	Chemistry	Domestic				HALTMAN, MIKE			0.00
388710	SW	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1984-08-31	180.00	New Well	Domestic		9		SMITH, BOB	150.00	10.00	5.50
<u>388712</u>	SW	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1985-11-18	317.00	New Well- Decommissioned	Domestic		13		HULTMAN, MIKE	170.00	0.50	5.50
<u>388714</u>	SW	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1985-12-11	337.00	New Well	Domestic		12		HALTMAN, MIKE	220.00	9.00	6.62
<u>388716</u>	SW	32	25	2	5	UNKNOWNDRILLINGCOMP11			Existing Well- Decommissioned	Unknown				GATHERCOLE, DON			
<u>388716</u>	SW	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-10-09	280.00	New Well	Domestic		15		GATHERCOLE, DON	180.00	4.00	6.62
<u>388720</u>	SW	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-10-06	450.00	New Well	Domestic		29		HEINZIG, DENNIS	195.00	8.00	6.62
<u>388725</u>	SW	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-10-06	460.00	New Well	Domestic		26		HEINZIG, DENNIS #2	175.00	2.50	6.62

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388728	NW	32	25	2	5	DEL'S DRILLING	1975-03-27	213.00	New Well	Domestic		12		FORBES, LAURIE	175.00	14.00	7.00
388730	NW	32	25	2	5	STAR DRLG CO	1970-06-01	270.00	New Well	Domestic		6		NOVAK, MIKE	204.00	4.00	0.00
388732	NW	32	25	2	5	UNKNOWN DRILLER		180.00	Chemistry	Domestic				REZANSOFF, A.			0.00
388733	NW	32	25	2	5	KRIEGER DRILLING LTD.	1988-05-12	195.00	New Well	Domestic		9		MANNING, JOHN	165.00	4.50	6.62
388736	NW	32	25	2	5	ALKEN BASIN DRILLING LTD.	1989-10-05	240.00	New Well	Domestic		6		CLAYDEN, DWAYNE	176.00	3.50	5.50
388743	NE	32	25	2	5	UNKNOWN DRILLER		320.00	Chemistry	Domestic				PETERSEN, E.C.			0.00
388744	NE	32	25	2	5	NORTHERN WATER SUPPLY CO.	1972-08-01	217.00	New Well	Domestic		19		NU-WEST	130.00	7.00	0.00
<u>388746</u>	NE	32	25	2	5	GEOSERVE DRLG	1972-07-20	275.00	Dry Hole- Decommissioned	Domestic		14		NU-WEST HOMES	10.00	5.00	0.00
<u>388747</u>	NE	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1972-06-19	172.00	New Well	Domestic		7	1	NU-WEST HOMES	138.00	6.00	0.00
<u>388748</u>	16	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1972-10-01	200.00	New Well	Domestic		7	1	NU-WEST HOMES	170.00	10.00	0.00
<u>388748</u>	16	32	25	2	5	AARON DRILLING INC.		200.00	Existing Well- Decommissioned	Unknown				NAHAL, SARWAN	105.00		5.57
<u>388749</u>	NE	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1973-04-01	212.00	New Well	Domestic		13	1	NU-WEST HOMES	180.00	5.50	0.00
<u>388750</u>	NE	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1973-11-30	171.00	New Well	Domestic		6		NU-WEST HOMES LTD	144.00	20.00	0.00
<u>388752</u>	NE	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1973-08-01	248.00	New Well	Domestic		14	1	NU-WEST HOMES	205.00	4.50	0.00
388754	NE	32	25	2	5	UNKNOWN DRILLER		290.00	Chemistry	Domestic				BOYD, N.D.			0.00
<u>388755</u>	NE	32	25	2	5	ELGIN EXPLORATION COMPANY LIMITED	1978-03-01	240.00	New Well	Domestic		3		PETRYSHEN, DIANE/JOHN			0.00
<u>388759</u>	NE	32	25	2	5	M&M DRILLING CO. LTD.	1980-11-18	420.00	New Well- Decommissioned	Domestic		7		BRAR, B.			0.00
388761	NE	32	25	2	5	M&M DRILLING CO. LTD.	1980-12-01	165.00	New Well	Domestic		6		BRAR, B. #2	140.00	2.00	5.56
<u>388763</u>	NE	32	25	2	5	UNKNOWN DRILLER		0.00	Chemistry	Unknown				DU WORS, ROBERT J.			0.00
<u>388764</u>	NE	32	25	2	5	UNKNOWN DRILLER		120.00	Chemistry	Domestic				MILLER, EVELYN			0.00

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388765	NE	32	25	2	5	KRIEGER DRILLING LTD.	1988-07-23	275.00	New Well	Domestic		10		BHATT, VIPIN	170.00	9.00	6.62
388767	NE	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1989-05-30	380.00	New Well	Domestic		19		BHATT, VIPIN	240.00	6.00	6.62
<u>389871</u>	SE	4	26	2	5	M&M DRILLING CO. LTD.	1977-07-06	255.00	New Well- Decommissioned	Unknown		18		STYLES PROPERTIES			0.00
389872	NE	4	26	2	5	UNKNOWN DRILLER		168.00	Chemistry	Domestic	<u>1</u>			MOSCHENROSS, C.J.	132.00		8.00
389873	NE	4	26	2	5	UNKNOWN DRILLER		215.00	Chemistry	Domestic	<u>3</u>			CRANE, J.D.T.	154.00		0.00
<u>389874</u>	NE	4	26	2	5	M&M DRILLING CO. LTD.	1973-04-01	386.00	New Well- Decommissioned	Domestic & Stock		17		MOLBAK, NEIL			0.00
<u>389875</u>	NE	4	26	2	5	M&M DRILLING CO. LTD.	1973-04-01	225.00	New Well	Domestic & Stock	1	15		MOLBAK, NEIL	175.00	10.00	0.00
389877	NE	4	26	2	5	UNKNOWN DRILLER		180.00	Chemistry	Domestic	<u>1</u>			MYERS DEV LTD	124.00		0.00
389879	NE	4	26	2	5	STAR DRLG CO	1970-09-01	259.00	New Well	Domestic		5		WAGER, KIETH	180.00	2.50	5.50
<u>389879</u>	NE	4	26	2	5	NIEMANS DRILLING & SONS LTD.			Existing Well- Decommissioned	Unknown				WANG, JIM			
389880	NE	4	26	2	5	M&M DRILLING CO. LTD.	1971-07-14	180.00	New Well	Domestic		10		STYLES PROPERTIES	131.00	13.00	0.00
389885	NE	4	26	2	5	M&M DRILLING CO. LTD.	1977-07-08	165.00	New Well	Domestic		10		STYLES PROPERTIES	126.00	20.00	0.00
389886	SW	5	26	2	5	FARARI HOLDINGS	1977-07-16	305.00	New Well	Domestic		12		ROLAND, ERIC	150.00	15.00	6.62
389887	SW	5	26	2	5	UNKNOWN DRILLER		315.00	Chemistry	Domestic	1			VAN ES, R.	300.00		0.00
389888	SE	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-02-08	264.00	New Well	Domestic		6		WARIACHE, B.	212.00	20.00	6.62
389889	SE	6	26	2	5	KRIEGER DRILLING LTD.	1987-06-20	262.00	New Well	Domestic		8		WARIACHE, BALBIE	159.00	10.00	6.62
389890	SE	6	26	2	5	M&M DRILLING CO. LTD.	1987-07-16	277.00	New Well	Domestic		16		STYLES PROPERTIES LTD	188.00	12.00	0.00
389891	SE	6	26	2	5	M&M DRILLING CO. LTD.	1987-07-30	217.00	New Well	Domestic		8		STYLES PROPERTIES	143.00	5.00	0.00
389892	SE	6	26	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				SCHUBERT, E.L.			0.00
389893	SW	6	26	2	5	DEL'S DRILLING	1973-12-01	175.00	New Well	Domestic		10		BIRD, CHARLES D.	116.00	15.00	6.50

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389894	SW	6	26	2	5	DEL'S DRILLING	1973-11-01	268.00	New Well	Domestic		10		BARROW, JOHN	136.00	15.00	6.50
389895	SW	6	26	2	5	DEL'S DRILLING	1974-04-01	212.00	New Well	Domestic		9		BAMLETT CONSTR	172.00	7.00	5.00
389896	SW	6	26	2	5	DEL'S DRILLING	1974-05-01	203.00	New Well	Domestic		14		BAMLETT CONSTR	139.00	9.00	0.00
389897	SW	6	26	2	5	DEL'S DRILLING	1974-03-01	200.00	New Well	Domestic		12		STEEL, JOE	135.00	8.00	0.00
389898	SW	6	26	2	5	DEL'S DRILLING	1973-10-01	196.00	New Well	Domestic		7		LIETZ, WALTER	161.00	20.00	0.00
389899	SW	6	26	2	5	M&M DRILLING CO. LTD.	1983-02-16	160.00	New Well	Domestic		13		SCHLEBENDORF, HENRY	120.00	6.00	0.00
389900	SW	6	26	2	5	KRIEGER DRILLING LTD.	1986-12-08	215.00	New Well	Domestic	1	7		STYLES PROPERTIES	155.00	10.00	6.62
389901	SW	6	26	2	5	KRIEGER DRILLING LTD.	1988-07-19	295.00	New Well	Domestic		9		LIETZ, WALTER	140.00	2.50	6.62
389902	SW	6	26	2	5	KRIEGER DRILLING LTD.	1988-07-19	170.00	New Well	Domestic		9		LIETZ, WALTER	131.00	9.00	6.62
389903	SW	6	26	2	5	ALKEN BASIN DRILLING LTD.	1988-11-24	200.00	New Well	Domestic		13		BIGGAR, E. HUDSON #2	155.00	15.00	5.50
389904	SW	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1989-01-12	280.00	New Well	Domestic		12		STEELE, J.	130.00	3.00	6.62
389905	SH	6	26	2	5	FARROW STEWART		268.00	New Well	Domestic		8		BERNAHEVITCH, J.	192.00	5.00	5.50
389906	NW	6	26	2	5	DEL'S DRILLING	1972-07-25	250.00	New Well	Domestic	<u>1</u>	12		TERRELL, R.K.	120.00	4.00	0.00
389907	NW	6	26	2	5	TAKS & SONS DRILLING LTD.	1970-01-01	300.00	New Well	Domestic		7		CULVER	100.00	10.00	5.50
389908	NW	6	26	2	5	DEL'S DRILLING	1972-09-01	203.00	New Well	Domestic		5		SAAR, GIL	137.00	6.00	0.00
389909	NW	6	26	2	5	DEL'S DRILLING	1972-07-01	176.00	New Well	Domestic		7		BOLES, R.J.	130.00	15.00	0.00
389910	NW	6	26	2	5	TWO WAY DRLG	1971-05-17	250.00	New Well	Domestic	<u>1</u>	5		SPRINGER, ALBERT	140.00	8.00	5.50
389911	NW	6	26	2	5	UNKNOWN DRILLER		218.00	Chemistry	Domestic	1			WICKES, R.	117.00		0.00
389912	NW	6	26	2	5	DEL'S DRILLING		315.00	New Well	Domestic		15		COSTELLO, BOB	129.00	3.75	7.00
389913	NW	6	26	2	5	TAKS & SONS DRILLING LTD.	1970-01-01	165.00	New Well	Unknown		6			85.00	10.00	5.50

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GIC Well ID	LSD	SEC	TWP	RGE	М	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
389914	NW	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-06-19	440.00	New Well	Domestic		15		GILBERT, BERT	109.00	2.00	6.62
<u>389915</u>	NW	6	26	2	5	M&M DRILLING CO. LTD.	1987-10-19	180.00	New Well	Domestic & Stock		5		ALBERS, BEN	122.00	6.00	0.00
389916	NW	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1989-06-02	322.00	New Well	Domestic		21		ALBERS, RODGER	160.00	15.00	6.62
389917	NW	6	26	2	5	KRIEGER DRILLING LTD.		280.00	New Well	Domestic		10		LEECH, ROB	140.00	4.60	6.62
389918	NW	6	26	2	5	KRIEGER DRILLING LTD.	1989-06-22	240.00	New Well	Domestic		12		LEECH, ROB	135.00	6.50	6.62
389919	NW	6	26	2	5	KRIEGER DRILLING LTD.	1989-08-22	260.00	New Well	Domestic		9		KOLODZIEJZYK, RUDY #1	115.00	3.00	6.62
389920	NW	6	26	2	5	KRIEGER DRILLING LTD.	1989-08-22	255.00	New Well	Domestic		9		KOLODZIEJZYK, RUDY #2	110.00	3.00	6.62
389921	NE	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1986-03-20	260.00	New Well	Domestic	1	9		ALTA ENV	139.00	10.00	6.63
389921	NE	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1986-03-20	260.00	New Well	Domestic	1	9	47	ALTA ENV	0.00		6.63
389922	NE	6	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1986-03-19	300.00	New Well	Domestic		18		ALTA ENV	128.00	1.50	6.62
389949		6	26	2	5	STAR DRLG CO	1973-08-01	228.00	New Well	Domestic		3		BAMLETT, J.	140.00	5.00	0.00
389951	SW	7	26	2	5	DEL'S DRILLING	1974-07-26	220.00	New Well	Domestic		9		B. ENT\BERNAKEVITCH, J.	149.00	18.00	5.50
389951	SW	7	26	2	5	DEL'S DRILLING	1974-07-26	220.00	New Well	Domestic		9	27	B. ENT\BERNAKEVITCH, J.	0.00		5.50
389957	SW	7	26	2	5	FARARI HOLDINGS	1977-08-03	400.00	New Well	Domestic		15		BERNACKEVICH, L.	138.00	5.00	6.62
389959	SW	7	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1986-10-06	400.00	Deepened	Domestic		12		BERNAKEVITCH, JOE	154.00	7.00	6.62
389960	SW	7	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1986-10-06	365.00	New Well	Domestic		23		BERNAKEVITCH, JOE	173.00	8.00	6.62
389961	SW	7	26	2	5	KRIEGER DRILLING LTD.	1986-11-06	95.00	New Well	Domestic		12		DIMARIA, PAT	42.00	14.00	6.62
389963	SW	7	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1989-06-01	307.00	New Well	Domestic		24		MELNYK, M.	150.00	12.00	6.62
389967	SW	7	26	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1989-08-15	340.00	New Well	Domestic		18		BERNACKVITCH, JOE	122.00	14.00	5.50
389969	SW	7	26	2	5	UNKNOWN DRILLER		0.00	Chemistry	Domestic				WAH, J.C.			0.00

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389970	NW	7	26	2	5	SCOTT H	1974-10-30	210.00	New Well	Domestic	1	8		BANAKOVITCH, J.	150.00	7.00	0.00
389972		7	26	2	5	UNKNOWN DRILLER		500.00	Chemistry	Domestic				BERNAKEVITCH, JOE			0.00
389973	SE	8	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-03-30	180.00	New Well	Domestic		9		FISHER, ARTHUR R.	90.00	15.00	6.62
389975	SW	8	26	2	5	STAR DRLG CO	1970-06-01	119.00	New Well	Domestic		5		ALLEN, J.	79.00	3.50	0.00
389977	SW	8	26	2	5	STAR DRLG CO	1976-09-03	160.00	New Well	Domestic		5		ALLEN, J.	108.00	10.00	5.56
<u>389978</u>	14	8	26	2	5	ALKEN BASIN DRILLING LTD.	1986-03-01	300.00	New Well- Decommissioned	Industrial		13		KENTING/DOME			0.00
389980	NE	8	26	2	5	NORTHERN WATER SUPPLY CO.	1977-05-10	182.00	Deepened	Stock		5		CHURCH, STAN	85.00	3.50	
389982	SE	9	26	2	5	DEN-ALTA DRILLING LTD.	1987-07-10	155.00	New Well	Domestic		7		DUL, JOHN	90.00	6.00	5.56
389986	SW	10	26	2	5	FLINN DRILLING LTD.	1971-04-15	215.00	New Well	Domestic		7		CRANE, J.D.T.	157.00	10.00	0.00
389988	SW	10	26	2	5	FLINN DRILLING LTD.	1971-04-01	168.00	New Well	Domestic		8		MOSCHONROSS, CARL	132.00	12.00	0.00
389989	NW	10	26	2	5	SIEBEL GEO		115.00	New Well	Domestic		4		DOUBLE A DRLG	40.00	15.00	0.00
389991	NW	10	26	2	5	UNKNOWN DRILLER		0.00	Spring	Domestic	1			EVANS, H.			0.00
<u>390115</u>	SW	16	26	2	5	DEN-ALTA DRILLING LTD.	1988-08-24	135.00	New Well	Stock		7		CHURCH, STAN	80.00	15.00	5.56
<u>390116</u>	SW	17	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1986-02-15	260.00	New Well	Domestic		5		BERNAKVITCH, JOE	0.10	1.50	6.62
390118	SW	18	26	2	5	NORTHERN WATER SUPPLY CO.	1976-07-31	120.00	Deepened	Domestic & Stock				MARSTON, ROBERT	95.00	5.00	5.56
390243	SE	1	26	3	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1985-03-26	180.00	New Well	Domestic		16		BIGGER HEIGHTS	141.00	3.00	6.62
390257	SE	1	26	3	5	ALKEN BASIN DRILLING LTD.	1989-04-04	440.00	New Well	Domestic		8		BIGGAR, EDDIE	166.00	2.00	5.50
390260	SE	1	26	3	5	ALKEN BASIN DRILLING LTD.	1989-04-14	360.00	New Well	Domestic		18		BIGGAR, E.HUDSON	170.00	4.00	5.50
390262	SE	1	26	3	5	ALKEN BASIN DRILLING LTD.	1989-09-06	220.00	New Well	Domestic		18		BIGGAR, EDIE	160.00	7.00	5.50
390362	NE	36	25	3	5	PARSONS DRLG	1976-04-22	300.00	New Well	Stock		18		SPEISS, PHIL	165.00	5.50	7.00

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390363	NE	36	25	3	5	INTERPROVINCIAL DRILLING CONTRACTORS	1972-09-21	340.00	New Well	Domestic		13		SPRATTS, L.M.	210.00	1.50	6.00
390364	NE	36	25	3	5	FLINN DRILLING LTD.	1972-05-01	225.00	New Well	Domestic		8		WOODHALL, F.	170.00	7.00	6.25
390365	NE	36	25	3	5	FLINN DRILLING LTD.	1972-06-01	231.00	New Well	Domestic		10		ZOUBLES, F.	178.00	6.00	6.25
<u>390366</u>	NE	36	25	3	5	OTHER	1972-03-01	330.00	New Well	Domestic		21		MROSS, WERNER			6.63
390367	NE	36	25	3	5	OTHER	1974-05-01	373.00	New Well	Domestic		8		HARCIUS, DAVE			6.50
390368	NE	36	25	3	5	DEL'S DRILLING	1976-04-26	350.00	New Well	Domestic		16		STUDER, DOUG	196.00	11.00	7.00
<u>390369</u>	NE	36	25	3	5	UNKNOWN DRILLER	1930-01-01	255.00	Chemistry	Domestic				MCCOOL, NORM/JUDY			0.00
390370	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1989-04-18	380.00	New Well	Domestic		20		ROSS, WERNER M.#1	0.00	2.00	0.00
<u>390371</u>	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1989-04-19	120.00	Dry Hole- Decommissioned	Domestic		4		ROSS, WERNER M.#2			0.00
390372	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1989-04-20	340.00	New Well	Domestic		14		ROSS, WERNER M.	201.00	1.50	5.50
<u>390373</u>	EH	36	25	3	5	INTERPROVINCIAL DRILLING CONTRACTORS	1958-05-14	175.00	New Well	Unknown				NEWSOME, FRANK			6.00
390966	NE	4	26	2	5	UNKNOWN DRILLER		160.00	Chemistry	Domestic	1			SCHULD, B.			0.00
390967	NE	4	26	2	5	FARROW STEWART	1973-01-27	160.00	New Well	Domestic		8		SAVOIA, MARIO	117.00	25.00	5.50
<u>390970</u>	SW	5	26	2	5	UNKNOWN DRILLER		350.00	Chemistry	Domestic	<u>2</u>			GOOD WATER UTILITIES CO			0.00
390972	SE	6	26	2	5	M&M DRILLING CO. LTD.	1987-07-03	280.00	New Well	Domestic		13		WARIACHE, BALBIA	185.00	12.00	0.00
390973	SW	7	26	2	5	UNKNOWN DRILLER		280.00	Chemistry	Domestic	<u>3</u>			DEWAR, DON			0.00
391011	NW	29	25	2	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				HICKS, W.R.			0.00
391020	SE	32	25	2	5	STAR DRLG CO	1971-09-01	286.00	New Well	Domestic		2		METZ, K.	181.00	4.00	0.00
391021	SE	32	25	2	5	UNKNOWN DRILLER		280.00	Chemistry	Domestic				BUCHWITZ, ALFRED			0.00
<u>391022</u>	2	32	25	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1987-10-16	500.00	New Well	Domestic		21		FELTHAM, DOUG	250.00	3.50	6.62

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391022	2	32	25	2	5	GERRITSEN DRILLING	1987-10-16	500.00	Old Well-Yield	Domestic				URBAN DOMINIC			6.63
<u>391024</u>	NE	32	25	2	5	DIVERSIFIED DRILLING & EXPLORATION CO.	1973-04-01	161.00	New Well	Domestic		7		NU WEST HOMES	140.00	15.00	0.00
<u>391026</u>	NE	32	25	2	5	ELGIN EXPLORATION COMPANY LIMITED	1978-03-01	380.00	New Well	Domestic		3		PETRYSHEN, DIANE/JOHN #2	140.00	2.00	5.56
391028	NE	32	25	2	5	UNKNOWN DRILLER		300.00	Chemistry	Domestic				PETRYSHEN,	190.00		0.00
391041	SE	12	26	3	5	UNKNOWN DRILLER		100.00	Chemistry	Domestic				YAKIMISHYN, M.			0.00
<u>391436</u>	SE	12	26	3	5	NORTHERN WATER SUPPLY CO.	1975-05-28	415.00	New Well- Decommissioned	Domestic		15		D&S INVESTMENTS LTD	140.00	1.00	0.00
<u>391437</u>	SE	12	26	3	5	NORTHERN WATER SUPPLY CO.	1975-06-14	277.00	New Well	Domestic		13		D&S INVESTMENTS LTD	140.00	3.50	5.50
391437	SE	12	26	3	5	NORTHERN WATER SUPPLY CO.	1975-06-14	277.00	New Well	Domestic		13	26	D&S INVESTMENTS LTD	137.80	3.00	5.50
<u>391438</u>	SE	12	26	3	5	UNKNOWN DRILLER		220.00	Chemistry	Domestic				BUNNYHOLLOW SUBDIV/LEHMAN	180.00		0.00
<u>391439</u>	SE	12	26	3	5	UNKNOWN DRILLER		140.00	Chemistry	Domestic				DICKEY, E.	103.00		0.00
<u>391440</u>	SE	12	26	3	5	KENS AIRTECH SERVICE	1979-04-12	350.00	New Well- Decommissioned	Domestic		19		BUNNYHOLLOW DEV			6.62
<u>391441</u>	SE	12	26	3	5	UNKNOWN DRILLER		140.00	Chemistry	Domestic				HOWARTH, B. #3	103.00		0.00
391442	SE	12	26	3	5	UNKNOWN DRILLER		180.00	Chemistry	Domestic				BALDWIN, DALE			0.00
391443	SE	12	26	3	5	UNKNOWN DRILLER		280.00	Chemistry	Domestic				MACMILLAN, J.			0.00
<u>391444</u>	SE	12	26	3	5	UNKNOWN DRILLER		156.00	Chemistry	Domestic				MOFFAT, ROSEMARY/GORDON			0.00
<u>391445</u>	SE	12	26	3	5	M&M DRILLING CO. LTD.	1989-06-05	345.00	New Well- Decommissioned	Stock		21		WHITE, GENE			0.00
391446	SE	12	26	3	5	M&M DRILLING CO. LTD.	1989-06-09	300.00	New Well	Stock		13		WHITE, GENE #2	132.00	2.50	5.50
391447	1	12	26	3	5	UNKNOWN DRILLER	1972-05-01	4,180.00	Chemistry	Domestic				BUNNEY, GEORGE			0.00
391448	SE	12	26	3	5	NORTHERN WATER SUPPLY CO.	1975-11-15	233.00	New Well	Industrial		12		D&S INVESTMENTS LTD	188.00	18.00	5.56
391448	SE	12	26	3	5	NORTHERN WATER SUPPLY CO.	1975-11-15	233.00	New Well	Industrial		12	35	D&S INVESTMENTS LTD	185.00		5.56

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391459		12		RGE	5	UNKNOWN DRILLER	COMPLETED	(ft) 200.00	Chemistry	Domestic	СПМ	L	PI	MACMILLAN, JOAN	(IL)	(igpm)	0.00
392110		36		3	5	NORTHERN WATER SUPPLY CO.	1975-01-25		New Well	Domestic & Stock		19		VOTTA, LESLIE	187.00	4.50	5.56
392117	NE	36	25	3	5	UNKNOWN DRILLER	1975-01-01	350.00	Chemistry	Domestic				BLAIR, J.			0.00
395757	SE	6	26	2	5	UNKNOWN DRILLER		210.00	Chemistry	Domestic				SCHMIDT, ARNIE/BETH			0.00
395760	SE	6	26	2	5	M&M DRILLING CO. LTD.	1987-07-24	217.00	New Well	Domestic		13		STYLES PROPERTIES	151.00	10.00	0.00
395762	SW	6	26	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1985-11-13	225.00	New Well	Domestic		7		SCHLEFENDORF, HARRY	130.00	5.00	6.63
<u>395784</u>	SW	6	26	2	5	UNKNOWN DRILLER		225.00	Chemistry	Domestic				MEDLAND, GORDON H.			0.00
400309	SW	5	26	2	5	KRIEGER DRILLING LTD.	1993-09-29	200.00	New Well	Domestic		15	16	KRBAUAC, LOUIE	155.10	5.00	5.50
405065	NE	4	26	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1976-12-02	200.00	New Well	Domestic		10		GIEKIE, STEWART	100.00	2.00	6.62
<u>407773</u>	NW	29	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1974-07-26	350.00	New Well	Domestic		8		FELTHEM, DOUG	170.00	4.00	6.62
<u>407774</u>	NW	29	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1973-08-30	290.00	New Well	Domestic		12		FELTHEM, DOUG	230.00	10.00	6.00
<u>407775</u>	NW	29	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1975-10-22	260.00	New Well	Domestic		9		MCMACHANS, DAVE	240.00	5.00	6.62
<u>407776</u>	NW	29	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1974-01-01	300.00	New Well	Domestic		7		FELTHEM, DOUG	210.00	4.00	6.00
<u>407777</u>	16	29	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1981-07-22	210.00	New Well	Domestic		10		HAYES, GARTH	150.00	10.00	6.62
<u>407779</u>	NE	30	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1972-06-15	280.00	New Well	Domestic		11		KESLANKO, DON	150.00	10.00	6.62
<u>407780</u>	NE	30	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1973-05-22	330.00	New Well	Domestic	<u>1</u>	11		RESELI, FRANK	170.00	4.00	6.00
<u>407781</u>	NW	32	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1971-05-01	232.00	New Well	Domestic	<u>2</u>	7		ROSSLER, GERD	180.00	6.00	6.00
<u>415994</u>	SH	32	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1972-04-15	280.00	New Well	Domestic		12		DE GRAFF, W.	180.00	3.00	6.50
<u>415995</u>	SH	32	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1972-03-13	340.00	New Well	Domestic		16		CHRISTENSON, F.	140.00	3.00	6.50
415997	SW	32	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1971-08-30	330.00	New Well	Domestic	1	10		LARSEN, HANS	180.00	5.00	6.50

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415998	SW	32	25	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1972-08-01	330.00	New Well	Domestic	1	15		LUHOFF, JOHN	170.00	3.00	6.50
<u>416400</u>	NW	6	26	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1971-02-15	190.00	New Well	Domestic		8		COTTSELL, RON	130.00	5.00	6.00
<u>416401</u>	SW	7	26	2	5	INTERPROVINCIAL DRILLING CONTRACTORS	1971-02-08	150.00	New Well	Domestic	<u>3</u>	6		DICKY, ERNIE	100.00	8.00	6.00
<u>416402</u>	SE	1	26	3	5	INTERPROVINCIAL DRILLING CONTRACTORS	1978-07-27	240.00	New Well	Domestic		10		BIGGER, GEORGE	160.00	6.00	6.63
<u>416432</u>	SE	12	26	3	5	INTERPROVINCIAL DRILLING CONTRACTORS	1979-06-04	250.00	New Well	Domestic		16		HOLLOW, BUNNY	50.00	3.00	6.63
<u>418532</u>	SW	6	26	2	5	M&M DRILLING CO. LTD.	1977-06-03	450.00	Dry Hole- Decommissioned	Domestic		24		STYLES PROPERTIES			0.00
466259	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1996-10-29	360.00	New Well	Domestic		9	26	MERKOSKY, DAVID	203.00	2.50	5.50
467182	SW	7	26	2	5	ALBERTA SOUTHERN EXPLORATION DRILLING LTD.	1996-10-29	240.00	New Well	Domestic		13	22	ARISMAN, A.	148.80		6.62
<u>467184</u>	SH	18	26	2	5	PEE WEE DRILLING (2004) LTD.	1997-04-23	290.00	New Well	Domestic		13	24	MARSTON, ROBERT H.	173.20	7.00	5.56
<u>467802</u>	NW	29	25	2	5	ALKEN BASIN DRILLING LTD.	1997-09-09	320.00	New Well	Domestic		16	16	HARRIS, DAVE	219.00	13.00	5.50
<u>467803</u>	NW	29	25	2	5	ALKEN BASIN DRILLING LTD.	1997-09-11	300.00	New Well	Domestic		16	16	HARRIS, DAVE	202.00	20.00	5.50
<u>468500</u>	NE	30	25	2	5	ALKEN BASIN DRILLING LTD.	1997-09-19	360.00	New Well	Domestic		20	25	JENSEN, SVEND	190.00	5.00	5.50
469222	NW	29	25	2	5	ALKEN BASIN DRILLING LTD.	1997-12-12	380.00	New Well	Domestic		27	21	HARRIS, DAVE	220.00	4.50	5.50
491231	NE	36	25	3	5	ALKEN BASIN DRILLING LTD.	1998-09-03	300.00	New Well	Domestic		9	16	MCRKOSKY, DAVID	246.00	1.50	5.50
492948	SW	7	26	2	5	ALKEN BASIN DRILLING LTD.	1999-09-02	380.00	New Well	Domestic		24	16	HORACHEK, YARO	226.00	6.00	5.50
<u>496574</u>	NE	36	25	3	5	AERO DRILLING & CONSULTING LTD.	2000-08-16	310.00	New Well	Domestic		16	11	SANDBERG, BOB	190.00	15.00	5.50
<u>497708</u>	NE	36	25	3	5	PEE WEE DRILLING (2004) LTD.	2001-04-19	260.00	New Well	Domestic		6	25	MERKOSKY, DAVE/ROSS	173.60	7.75	5.56
1020043	NW	32	25	2	5	AARON DRILLING INC.	2005-06-24	360.00	New Well	Domestic		10	6	MCKINLEY, MASTERS	180.00	4.00	6.62
1020144	SE	4	26	2	5	AARON DRILLING INC.	2002-12-17	495.00	New Well	Domestic		23	14	BURNCO	146.00	6.00	6.62
1020159	NE	4	26	2	5	AARON DRILLING INC.	2004-12-03	400.00	New Well	Domestic		17	7	MCQUAIG, IRENE	248.00	4.00	6.62

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View in Metric Export to Excel

GIC Well ID	LSD	SEC	TWP	RGE	м	DRILLING COMPANY	DATE COMPLETED	DEPTH (ft)	TYPE OF WORK	USE	СНМ	LT	PT	WELL OWNER	STATIC LEVEL (ft)	TEST RATE (igpm)	SC_DIA (in)
1021094	SE	1	26	3	5	AARON DRILLING INC.	2006-03-06	185.00	Existing Well- Decommissioned	Domestic		1		MD ROCKVIEW	147.00		
1021106	SE	1	26	3	5	AARON DRILLING INC.	2005-12-22	260.00	Existing Well- Decommissioned	Domestic		1		MD OF ROCKYVIEW		100.00	
1021215	SW	7	26	2	5	AARON DRILLING INC.	2006-05-15	450.00	New Well	Domestic		10	11	LTR CONSTRUCTION	106.80	2.50	6.62
1021303	SE	9	26	2	5	AARON DRILLING INC.	2006-11-17	470.00	New Well	Domestic		14	8	DUHL, JOHN	201.00	6.00	6.62
1021426	SE	9	26	2	5	AARON DRILLING INC.	2007-02-28	495.00	New Well	Domestic		21	12	BURNCO	212.50	6.00	6.62
1022543	16	32	25	2	5	AARON DRILLING INC.	2015-04-24	260.00	New Well	Domestic		6	18	NAHAL, SARWAN	166.20	4.00	6.62
1022608	16	32	25	2	5	AARON DRILLING INC.	2015-10-30	195.00	New Well	Domestic		18	19	PINGLIA, HARPEET	127.40	3.50	6.63
1022620	16	32	25	2	5	AARON DRILLING INC.	2015-10-30	195.00	New Well- Decommissioned	Domestic		17		HARPEET, PINGLIA			
1023043	9	32	25	2	5	AARON DRILLING INC.	2018-10-30	295.00	New Well	Domestic		13	6	NAHAL, SARWAN	144.00	1.88	5.50
1023152	SW	6	26	2	5	AARON DRILLING INC.	2019-09-02	320.00	New Well	Domestic		24	15	HORIZON LAND SURVEYS INC	128.65	3.00	5.56
<u>1305564</u>	3	17	26	2	5	GERRITSEN DRILLING	2014-06-04	160.00	New Well	Domestic		15	14	MORISON FARMS FEEDYARD	135.98	5.00	6.00
1305837	1	18	26	2	5	GERRITSEN DRILLING	2020-11-18	177.00	New Well	Domestic & Stock		10	18	STEPHENSON CHEREE/SLADE	147.63	17.00	6.00
<u>1475920</u>	4	6	26	2	5	M&M DRILLING CO. LTD.	2007-02-27	220.00	Existing Well- Decommissioned	Unknown		1		OLIVERIO, VINCE	180.00		5.50
<u>1475921</u>	4	6	26	2	5	M&M DRILLING CO. LTD.	2007-02-27	180.00	Existing Well- Decommissioned	Unknown		1		OLIVERIO, VINCE	150.00		5.50
<u>1476459</u>	4	6	26	2	5	M&M DRILLING CO. LTD.		185.00	Existing Well- Decommissioned	Domestic		1		VIKIC, RAMO C/O KOVACEVIC, FIKRET	115.00		6.63
2096007	SW	31	25	2	5	UNKNOWNDRILLINGCOMP11	1955-06-30		Well Inventory	Stock		1		CHURCH, STANLEY			
2096009	SW	31	25	2	5	UNKNOWNDRILLINGCOMP11	1955-06-30		Well Inventory	Stock		1		CHURCH, STANLEY			
2097514	15	4	26	2	5	WILD WEST DRILLING INC.	2015-05-01	240.00	New Well	Domestic		9	24	DAWN CHAREST	133.28	10.00	6.05
9511019	1	8	26	2	5	GOOD EARTH DRILLING SERVICES LTD.	2016-08-17	175.00	New Well	Domestic		14	26	FRIESEN, COLE	23.44	10.00	6.58
9681490	9	4	26	2	5	NIEMANS DRILLING & SONS LTD.	2020-06-29	500.00	Test Hole- Decommissioned	Domestic		15		WANG, JIM			

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Additional Discussion as to Why the HTA Cannot Be Relied Upon

The Groundwater Flow Calculations and Modeling are Based on Incorrect Data and Calculations and are Not Scientifically Viable

AECOM presents a 2-D model and discusses post-reclamation recharge. While there is no model cited and no input data presented, the proposed scenario is to remove all the surficial material down to the Paskapoo Aquifer, leaving it completely vulnerable to contamination and forever altering the water balance. In trying to build this model to evaluate groundwater flow and recharge, AECOM attempts to calculate the hydraulic gradient and flow direction beneath the property. This is typically a simple process that is easily calculated using three points with known groundwater elevations and well elevations.

Think of it like that labyrinth ball balance game through the maze, where you need to navigate a ball from start to finish while balancing it on a board and not falling into the holes. It certainly would not work balancing the ball on the edge of a piece of paper. Trying to calculate water flow is similar. You cannot actually get a direction with two points. You need a plane.

However, there was insufficient data to calculate the flow direction properly, so AECOM used two data points and calculated the hydraulic gradient using *Darcy's Law* (the water seepage calculation equation).

This is a complete violation of Darcy's Law to use only two points. Furthermore, AECOM presents the Darcy's Law equation on P. 11 of Section 5.3.1 incorrectly with a typo. This result was subsequently used in their recharge model and therefore the results are completely unreliable. To suggest that you can quantify seepage rates based on the data they have when they acknowledge that they don't even know enough to be able to determine flow direction is incredibly irresponsible. Furthermore, the seepage rate as shown in Table 6 is not the same as discharge and is not expressed in units of m^3 /day. Table 6 (which is presented in the vertical flow section) shows discharge of more than 1 m^3 /day. The messaging here appears to be deliberately confusing.

In addition, the model does not even consider preferential lateral inflow from the groundwater, which will occur via the seepage faces of the mine. Rainfall data, proper geological logging and hydraulic characteristics of the aquifer are required.

The Data are Completely Inadequate for a Hydrogeological Study

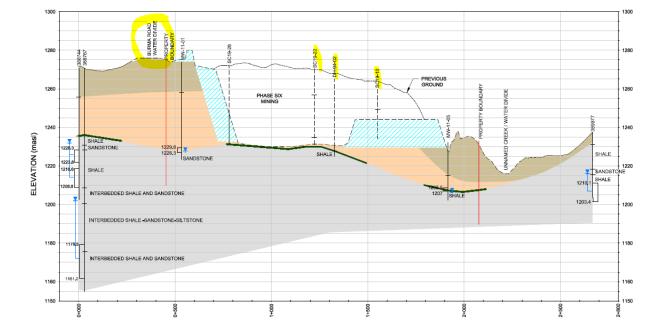
The number and depths of the 54 boreholes are grossly deficient for proper assessment of an area this size, and subsequently joining lithologic units (i.e. the caprock and clay aquitards) over vast distances with extremely poor geologic logging is very misleading and unacceptable geological practice. Of the 10 groundwater monitoring wells installed within the property boundary, only 3 wells are viable and contain any water. Based on the fact that no boreholes were actually drilled into the Paskapoo Aquifer, it appears the drilling at the property was performed simply to evaluate the gravel resource and is wholly inadequate for use in a hydrogeologic study. A hydrogeologic study implies evaluating hydrogeologic units, particularly the Paskapoo Aquifer, that is being evaluated to see if indeed it would be vulnerable from the gravel mining operations. In fact, most of the work presented in the HTA does not meet the minimum requirements or professional standards required for such an undertaking. You can find these requirements at Alberta Environment and Parks (AEP, 2019), the Canadian Council of the Ministry of Environment (CCME, 2016), Ontario Environment and Energy (Ontario.ca, 2021) to name a few.

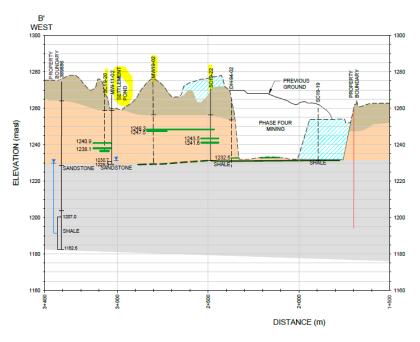
The HTA states that "five hydrostratigraphic units were identified within the project area based on the results of the CHM, lithology, pore media attributes and water bearing conditions: Till Aquitard, Tertiary Sand and Gravel Aquifer, Clay Aquitard, Shale Siltstone Caprock, and the Paskapoo Aquifer" (Section 5.1, P. 8). However, only one unit was actually somewhat investigated, the tertiary gravel unit, from which groundwater samples were collected, simple slug tests were performed on two wells. No data were collected from the other units, which is once again unacceptable for this type and scale of study.

The Cross-Sections were Drafted based on Missing Data

I am showing a couple of the HTA cross-sections from Figures 12 and 13 below to illustrate my points that the work presented in the HTA is so heavily deficient and flawed and so misleading to the typical reader that is reckless and cannot not be considered valid.

- a) Burma Road Water Divide? The road is paved and underlain by gravel with ditches to promote water runoff. No discussion in the HTA.
- b) None of these highlighted boreholes' data are included in the HTA (note that the only boreholes showing "clay aquitards" are from data not presented).
- c) Settlement Pond? No reference is made to this settlement (settling?) pond in the HTA.
- d) The unnamed Creek is a water divide? Where is the data? What is the relevance?





Evaluation of the Hydraulic Conductivity of Soils is Inadequate

I am going to touch upon Section 5.1.2 (P. 8) in the HTA, as the lack of work shown work and conclusions drawn in this section demonstrate such a blatant disregard for good science.

"The Tertiary Sand and Gravel is expected to be highly permeable with hydraulic conductivity values greater than 1x10-4 m/s, which are typical of sand and gravel deposits. Hydraulic conductivity values of 1x10-4 m/s or greater for similar sand and gravel deposits have also been reported for the proposed Summit Aggregate Resource extraction project (SLR, 2015) and Hughes Gravel pit (Waterline, 2015), located approximately 15 kilometres to the northwest.

However, within the Project Area the hydraulic conductivity for the basal water within the Tertiary Sand and Gravel Aquifer ranges between 1x10-6 m/s and 1x10-5 m/s (**Table 4**). These values are lower than those reported for the Summit and Hughes extraction projects. The capacity of the basal water within the Tertiary Sand and Gravel Aquifer in the Project Area is also estimated to be lower due to the limited saturated aquifer thickness (e.g., not greater than 2 m). The lower conductivity and lower capacity of the Tertiary Sand and Gravel Aquifer within the Project Area indicate this aquifer is not ideal for use."

There is no explanation given as to why soil data was not properly collected from the 2019 boreholes when they were drilled with a sonic drill rig that was pulling full 4-inch diameter cores from the entire borehole top to bottom. There was ample opportunity to properly log the holes and actually collect laboratory hydraulic conductivity data (using Shelby Tubes for example) as is common practice. It appears that the 54 boreholes within the gravel were drilled for resource assessment only. There appears to be no intent to properly investigate the hydrostratigraphic units.

The statement that the basal gravel aquifer is not ideal for use based on three slug tests over such an expansive area, when the Paskapoo was not even evaluated is very misleading to the reader, as a proper hydrogeological study was not even attempted. You cannot characterize an aquifer on the basis of 3 wells over 243 hectares/600 acres. Moreover, single well response tests only provide a very local characterization and can only be considered to be characteristic when substantial numbers of test results are provided. Multi-day pumping tests are the more appropriate method for characterizing aquifer yield. That said, it is not at all clear to me why this assessment has focussed only on the basal sand and gravel as it has already been identified that the regional aquifer and the receptor of concern is the Paskapoo Aquifer. In order to demonstrate that the

Opposition to Application No. PL20200093, BYLAW C-8082-2020

project will have no adverse effect on local water supply the connection between the basal water and the Paskapoo needs to be investigated and characterized and that is simply not possible when the data are limited to three water bearing wells within the basal sands and gravels. In short, the aquifer that needs to be characterized has not been included in any of the investigations. This section tries to dupe the reader into thinking that effort has been made into studying the aquifer that could be affected by the project but it does no such thing.

From: edrard

Sent: December 9, 2020 3:55 PM

To: Legislative Services Shared; Anwar Nour

Subject: [EXTERNAL] - Bylaw C-8082-2020 A bylaw of Rocky View County to Amend Land use

Follow Up Flag: Follow up Flag Status: Follow up

Do not open links or attachments unless sender and content are known.

I want to register my strong opposition to the application to amend the use of the Lands covered by the application.

Anwar Nour and Maria Nour 261073 Bearspaw Road Calgary Alberta T3R 1H6

Legal Description: LSD SE/12/26/03/05

Lot 1 Block 4 Plan 13505

my tel number is and my cell is

Thank you

From: Kristi Eshleman

Sent: November 29, 2020 4:03 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Municipal Clerk's Office Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To: The Municipal Clerk's Office

Re: BYLAW C-8082-2020

From: Brent and Kristi Eshleman

16 Church Ranches Close, Calgary, AB T3R1C1

Purpose: To OPPOSE BYLAW C-8082-2020

Reasoning: As long time residents of the Bearspaw community, we oppose BYLAW C-8028-2020 (The application by Lehigh Hanson to develop a 600 acre gravel pit on the northwest corner of Rocky Ridge Road and Burma Road known as at the Scott Property).

Our reasoning for this opposition is as follows:

- 1. This gravel pit will cause negative environmental impacts to water systems, wetland habitats and wildlife survival. This is unacceptable.
- 2. This gravel pit will cause negative health impacts including and not limited to human lung carcinogens from the dust containing silica. This by product of mining is known to cause irreparable pulmonary issues such as COPD and asthma. As a family with asthmatics, we would be directly affected and the County of Rocky View will be liable should they approve the BYLAW.
- 3. This gravel pit will create incessant noise on an industrial level. This is unacceptable given the large number of residents affected by this noise. The noise will also create undue stress to wildlife, pets and livestock. This is unacceptable given residents moved here for the calm country life.
- 4. This gravel pit is not necessary and is counter productive to the intended residential plan set forth for the Bearspaw area as a RESIDENTIAL community.
- 5. The cumulative negative impacts of this gravel pit will drive residential property values downward. During these economically challenging times, it is unforgivable to push through this application for Lehigh Hanson's sole benefit while hurting the longterm prosperity of Bearspaw residents.

Thank you for your time and for taking these concerns seriously in the decision making process.

Sincerely,

Brent and Kristi Eshleman

Catriona Le May Doan

24192 Aspen Dr, T3R 1A4 Rocky View County, AB

Rocky View County

262075 Rocky View Point Rocky View County, AB T4A 0X2

Attention: Municipal Clerk's Office

RE: Opposition to Application No. PL20200093, BYLAW C-8082-2020

I am writing in opposition of the Scott Property project. There are various reasons for this.

My life has always been about healthy living – from my 25 years involved in speed skating pursuing the highest level of athletic performance, to now helping others achieve their very best. I understand the importance of taking care of our health. I live this every day. Having been retired from competitive sport for 17 years, I have chosen to live in Rocky View county to have open space, fresh air, and peace and quiet for myself and my children. We all enjoy the outdoors – whether winter or summer. My work is also all about health – helping people in Calgary and the surrounding area get introduced to a healthy lifestyle through a variety of sport and physical activity. My volunteer work is also about community and sport. I am on the board of Special Olympics Canada, Canada Games Council, and now Chef de Mission for Beijing 2022 Olympic Winter Games.

We know that sport and being active will be crucial for all citizens in our recovery from the Pandemic and through our lifetimes. We need that physical and social activity, but we cannot underestimate the importance of the mental health. The mental health of our communities is at an all time low. We should and need to be extremely concerned about this.

The proposed project is not taking people's physical or mental health into consideration. The dust produced from this project contains carcinogens which will severely impact human health. Noise from existing pits nearby will be compounded by this proposed operation to unbearable levels. I have learned so much from talking to community members who have studied the detrimental impacts from this type of industrial mine, and I believe that if everyone could educate themselves on the specifics, the understanding is that this project is putting a single landowners profits ahead of people's health — physical and mental.

The expectation that this issue is to be debated during a lockdown in our province without a proper way to communicate and respond during the session is unacceptable. People who are not comfortable being around others and risking their health when already feeling compromised, should have a live video feed where they can communicate. Not only are the dates listed confusing, but the video message applications are also too complicated and is a barrier for many.

Rocky View county, especially the area affected by this proposed project, has increased in population density over the last 20 years. This proposed project was denied in 1994 and again in 2010 with the discussion that this area was a residential area. How can this be questioned now?

I trust that this Council will make a decision that takes the residents and those that are the voice of this community into account. The leaders of this community were elected by the citizens and I hope that we can continue to trust that our voice is being heard, and that our voice is valued. My vote is NO to this project.

Sincerely,

Catriona Le May Doan, O. C.

RVC Bearspaw Area Resident

Two Time Olympic Gold Medallist

President and CEO, Sport Calgary

From:

Sent:December 8, 2020 3:52 PMTo:Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020

Follow Up Flag: Follow up Flag Status: Follow up

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We **OPPOSE** the proposed bylaw on the equitable grounds that it allows an aggregate operation to be established far too close to existing residential subdivisions (Crestview Estates and the subdivisions immediately to the south of Burma Road) thereby adversely affecting the quality of life of those residents.

Chris and Sue Woodward 187 Bearspaw Loop Calgary, AB, T3R 1K2

From: Dave Larson

Sent: December 6, 2020 4:20 PM

To: Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-22020 - Complaint letter

Follow Up Flag: Follow up Flag Status: Follow up

Do not open links or attachments unless sender and content are known.

To whom it may concern,

We are writing today to petition against the Lehigh Hanson Gravel Pit proposal. We live in Rocky View County not far from the pit location. We moved out to Rocky view (Church Ranches) 4 years ago to get out of the City as we felt it would be better in the country on an acreage being we have 2 children with severe asthma. My wife also has asthma. As you may know dust is one of the main triggers for this condition. We are asking that this proposal would be declined for this reason as well as many more. We have purchased our property and paid high value as its a sought after location. Allowing Lehigh hanson to do what they are hoping to do, would also devalue our properties and make them wealthy. We arent against them becoming more wealthy, but not at the expense of our health and because of this making our property values worthless.

Please look at the bigger long term picture by sending this company to find gravel in a remote location.

Best Regards,

Dave Larson

52 Church Ranches Blvd

From: Dominic Kazmierczak
To: Steven Lancashire

Subject: FW: [EXTERNAL] - Bylaw C-8090-2020 AND C-89051- 2020 (Mountain Ash Application PL 2020-0103). Gravel pits

Date: January 27, 2021 2:31:41 PM

Another one for Lehigh.

From: D Reid

Sent: Tuesday, January 26, 2021 9:33 PM

To: Legislative Services Shared < LegislativeServices@rockyview.ca>

Subject: [EXTERNAL] - Bylaw C-8090-2020 AND C-89051- 2020 (Mountain Ash Application PL 2020-

0103). Gravel pits

Do not open links or attachments unless sender and content are known.

Dear Rocky View Council:

I am writing to you in regards to the various plans to open more gravel pit mines in RVC (for example Bylaw C-8090-2020 AND C-8051- 2020 Mountain Ash Application PL 2020-0103).

I am particularly concerned with two aspects:-

- in general, the idea of operating more gravel pits near existing and well established residential is an appalling action to take.
- more specifically, the plans to a start a number of new gravel operations nearby, and just northwest of, the Big Hill Springs Provincial Park is a serious mistake.

RVC should not be allowing industrial and mining operations that will significantly interfere with well established residential communities due to noise and dust pollution, constant heavy truck traffic, road congestion, road damage, serious harm to wildlife, the overall detrimental environmental effects, visual pollution, and of course the lowering of house and property value.

Furthermore, once one industrial operation is allowed this will encourage yet more industry. If a single mine is opened it is inevitable that more will be allowed. I do not see any examination of the **cumulative effects of a number of mining operations**. Has anyone examined the cumulative effects? This must be done before any new mine operations are started.

The income that RVC gains from gravel pit operations will not cover the costs of environmental remediation, road repair and construction.

Reclamation to the original conditions before the start of mining is difficult and in my experience is never achieved. The mining and oil industry in Alberta has an appallingly poor record of environmental remediation. Just look at the numerous orphaned oil wells all over Alberta, the utter shambles of the unsuccessful attempts to remediate oil sands, and all the old abandoned open pit coal mines.

If the aquifer source of the Big Hill Springs is negatively impacted by gravel mining, the Big

Hill Creek (and its various fish species) will of course also be harmed. It seems highly probable that the aquifer will be affected by the mining operations. It is impossible to repair the subsequent damage to an area of unique geological, biological and ecological interest. Damaging this special and much loved place is foolish and shortsighted.

I have read the engineering reports produced for the gravel pit companies that purport demonstrate these the mining operation will not cause environmental harm. Here I speak as a research biologist with 50 years of experience and I am most unimpressed by their scientific quality or depth of these reports. In my estimation it seems likely that the aquifer will be negatively affected by the gravel operations.

Sincerely, David M. Reid Professor of Biology (Emeritus).

20 Poplar Hill Place, Calgary AB T3R 1C7 (This is in the north end of the Bearspaw district)

From: Don Heisler

Sent:January 18, 2021 4:38 PMTo:Legislative Services SharedSubject:[EXTERNAL] - Gravel Pit

Follow Up Flag: Follow up Flag Status: Completed

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My wife and I are opposed to the gravel pit. We are Don and Saysamone Heisler, we live at 8 Meadow Bay. Thank you.

January 4, 2021

Municipal Clerks Office

RE: Application Number PL20200093 (066605001/002/003/004/005)

To Whom It May Concern:

As residents of Rocky View County at the address of:

Dwayne and Sharolynne Raessler 92 Church Ranches Blvd Calgary, Alberta T3R 1B1

Legal Land Description - W1/2-31-25-02 - W05M Lot 6 Block 4 Plan 9910556

We do hereby STRONGLY OPPOSE the proposed BYLAW C- 8082-2020 for the following reasons:

- 1. Increased traffic and noise pollution from Burma Road due to gravel trucks and heavy equipment entering and exiting the property at various times throughout the day and night. With primary westerly and northwesterly winds this will be a continuous issue.
- 2. Wildlife such as Deer, Moose, and other species will be affected by increased traffic. This will cause more animals to have an increased danger of getting killed on roads and increased insurance costs and claims with vehicles.
- 3. Increased travel on our roads advocates an increase of expenses to the County of Rocky View to maintain roads more often and thus higher taxes for residents of Division 8.

Additionally we moved to this area 20 years ago in Church Ranches for a better lifestyle for our family to enjoy the outdoors and not the hustle and bustle of the city.
Sincerely yours,
Dwayne and Sharolynne Raessler

From: edwina hiscock

Sent: December 1, 2020 3:03 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020

Do not open links or attachments unless sender and content are known.

We moved into Church Ranches Bearspaw in 1999 excited to live in an upscale, rural, quiet neighborhood. We have really enjoyed the quiet peaceful feeling out here. When we purchased there was no indication that lands adjacent to our community would be allocated for things like gravel pits. We checked out land usage possibilities before we bought.

Since moving here we have seen the development of 4 gravel pits in the The roads are now super busy with truck kicking up dust and rocks. It's very dangers for me to ride my bike here and to date I have had to replace two windshields.

This bylaw change would drastically reduce our house price, create much traffic/noise/dust. Gone would be the rural quiet setting that we moved here for. The dust created will adveresly affect our health as we have asthmatics in the family!

We DO NOT support this Bylaw to redesignate said lands for the Lehigh Hanson Gravel Pit!

I oppose this change and it should NOT be entertained unless ALL residents are willing to have it changed. We did not buy into an area that was designated "INDUSTRIAL" It is NOT fair to existing residents to change this.

We are optimistic that you will listen to the residents who border this area.

Edwina and Carl Hiscock 99 Cheyanne Meadows Way Calgary, Alberta, T3R 1B6

From: SidElsie Shmigelsky

Sent:December 9, 2020 11:01 AMTo:Legislative Services SharedSubject:[EXTERNAL] - BylawC-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To Whom it may concern: As I am a resident of Church Ranches, I am opposed to the Gravel pit development . I have serious lung medical issues and the dust created could hinder my health. The traffic produced from the huge trucks , not to mention the noise produced from all the machinery does not belong in a family residential area. There is industrial land for this type of business. I see no benefit in having a gravel pit in such close proximity to our residents. With my health issues I am deeply concerned and against the gravel pit development .

Thank-you in

advance. Elsie Shmigelsky

Frank & Donna Jakowski 25010 Briarwood Drive Calgary, Alberta Canada T3R 1C2

November 29, 2020

Rocky View County 262075 Rocky View Point Rocky View County, Alberta

Re: Bylaw C-8082-2020

Dear Council:

Thank you for the opportunity to make a submission to Council in respect to this Bylaw. Our family is opposed to the Bylaw for the reasons outlined below.

I am not a scientist or health expert so I am not able to discuss gravel dust or the effects on individuals.

I am able to discuss noise related to gravel operations. In 1996, we moved into our newly constructed house in the second phase of Citadel. Unknown to us when we built the house or moved in that Inland operated a gravel extraction operation directly north and within 2km of our new house. The gravel operation is now known as Inland Park, situated just north of now Stoney Trail and just south of the City of Calgary Spyhill dump on 112th Avenue. This facility operated 24X7X365, gravel extraction and crushing. This activity made our first 5 years in our new house a nuisance. We were unable to leave our windows open in the evening for fresh air or heat reduction and any activity outside had the constant noise of the gravel operation. It was hard to enjoy the outdoors in the summer with the noise that was constant and always irritating.

We constructed and moved to our home in Bearspaw in 2003 to leave the City noise, lights and have a quieter life. Our house is directly across Range Road 25 from the proposed gravel operation. As we are now retired, we enjoy going for quiet walks during the day, seeing the wildlife in our yard and on our walks and enjoy the serenity and darkness of the area. Our 17 years in the area has been beneficial to our health, mentality and physically. The area South, West and even North of the proposed operation is all residential. Everyone that lives and bought in this area did it for the same reason, to leave the hustle and bustle of the City to enjoy a quiet country life. When we looked for an area to build and live, we purposely looked for an area away from industrial activity that was close to farming and ranching activity so we knew that

the area would always be a quiet sanctuary. This proposed operation will take this away from all of the residents in this area. The proposed operation will also have a negative impact on the property values for the homes closest to the operation. This is not a result that anyone that built and lives in the area wants or was expecting. I am sure many of the homes out here are nest eggs for our families and children, which would be negatively affected.

I understand the need for gravel and I understand what lies underneath this area as we are able to grow rocks easily in our yard. This proposed operation is unfortunately in the wrong area. If the proposal was for an area north of the proposed location, south of Township 262 and between Range Road 23 and 25, it might be more acceptable because there are no residential districts in that area. There are a few ranch residences in the area but no residential areas. This change is not compatible with the area, again that is substantially residential.

As stated at the start, we are opposed to the Bylaw and the proposed use of this land.

Sincerely

Frank J. Jakowski, CA

From: Susan Spina

Sent:December 7, 2020 11:26 AMTo:Legislative Services SharedSubject:[EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

From:

Fred and Susan Spina

96 Cheyanne Meadows Way

Calgary, AB T3R 1B7

Lot: 48/ Block: 3/ Plan: 9810168

Dear Rockyview Municipal Clerk Office,

The County has requested comments in advance of the public hearing regarding Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

We are opposed to this application. Heavy industry such as open pit mining is incompatible with residential communities. Opening gravel mining has a huge environmental impacts such as: the water table (especially for those who have water wells); wetland habitats for animal and bird species; noise contamination from drilling and blasting of gravel; truck and shovel/loader noise; conveyor noise; dust contamination including carcinogenic silica dust which is very harmful to our health, affecting our breathing and ultimately could cause silicosis. This application represents a completely unacceptable land use for this area.

Since the County refused Lehigh's two previous applications in respect to this property, several new residential developments have been approved in the immediate vicinity. These approvals signalled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere close to the gravel pits. These negative consequences include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

In closing, this application should be refused for a multitude of reasons, including the ones we have listed above.

Sincerely,

Fred and Susan Spina

From: Garret Swihart

Sent: November 30, 2020 5:17 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Dear members of RockyView Council,

My family and I have lived in this our dream home, which we built, and this our neighbourhood for over 29 years. We have lived here on Meadow Drive and consider it a privilege to do so, and look forward to another 29 or more years.

We have seen much growth in these past years, and understand many want the same privilege and wish to invest in their family home out here with us.

We consider quite seriously another gravel pit, being proposed even closer to our home and neighbourhood as a threat. A threat to our investment, a threat to our health, a threat to our tranquility, and a very clear threat to our safety on our roads. We have seen gravel truck roll overs, we have seen intersection gravel truck crashes and we have already experienced many near misses as gravel trucks failing to fully come to a stop, at stop signs, just roll through and figure that their schedule and large size rules! We also have replace many windshield as gravel spills and rocks stick in gravel truck tires seam to have gotten to an all out high in the past 5 years - I've needed to replace a windshield every year. How many votes does a gravel pit buy you - NOT OURS!

Should this gravel pit be approved by this council, I will invest both time and money in seeing you be voted out.

Seriously concerned,

Garret and Marianne Swihart and Gladys Payne.

Sent from my iPhone

From: Gary Walsh

Sent: December 9, 2020 7:00 PM

To: Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Do not open links or attachments unless sender and content are known.

I oppose the Lehigh Hanson gravel pit in RVC. Not in this area of RVC.

Gary & Carol Walsh 38 Monterra Link RVC T4C OG7

Sent from my iPad

Rocky View County

January 19 2021

Bylaw C-8082-2020

Proposed gravel pit Scott property

File numbers 0665001 06605002 06605003 06605004 06605005

Application Number PL20200093/0094

Division 8

Katherine and Gerrit Langejans

57 Silverwoods Drive Calgary T3R 1E2

Attn Andrea Bryden:

We would like to register that we are **strongly opposed** to the Scott Gravel Pitt.

We have lived in our home on Silverwoods Drive for approximately 20 years. We moved to a rural residence to improve the quality of life for our family. When we moved into the area there were 2 gravel pits, LaFarge and Burnco, and since then a 3rd gravel extraction pit, the Government of Alberta, has opened on 85th Street NW. We now have 3 gravel extraction pits within 7 Km of our house which impact our daily lives through noise and air pollution, plus increased traffic on Burma Road/144 Avenue NW and 85th Street NW.

Noise Pollution:

We can hear the crusher at the Provincial gravel pit on 85th Street NW. The crusher is running every day from morning until evening There is a constant hum which increases when there is an East wind. It makes sitting outside unpleasant and we don't open windows due to the noise and dust.

The proposed pit has indicated they will use a conveyer belt to move the gravel and we have been assured this will reduce noise and traffic. Unfortunately, there is not a conveyer belt system in operation in Canada to review but how it can work silently is a mystery and when it breaks down, or is stopped for maintenance, the only way the gravel can be moved will be by truck. Increasing traffic, noise and dust.

Air Pollution:

Dust which includes Silica is a constant in our lives and will be increased by the operation of this pit. Silica has a cumulative factor and has been proven to be harmful to lungs and negatively affect those suffering from breathing issues. Rocky View doesn't seem to be concerned about this health hazard.

The proposed gravel site is directly north of our residence and the prevailing winds are from the north and the west which will mean increased dust and exposure to Silica.

Wild Life:

The effect on wildlife of the removal of open land, vegetation and natural wetlands will be detrimental. There will be a decrease of birds that nest in wetlands and an increased road deaths due to increased traffic.

Water Table:

The gravel extraction will disrupt natural underground water ways, dry out natural wetlands and affect existing well systems, plus add to Rocky View's existing flooding problem.

Increased Traffic:

There will be an increase to the number of gravel trucks moving gravel to other locations/processing plants and employees traveling to and from the gravel pit resulting in an increase of damage windshields hit by flying gravel. Gravel companies take no responsibilities for gravel dropped by their trucks onto the roads and for truck drivers not securing their loads correctly. Many residents replace their windsheilds and remove dents from the body of their vehicles every year due gravel damage at their own cost.

Trucks do not always obey the highway code. On numerous occasions we have witnessed trucks not stopping at stop signs but pulling out in front of cars when not safe to do so and by driving above the speed limit.

Quality of Life:

The operation of this 4th pit will impact our lives in many ways. With constant noise and increased dust, we will not be able to enjoy being outside in the future. It will have an impact on property values and a reduced availability of purchasers — who will want to buy a property close to a mining operation. Residences located at the east end of Silverwoods will look directly onto the gravel pit as a berm will not be able to built high enough to hide the pit. The existing berms built to hide other gravel pits are full of weeds, dead or poor specimens of trees and bushes and do not disguise the pits or provide a barrier to the effects of gravel extraction. Residents who live in Crestview will be only 150 meters away from the berm which is meant to provide a barrier to the mining operation. They have lived in their rural residences since the 70's, paid their taxes and have been good residential citizens and now will be in middle of an industrial site. How anyone on Counsel can support this proposed gravel pit is unbelievable.

This is the 3rd application for this gravel pit. The previous 2 times it was soundly defeated, the last time 9-0 which should be an indication to Counsel that they are many valid reasons not to approve this operation which have not changed since the last application. Why are they able to apply again?

In closing we chose to live in a rural neighbourhood and paid for the privileged to buy a residence here and now we are being surrounded by mining and gravel extraction pits and expected to be happy with the negative impact they will have on the community.

We are **against** the proposed Scott Pit.

Yours sincerely

Gerrit and Katherine Langejans

From: Gerry Luft

Sent: January 13, 2021 11:12 AM

To: Legislative Services Shared

Cc:

Subject: [EXTERNAL] - Bylaw C-8082-2020.

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To: Rocky View Council

I am opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with existing and proposed residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, as well as for the existing residential development, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents' health, safety (including increased traffic), and quality of life, as well as serious & significant environmental costs.

I am also concerned that the County has scheduled this public hearing during the current Covid-19 crisis. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

In closing, this application should be refused for a multitude of reasons, including the ones I have outlined above.

Gerry & Wyn Luft

72 Cheyanne Meadows Way

Calgary, Alberta T3R1B6

Jan. 13, 2021

From:

Sent: January 18, 2021 10:45 AM
To: Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Subject: Bylaw C-8082-2020

To: Rocky View Council

We are absolutely 100% opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents' health, safety, and quality of life, as well as serious environmental costs. The health and safety of our family as well as every other family that lives in this area are significantly more important than any gravel mining pit and how absolutely appalling that Lehigh Hanson is once again applying for this.

We are also disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

In closing, this application should be refused for a multitude of reasons, including the ones we have listed above.

Gregory Allan and Paige Doty

71 Church Ranches Blvd., Calgary, Alberta T3R 1B1

January 18, 2021

Sent from Mail for Windows 10

55 Bearspaw Point Place Calgary, AB T3L 2P5

262075 Rocky View Point Rocky View County, Alberta T4A 0X2 abryden@rockyview.ca

Attention: Andrea Bryden,

RVC Planning & Development Services

Dear Ms. Bryden:

Subject: Application #: PL20200093/0094 (File #s: 06605001, 06605002, 06605003, 06605004, 066-5005

In response to the County's request for comments on Lehigh Hanson's application to accommodate an open pit gravel mine on the Scott Property and their Master Site Development Plan application, I note that an Alberta Geologic Survey, Alberta Energy study, "Mineral Aggregate Commodity Analysis" by WA Dixon Edwards includes a case study on the 1994 proposal to develop sand and gravel pits in Rocky View (Appendix B. The study identifies the following concerns, which are just as relevant today when heavy industry including open pit mines is proposed next to residential communities, and which should be considered in public hearings and the final decisions. The list includes, from pages 49 and 50:

- Truck noise
- Country residences were here before the pit
- Pit noise
- Reduction of property values (>20% and >15% were mentioned)
- Gravel is only a small cost of value of new house (1.8%)
- Noise control
- Hours of operation
- Inadequate or no industry standards
- Road damage
- Community safety
- Dust and dust control
- The need for a pit
- Traffic safety
- Truck traffic
- · Truck routes
- · Longevity of pit
- · Incompatibility with country residential living , tranquility, quality of life
- · No gravel shortage in Calgary

- The equipment suggested is untested
- Lack of information provided for open meetings
 The actual list is twice as long.

In addition to the above, we are opposed for the following reasons:

- The County has encouraged country residential developments in the Bearspaw
 ASP area for years. People have relied on the County to maintain the character and
 lifestyle of the area as they have built homes, raised families and retire. The
 integrity of the commitment of the County and prior Councils to maintain and
 encourage the growth of adjacent residential communities has been affirmed
 by rejecting earlier applications in 1994 and 2010.
- 2. Notwithstanding the applicant's assertion that aggregate is a "scarce" resource, there is no evidence to support this claim. Profits generated are greater because of the proximity to truck to market, but the impact on the proposed open pit gravel mine is a completely incompatible with the existing adjacent country residential communities. The County turned down Lehigh Hanson's earlier applications twice for this reason adjacent heavy industry is incompatible with residential developments.
- The Bearspaw ASP identifies this area for future country residential development.
 This is being affirmed as a new ASP is being developed. County has no social license to now undermine the rural residential community by allowing open pit mining in this location.
- The proximity of the open pit gravel mines carries with it negative health, quality of life and environmental costs.

I am also bothered by the process being followed in this application:

- A. Misleading Lehigh statements in the public are a concern. Aggregate developments are necessary for development, but the Lehigh suggestion that this is a NIMBY ignores the impact that this will have on the significant adjacent residential community. Community opposition in previous applications was not "a few residents who turn out to shout down any local growth and development". In 1993, those "few residents" included over 1,600 Bearspaw homeowners who signed a petition opposing Lehigh Hanson's first application. Even more relevant today
- B. I am also disturbed that the County is permitting Lehigh Hanson to proceed with its application given the complete inadequacy of the public engagement they are required to do in advance of submitting their application. The County should not permit Lehigh Hanson, or any other applicant, to dispense with its consultation obligations simply because of the current pandemic.

In closing, this application should not be approved for a multitude of reasons as it is irresponsible to allow any heavy industry, let alone open pit mining, to locate in the middle of residential communities.

Your consideration in respect of this application is appreciated.

DLHirschmanner

Hans and Diana Hirschmanner

55 Bearspaw Point Place Calgary, AB T3L 2P5

262075 Rocky View Point Rocky View County, Alberta T4A 0X2 dkazmierczak@rockyview.ca

Attention: dkazmierczak@rockyview.ca RVC Planning & Development Services

Dear Mr. Kazmierczak:

Subject: Application #: PL20200093/0094 (File #s: 06605001, 06605002, 06605003, 06605004, 066-5005

In response to the County's request for comments on Lehigh Hanson's application to accommodate an open pit gravel mine on the Scott Property and their Master Site Development Plan application, I note that an Alberta Geologic Survey, Alberta Energy study, "Mineral Aggregate Commodity Analysis" by WA Dixon Edwards includes a case study on the 1994 proposal to develop sand and gravel pits in Rocky View (Appendix B. The study identifies the following concerns, which are just as relevant today when heavy industry including open pit mines is proposed next to residential communities, and which should be considered in public hearings and the final decisions. The list includes, from pages 49 and 50:

- Truck noise
- Country residences were here before the pit
- Pit noise
- Reduction of property values (>20% and >15% were mentioned)
- Gravel is only a small cost of value of new house (1.8%)
- Noise control
- Hours of operation
- Inadequate or no industry standards
- Road damage
- Community safety
- Dust and dust control
- The need for a pit
- Traffic safety
- Truck traffic
- Truck routes
- · Longevity of pit
- Incompatibility with country residential living, tranquility, quality of life
- No gravel shortage in Calgary

The equipment suggested is untested

Lack of information provided for open meetings

The actual list is twice as long.

In addition to the above, we are opposed for the following reasons:

- The County has encouraged country residential developments in the Bearspaw
 ASP area for years. People have relied on the County to maintain the character and
 lifestyle of the area as they have built homes, raised families and retire. The
 integrity of the commitment of the County and prior Councils to maintain and
 encourage the growth of adjacent residential communities has been affirmed
 by rejecting earlier applications in 1994 and 2010.
- Notwithstanding the applicant's assertion that aggregate is a "scarce" resource, there is no evidence to support this claim. Profits generated are greater because of the proximity to truck to market, but the impact on the proposed open pit gravel mine is completely incompatible with the existing adjacent country residential communities. The County turned down Lehigh Hanson's earlier applications twice for this reason – adjacent heavy industry is incompatible with residential developments.
- The Bearspaw ASP identifies this area for future country residential development.
 This is being affirmed as a new ASP is being developed. County has no social license to now undermine the rural residential community by allowing open pit mining in this location.
- The proximity of the open pit gravel mines carries with it negative health, quality of life and environmental costs.

I am also bothered by the process being followed in this application:

- A. Misleading Lehigh statements in the public are a concern. Aggregate developments are necessary for development, but the Lehigh suggestion that this is a NIMBY ignores the impact that this will have on the significant adjacent residential community. Community opposition in previous applications was not "a few residents who turn out to shout down any local growth and development". In 1993, those "few residents" included over 1,600 Bearspaw homeowners who signed a petition opposing Lehigh Hanson's first application. Even more relevant today
- B. I am also disturbed that the County is permitting Lehigh Hanson to proceed with its application given the complete inadequacy of the public engagement they are required to do in advance of submitting their application. The County should not permit Lehigh Hanson, or any other applicant, to dispense with its consultation obligations simply because of the current pandemic.

In closing, this application should not be approved for a multitude of reasons as it is irresponsible to allow any heavy industry, let alone open pit mining, to locate in the middle of residential communities.

Your consideration in respect of this application is appreciated.

DLHirschmanner

Hans and Diana Hirschmanner

From: Jafar Zahedi

Sent: December 9, 2020 5:06 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Fwd: Undeliverable: Bylaw C-8082-2020. Oppose to application of gravel

pit

Do not open links or attachments unless sender and content are known.

----- Forwarded message -----

From: Jafar Zahedi

To: "legislatives@rockyview.ca" < legislatives@rockyview.ca>

Cc: Bcc:

Date: Tue, 8 Dec 2020 20:54:49 -0700

Subject: Bylaw C-8082-2020. Oppose to application of gravel pit

Dear who might be concern:

I, Jafar Zahedi resident at 39 Lone Pine Cres oppose the application of the grave pit as extraction mine and application presented by Lehigh Hanson at the vicinity to our residents. As me and may other people moved from the city of Calgary to this area to have a peaceful life

and live in and with natural habitants environment.

Please denay and be oppose the request of gravel pit application and save the natural setting of this area from disturbance of topography and losing water resources, wild life habitant, for the sake of people life regarding their health and safety, losing people investment in houses value, air quality, noises and traffics and other possible negative effect.

With Best Regards

Jafar Zahedi

39 Lone Pine Cres

From: Jan Sanford

Sent: December 9, 2020 1:28 PM

To: Legislative Services Shared

Subject: [EXTERNAL] - To: Municipal Clerk, Re: Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Follow up

Do not open links or attachments unless sender and content are known.

My husband and I would like to express our strong disapproval of the LeHigh Hanson Gravel Pit facility that is being proposed for Rocky View County on the Scott Property. There are a myriad of environmental and economic reasons why we are against this damaging endeavour.

They include:

- 1. Increased dust and particulates going into the air contributing to health problems of nearby residents
- Increased noise from heavy equipment and vehicles
- 3. Increased big truck road traffic along Burma Road

- 4. Negative impacts on existing wildlife; and
- 5. Devaluation of homes within 5 kms of the Gravel Pit operation.

We are firmly opposing the development and operation of the Lehigh Hanson Gravel Pit Facility.

Sincerely,

Janice and James Sanford

63 Cheyanne Meadows Way, Calgary, Alberta, T3R 1B6.

From: Javaid sadiq

Sent: December 8, 2020 3:41 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Subject: Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Dear Madam/Sirs,

I am Javaid Sadiq, a resident of 35 Church Ranches Blvd. We moved to this area some 5 years ago and are enjoying every minute of our life in this clean and peaceful environment. We love living in this county and thank you all for providing us such peaceful environment. We had hoped that this environment will remain unchanged and will will spend last years of our life in this beautiful area. However the proposal to have an open pit gravel mine, very close to our home, has really caused us lot of stress and we like to strongly oppose this proposal.

The County has requested comments in advance of the December 22nd public hearing regarding Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

I am opposed to this application. Heavy industry such as open pit mining is incompatible with residential communities. As a result, this application represents a completely unacceptable land use for this area.

Since the County refused Lehigh's two previous applications in respect to this property, several new residential developments have been approved in the immediate vicinity. These approvals signaled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere close to the gravel pits. These negative consequences include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled a public hearing just three days before Christmas in the current Covid-19 environment. This is particularly distressing given the complete inadequacy of Lehigh Hanson's public engagement. The County and Lehigh Hanson should not be permitted to dispense with meaningful public consultations.

In closing, this application should be refused for a multitude of reasons, including the ones I have listed above.

We like to record our objection and hope this proposal will be rejected.

best regards

Javaid Sadiq 35 Church Ranches Blvd Rocky View County T3R 1C! December 7, 2020

Planning & Development Services Department Rocky View County 262075 Rocky View Point Rocky View County, AB T4A 0X2

Application Number: PL202000093 06605001/002/003/004/005

Subject: BYLAW C-8082-2020

To Whom it May Concern:

We write to you with a feeling of concern and dismay that Rocky View County is once again bringing forward an application for another extremely disruptive and unhealthy gravel pit in proximity to a residential neighborhood.

Residents of Rocky View County, and I include my husband and me in that group, have chosen to purchase land and homes in this area because they are drawn to the serene and peaceful, healthy country living. We personally have deliberately made the choice to live in the country. We have deliberately made the choice to not live within city-like proximity to neighbors. We have made these very deliberate choices and used our hard-earned money to live in Rocky View County and we continue investing money and labour into our property to maintain the high standards that characterise this neighborhood.

It is completely unacceptable that we would be asked to approve another gravel pit adding to the already excessive number of gravel pits in the area. The pollution and noise that we endure currently is already at unacceptable levels (https://calgaryherald.com/news/local-news/dust-levels-nearly-seven-times-beyond-standard-at-provincial-gravel-pit-in-citys-northwest). I personally suffer from a lung disease that makes me quite vulnerable to this type of air born particulate; please send me your planning materials for such health issues.

We are completely opposed to any further gravel pit development of any kind in Rocky View Country.

We were not included in any communication put out by the owners of the Scott Property project and ask that ALL affected parties be included in any further information or discussion on this project.

Sincerely,

Jerome & Janine Johnson



December 3, 2020

Subject: Bylaw C-8082-2020

The County has requested comments in advance of the December 22nd public hearing regarding Lehigh Hanson's application to re-designate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

I am opposed to this application. Heavy industry such as open pit mining is incompatible with residential communities. As a result, this application represents a completely unacceptable land use for this area.

When the gravel is taken out, the land becomes non-usable. After the pit is depleated the property becomes non revenue bearing. Better to have the land in residential properties. We do not need another moonscape so close to the other gravel pits.

Since the County refused Lehigh's two previous applications in respect to this property, several new residential developments have been approved in the immediate vicinity. These approvals signalled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere close to the gravel pits. These negative consequences include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled a public hearing just three days before Christmas in the current Covid-19 environment. This is particularly distressing given the complete inadequacy of Lehigh Hanson's public engagement. The County and Lehigh Hanson should not be permitted to dispense with meaningful public consultations.

In closing, this application should be refused for a many of reasons, including the ones I have listed above.
Sincerely

John Clemett Rockyview County

From: Judy Chu

Sent: January 9, 2021 4:30 PM

To: Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To: Rocky View Council

Re: Bylaw C-8082-2020

I am opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

In closing, this application should be refused for a multitude of reasons, including the ones I have listed above.

Name : Johnny & Judy CHU

Municipal Address: 23 Alexa Close Calgary AB. T3R 1B9

Date: January 9, 2021

Sent from my ôôPhone

From: Kae Kaufman

Sent:December 7, 2020 12:22 PMTo:Legislative Services SharedCc:Rocky View Gravel Watch

Subject: [EXTERNAL] - Bylaw C-8082-2020 - Rocky View County

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To Whom it should concern:

I was recently visited by a representative of the Rocky View Gravel Watch who informed me of Lehigh Hanson's Scott Property Application to operate a gravel pit a little more than a kilometre away from my home. The representative provided me with "Help Us Stop Lehigh Hanson's New Gravel Pit" handout, pointed out a few critical points, and then left it with me for further consideration.

As the days passed and the deadline for submissions loomed, I couldn't help but think about how much I had come to appreciate the peace and tranquility that I have come to enjoy (and often take for granted) at my home in the northwest region of Rocky Ridge County. 'Home' is a place where I am granted many profoundly memorable life experiences. Like the deeply satisfying sense of completion that I feel as I scan the grounds that I have just tended with dedication, precision and care. Or the tangible serenity that hovers over freshly cut grasses while pastel rays pull the remnants of another day behind a rocky silhouette; the unspoken familiarity an mutual respect that I share with my woodland friends, and the cool fresh air that greets my dog and me at the start of each new day.

When considering the value and the benefit of living on this remarkable patch of land, the notion of the rumbling toxicity produced by a churning gravel pit located so close to my priceless personal haven creates a gut-wrenching sense of urgency that calls for an immediate and impassioned response. The noise, the dust, the heavy traffic, the increased risk of rock chips and vehicular damage along with the direct and destructive impact on the resident wildlife marks a stark contrast to the right, the pleasure and the privilege of country living.

Rocky Ridge and Burma Roads are busy thoroughfares that lead local residents to schools, shopping and professional services. It simply does not make sense to introduce an influx of heavy trucks, obstructions, delays in traffic and potentially blinding road conditions that pose an increased risk of injury to humans and animals alike. This is not to mention the long-term physical and psychological effects of dust, exhaust, chemical infiltration, chronic disruption and the total annihilation of calm.

These are precarious times. Times when our capacity for concern is continually overcome by the fear and uncertainty of our day. It is in times like these that the peace, serenity and security of home means more than ever.

For that reason, I would like to thank the gentleman that appeared at my door to warn and inform me of the current threat to my cherished way of life and to express my genuine appreciation for all who stand up and show up to defend the home environment that I have worked so hard to create.

With heartfelt gratitude and undying support, your neighbour,

 $\sim Kae$

Kaeleigh Kaufman 24138 Meadow Drive Calgary, Alberta T3R 1A7

From: Kevin Vanderheyden

Sent: November 30, 2020 7:17 AM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Municipal Clerk's Office noting BYLAW C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Hello, I'm writing to you to inform you of my <u>extreme opposition</u> to the Lehigh Hanson Gravel Pit. My wife has life threatening Asthma along with my oldest son, if you need a Doctor's confirmation I have no problem providing one. We cannot have a project like this in our community where so many people live. They need to find a location away from the community where so many people live and spend time outside. I'm also very worried about the water table, wetland habitats for animal and bird species; noise contamination from drilling and blasting of gravel; truck and shovel/loader noise; conveyor noise; dust contamination including carcinogenic silica dust which is very harmful to as stated above the health of my family.

Please reject this project, don't allow a project like this to sit in a community where kids live and play.

Kind regards,

Kevin Vanderheyden 4 Chamberlain Place NW (Church Ranches)

From: Larry Sopko

Sent: November 29, 2020 4:18 PM

To: Legislative Services Shared

Cc: Al Hoggan; Theresa Cochran

Subject: [EXTERNAL] - Bylaw C-8082-2020 - a typo in last email address sent so this is re-send

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

I am a resident of the Rocky View County and living at 53 Silverwoods Drive, Calgary T3R-1E2.

I remain vehemently **OPPOSED** to the Bylaw C-8082-2020 to Amend Land Use Bylaw C-8000-2020 for many reasons.

First, I have a water well located on my property. I strongly believe the gravel pit will have a severe adverse effect on water quality through contamination directly caused by the proposed gravel pit.

Second, the impact of the noise of a conveyor belt has not been addressed by Lehigh Hanson in the least bit. The owners of Lehigh Hanson, living in Germany, will not hear the conveyor belt and crusher in operation. We will be the ones who would have to put up with these impacts. At a town hall meeting, I asked a senior Lehigh Hanson representative if there was a conveyor belt in operation that I could go to see <u>AND</u> to hear. His reply was simply, "There is a similar one in Texas."

Third, the dust will be carried by the wind to all of our properties which are located less than a few hundred metres away. Not unlike what we now know about asbestos, cumulative silica is retained in the lungs and presents serious health problems years later. There are documented WCB claims for workers in gravel pits, but there is no recourse for any of the residents adversely affected. May I suggest you take a drive past the Spy Hill facilities in operation. They try to contain the clouds of dust by using the occasional sprinkling of trucked water. They could care less about the public who must drive though their mud and dust. The <u>paving</u> of all properties with trucks entering and leaving these sites should be made mandatory by the County of Rocky View.

The geology of the gravel pit must be disclosed by Lehigh Hanson. The cores taken from the ground must be made available for public viewing, just as any oil and gas company is required by law to do so with cores taken from their operations. It is through the correlations of subsurface information such as core analyses and gamma ray logs that will prove that Lehigh Hanson is **lying** in their claim that it is a "rare deposit" situated under their 600+ acre parcel. They can pack up any move fifty miles away and they will find the same quality of gravel elsewhere.

What I feel particularly disturbing about this application is that the Rocky View Council is even willing to "hear" the application, even after defeating it twice before. NO MEANS NO and absolutely nothing has changed in the minds of the residents of all our surrounding communities. By consuming so many people's time and money in the past years and now again today, there must be something fundamentally flawed with the Rocky View Council's inept handling of such proposals.

It has been a difficult year for everyone, and I personally find it shameful that R.V. Council would even consider "hearing" this proposal so close to Christmas.

Those are my thoughts on this very serious matter.

Larry Sopko Owner of 53 Silverwoods Drive

From: Lori Ames

Sent: December 16, 2020 9:29 AM

To: Legislative Services Shared

Subject: [EXTERNAL] - Lehigh Hansen PL20200093 proposed bylaw amendment public hearing

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Hi I am writing with regard to proposed changes that will benefit Lehigh Hansen but will affect all other residents within sound and air range of a gravel pit.

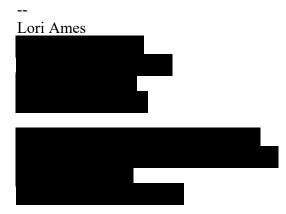
The proposed change would greatly affect property enjoyment and consequently values. There is a Lafarge gravel pit on the edge of Rockyview district and there is already noticeable sound and dust for several kilometers.

A gravel pit in the midst of peaceful residential acreages would certainly be more noise since sound can carry for many kilometers and increased dust is a health concern for my family due to silicone particulates. In addition wildlife will be affected due to increased traffic and noise and Bearpaw will change when wildlife flees the area.

If this proposal goes through then I would be forced to sell my home rather than endure the noise and pollution that I was escaping when I left Calgary.

I am begging you not to change Bearspaw by putting a gravel pit in the midst of our peaceful residential community, as I had never intended to leave the area but would move with a gravel pit within a few kilometers.

Sincerely, Lori Ames resident 12 years.





From: Lyla Couzens

Sent: November 29, 2020 9:05 AM

To: Legislative Services Shared

Subject: [EXTERNAL] - Lehigh Hanson Gravel Pit

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To Whom it May Concern:

I am vehemently opposed to the proposed Lehigh Hanson Gravel Pit off Burma Road. I have lived in this area for 21 years and have gradually seen the increase in large vehicles on our local roads, the noise has increased dramatically, nature has been impacted and the dust and health issues from silica dust are alarming. Please do not proceed with this gravel pit!

Lyla Couzens 28 Cheyanne Meadows Way Calgary T3R1B6

Sent from my iPad

Planning and Development Services Department, Rocky View County - 262075 Rocky View Point, Rocky View County, AB, T4A 0X2

Application Number: PL20200093 (066605001/002/003/004/005)

Subject: BYLAW C-8082-2020

Dear Council Members,

My wife and I have lived on 24042 Aspen Drive for 23 years. There are four large gravel pits in close vicinity to us. Stoney Trial Aggregates, Lafarge Spy Hill, Inland Spy Hill and a Burnco. The Stoney Trail pit creates noise all year round, day and night, making us unable to open our windows at night.

This also creates the hazardous dust with all the airborne pollutions and health risks including cancer, silicosis, COPD, kidney and autoimmune disease, to name a few. These pits affect the wildlife in our area as well by removing natural vegetation. The increased traffic in our area, diesel emissions, disruption of surface and groundwater are more issues we have to deal with because of these pits.

There are **no merits** to approving another gravel pit in this area, we have a 50-75 year supply as it is. We **strongly oppose** this and I hope that you vote no on this project. Protect the residents of Bearspaw and those of us living immediately adjacent.

Yours Truly,

Mark Kwasnicki 24042 Aspen Drive

From:

Sent:January 19, 2021 10:23 AMTo:Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up **Flag Status:** Completed

Do not open links or attachments unless sender and content are known.

I am opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

It would be criminal for the County to allow open pit mining so close to previously permitted residential development and building. Residents in the surrounding area of the land in question put their trust in the County when committing to building a home and life in Bearspaw, NOW is the time for the County to demonstrate that trust.

This application should be refused for a multitude of reasons, including the ones I have listed above

Thank you

Martin Jones 226 Church Ranches Way I am opposed to Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 so it can operate an open pit gravel mine on what is referred to as the Scott Property and their accompanying Master Site Development Plan.

Heavy industry such as open pit mining is incompatible with residential communities. As such, this application represents a completely unacceptable land use for this area.

The County refused Lehigh's two previous applications in respect to this property. Since those refusals, the County has approved several new residential developments in the immediate vicinity. These approvals sent the message that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. Because of these earlier decisions, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere near the gravel pits. These consequences include unavoidable adverse impacts to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled this public hearing in the current Covid-19 environment. This is particularly inappropriate given Lehigh Hanson's completely inadequate public engagement. The County and Lehigh Hanson should not use the pandemic as an excuse to dispense with meaningful public consultation and participation.

It would be criminal for the County to allow open pit mining so close to previously permitted residential development and building. Residents in the surrounding area of the land in question put their trust in the County when committing to building a home and life in Bearspaw, now is the time for the County to demonstrate that trust.

This application should be refused for a multitude of reasons, including the ones I have listed above

From: Rana Khan

Sent:November 28, 2020 3:17 PMTo:Legislative Services SharedSubject:[EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

To whom it may concern:

The County has requested comments in advance of the December 22nd public hearing regarding Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

I am opposed to this application. Heavy industry such as open pit mining is incompatible with residential communities. As a result, this application represents a completely unacceptable land use for this area.

Since the County refused Lehigh's two previous applications in respect to this property, several new residential developments have been approved in the immediate vicinity. These approvals signaled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere close to the gravel pits. These negative consequences include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also disturbed that the County has scheduled a public hearing just three days before Christmas in the current Covid-19 environment. This is particularly distressing given the complete inadequacy of Lehigh Hanson's public engagement. The County and Lehigh Hanson should not be permitted to dispense with meaningful public consultations.

In closing, this application should be refused for a multitude of reasons, including the ones I have listed above.

Regards, Naser and Rana Khan

From: Melodee Jackson

Sent: November 30, 2020 1:35 PM

To: Andrea Bryden

Cc: Legislative Services Shared

Subject: [EXTERNAL] - Lehigh Hanson (LH) Applications PL 20200093/00094

Follow Up Flag: Follow up **Flag Status:** Completed

Do not open links or attachments unless sender and content are known.

Subject: Application #: PL20200093/0094 (File #s: 06605001, 06605002, 06605003, 06605004, 066-5005)

Ms. Bryden:

We are responding to the County's request for comments on Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

We are opposed to this application. The proposed open pit gravel mine is a completely incompatible land use because of the existing adjacent country residential communities. The County turned down Lehigh Hanson's earlier applications twice for this reason – heavy industry is incompatible with residential developments.

Since those earlier refusals, the County has approved many new country residential communities in the immediate vicinity of Lehigh Hanson's proposed open pit mine. These approvals signaled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative impacts on everyone who lives anywhere close to the gravel pits. These negative impacts include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

We are also disturbed that the County is permitting Lehigh Hanson to proceed with its application given the complete inadequacy of the public engagement they are required to do in advance of submitting their application. The County should not permit Lehigh Hanson, or any other applicant, to dispense with its consultation obligations simply because of the current pandemic.

In closing, this application should not be approved for a multitude of reasons including the ones we have listed above.

Thank you for taking time to read and respond.

Sincerely,

Pat & Melodee Jackson 80 Church Ranches Blvd Calgary, Alberta T3R 1B1 Municipal Clerk Re Bylaw C-8082-2020

I am opposed to the Lehigh Hanson Gravel Pit (Scott Pit) based on the following:

The location of this property is in a Residential area adjacent to Church Ranch subdivision and as part of the Bears Paw plan deemed to be Residential

I live 1km east of this proposal and I would be greatly affected as I have a well also the noise, dust and traffic. My standard of country living has already been affected by Burnco, Lafarge and Stoney Pitts we don't need another one.

This is a third application and with the first two being turned down it is time for council to put a stop to this.

These gravel pits do not contribute to community well being and have a very negative impact on the way we live. The only benefit is the increase tax revenue to Rocky View. When these pits are completed all that is left is a hole in the ground, they do not put it back to there original state.

Please reconsider their application and say no enough is enough.

Pat and Diane Green 260233 Range Road 23 Calgary AB T3R1E4

From: Peter Schneider

Sent: January 4, 2021 6:01 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Based on the experience of those living off the path of the Stoney Trail ring road being constructed in the south, I am strongly opposed to any further gravel pit considerations within the populous areas of Bearspaw. We know of residents that would be several kilometres from the construction site and yet they hear the gravel crushing & management, and have significant dust in their homes as a result. These are health risks that cannot be ignored. With the ring road the one saving grace is that there is a limited timeline, there is a significantly longer timeline with any grave pit that would be established within Bearspaw. Home owners off the path of the ring road have seen declines in their home resale value (one family we know believe it is a significant contributor to a 25-30% decline in value of the homes in their neighbourhood). Establishing the pit Lehigh Hanson would have a direct impact in values, which would have to lower tax rates.

Gravel pits do not belong in residential areas. They are not healthy or conducive to the rural lifestyle the residents of Bearspaw chose. Nor should the residents of Bearspaw need to constantly fight too keep the pits out of our front and backyards.

Peter Schneider

149 Bearspaw Hills Road, Calgary, Alberta, Canada T3R 1B3

From: Phil Moore

Sent:December 1, 2020 8:55 AMTo:Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up **Flag Status:** Completed

Do not open links or attachments unless sender and content are known.

December 18, 2020

Legislative Services Rockyview County

Subject: Bylaw C-8082-2020

The County has requested comments in advance of the December 22nd public hearing regarding Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

We are opposed to this application. Heavy industry such as open pit mining is incompatible with residential communities. As a result, this application represents a completely unacceptable land use for this area.

Since the County refused Lehigh's two previous applications in respect to this property, several new residential developments have been approved in the immediate vicinity. These approvals signalled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere close to the gravel pits. These negative consequences include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

I am also utterly outraged that the County has scheduled a public hearing just three days before Christmas in the current Covid-19 environment. This is particularly distressing given the complete inadequacy of Lehigh Hanson's public engagement. The County and Lehigh Hanson should not be permitted to dispense with meaningful public consultations.

In closing, it is difficult to express in writing the anger and derision I feel towards the County and their handling of this application. An approval of this writing would, for myself and my neighbours, be simply unforgivable.

Your Constituents,

Phil and Lisa Moore 24 Woodland Place Calgary, Alberta

From: Sent:	ping qiang December 2, 2020 1:52 PM	
To:	Legislative Services Shared	
Cc:	Church Ranches Homeowners Association	
Subject:	[EXTERNAL] - Oppose BYLAW C-8082-2020	
•	chments unless sender and content are known.	
To: <u>legislativeservices@</u>	ockyview.ca	
From:	(Living Address Legal Description: Lot 31 Block 2 Plan # 951178	89)
Subject: oppose BYLAV	C-8082-2020	
Dear the Rocky View Cou	ty officers:	
to voice my opposition to 2020) . Since 2011 we move	my husband's name is Jian Li who live in 36 church ranches blvd . Today I am writing this let gravel mining permit application on Range Road 25 and Burma Road (BYLAW C-8082 and in Church Ranches community, we love this peaceful rural residential neighborhood with nath nills and lakes. It is a place where we can escape the noise and busyness of the city and relates.	2- tural,
silica dust are very harmful that the gravel mining will of	in 1ml distance from my house would be devastating and ruin the quality of our life. The noise to our health, affecting our breathing and ultimately causing lung issues. As a geologist I also srupt the existing movement of surface water and groundwater, interrupt natural was reduced quantity and quality of drinking water for residents and wildlife nequarry site.	knov vate
	y that a gravel and sand pit affects us to enjoy our properties that we have invested so much moreoperty values and peaceful life. If this permit is granted, the negative impact on the environmostible.	-
I thank you for taking the ti about the future of our com	e to hear my voice and hope you will take them into consideration when making your decision nunity.	I
Sincerely,		
Ping Qiang and Jian Li		
36 church Ranches BLVD	3R 1C1	

From: Rod Hoogstraten

Sent: November 30, 2020 12:53 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - BylawC-8082-2020

Follow Up Flag: Follow up **Flag Status:** Completed

Do not open links or attachments unless sender and content are known.

To Whom It May Concern:

My name is Rod Hoogstraten and my wife Dianne and I are residents of Church Ranches and we wish to register our objection to the Lehigh Hanson proposal for a gravel pit mine on the Scott Property.

We already have a gravel pit in the area which has caused considerable noise and traffic problems over the years. I have complained in prior correspondence and it seems to fall on deaf ears. The reality is that I haven't heard of one person that supports the gravel pit?

This new proposal is unacceptable so close to the many residential communities in the immediate area. Rocky View County must deny this proposal by Lehigh Hanson and show more concern for the health and well being of its constituents! Please act responsibly and deny this proposal.

Rod and Dianne Hoogstraten, 32 Church Ranches Close T3R 1C1 Subject: Bylaw C-8082-2020

This is in reply to the County's request for comments in advance of the December 22nd public hearing regarding Lehigh Hanson's application to redesignate the 600 acres at the north-east corner of Burma Road and Range Road 25 to accommodate an open pit gravel mine on what is referred to as the Scott Property and their application for the accompanying Master Site Development Plan.

My wife and I are opposed to this application. Heavy industry such as open pit mining is incompatible with residential communities. There can be no positive outcomes for our community as a result of this operation.

There will be MORE DUST, MORE TRAFFIC and MORE NOISE. There cannot be anything but a REDUCTION in adjacent PROPERTY VALUES, the residents ENJOYMENT of the area and an impact on the WILDLIFE in the area.

As a result, this application represents a completely unacceptable land use for this area.

Further, in their report of August 2020 entitled "What we heard report" Lehigh Hanson "heard" that "some stated that aggregate operations are not complimentary to adjacent residential communities and that Lehigh should explore other locations for extraction". To this Lehigh replied in part "close-to-market aggregate sources mean lower costs for consumers, and reduced greenhouse gas emissions and truck traffic." In other words Lehigh is not so much concerned over being complimentary to their neighbor's land use as they are of having their costs lowered, even if those lower costs come at increased cost to their neighbors.

Since the County correctly refused Lehigh's two previous applications in respect to this property, several new residential developments have been approved in the immediate vicinity. These approvals signalled that the County is committed to the land use strategy in the Bearspaw Area Structure Plan which identifies this land as the location for future country residential development. As a result, the County has no social license to now impose open pit mining in this location.

Open pit gravel mines impose dramatic negative consequences on everyone who lives anywhere close to the gravel pits. As noted above these negative consequences include unavoidable costs to residents' health, safety, and quality of life, as well as serious environmental costs.

We are also disturbed that the County has scheduled a public hearing just three days before Christmas in the current Covid-19 environment. It is difficult to see this as anything other than attempting to ram this bylaw through when there is likely to be the least amount of opposition. This is particularly distressing given the complete inadequacy of Lehigh Hanson's public engagement. The County and Lehigh Hanson should not be permitted to dispense with meaningful public consultations.

In closing, this application should be refused for a multitude of reasons, including the ones we have listed above.

Ron & Louise Lefebvre 31 Lone Pine Cres CALGARY, AB. T3R1B9 Louise Lefebore

From: Ron Beierle

Sent: January 11, 2021 10:31 AM

To: Legislative Services Shared

Subject: [EXTERNAL] - Proposed bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Follow up

Do not open links or attachments unless sender and content are known.

Application Number PL20200093 (06605001/002/003/004/005)

Name:Ron and Nina Beierle Address:24 Meadow Bay Calgary AB T3R 1A7

We are **opposed** to the proposed bylaw

We believe it would have a negative effect on our property value. It would also result in additional noise in the area.

Thank you

From: Rusty Mackey

Sent: January 18, 2021 5:12 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up **Flag Status:** Completed

Do not open links or attachments unless sender and content are known.

Gentleman:

My name is Rusty Mackey and have lived at 24353 Meadow Drive for 11 years. I am addressing the issue of the proposed gravel pit and may be the only one; including the decision makers, that actually lived two miles from the Knelsen sand and gravel operation in Dimsdale, AB for three years.

For three years I fought particulates in the air composed of dust and silicates, not to mention the noise that was CONSTANT 24-7.

What you are proposing is an abomination to the residents of Bearspaw. I moved to this area with constant lung disorder that were cleared-up in two years due to clean air. You have NO IDEA what the consequences are to the housing market, health of residents and the total degradation to the life we have now and for what? \$\$\$\$\$! For once listen to the people that have paid their taxes and have had experiences in this arena. All of the experts that Lehigh Hanson may address in their support of their submission, will not justify the truth.

If the board approves this submission, they are responsible for the deterioration of a way of life we will NEVER get back. Since I've lived here I have seldom, if ever, seen a submission or subdivision or building permit rejected. It seems we can go to all the meetings and hearings but all comes down to dollars.

I appeal to you to for once, speaking from experience, reject this submission don't let your desire for dollars, destroy what we have as residents. There is plenty of land in the MD of Rocky View to the North that could accommodate such an endeavour.

Sincerely

Rusty R Mackey BSc, Spe

Sent from my iPad

Sarwan singh nahal Saarabjit Kaur Sangha 24043 Burma Rd Calgary AB. T3R1E3

Date: January,18th,2021 **Bylaw C-8082-2020**

Dear Rocky View Council

Re: PL20200093/0094 Lehigh Hanson application for an Open Pit Gravel Mine

We are on Water well, where our family drink water with past experience few years back my water well was stopped working. After called the expert to check it we were told the pump got or pipe got shifted by vibration of blast by gravel. It costed me \$17000.00

We have resided in Bearspaw for 20 years (note: if less than 10 years then state if you built, if Rocky View approved your permit and if you purchased existing, state your understanding the land across Burma Road was designated as agricultural for and earmarked for future residential development) and therefore will be directly affected by the decision made by council regarding this application. In fact we have a direct view of the site. We are opposed to the application.

It is our understanding that this is the third application made by this same applicant, with the most recent one being rejected unanimously. The same reasons for that rejection still apply. There will be significant environmental effects, significant health consequences to residents and it will greatly interfere with the enjoyment of residences in all the properties surrounding the area.

More significantly, meaningful consultation should have occurred with affected residents. This has not occurred. We have been home almost exclusively since the middle of March due to the global pandemic and have not received any correspondence or had contact from Lehigh Hanson or its affiliates in that time other than notice of the application.

In conclusion, I hope Rocky View Council will use the prudent voice used in the previous two applications and reject this application.

1) S. S. nahal (2) SkSamphi

From: Scott Fofonoff

Sent: December 7, 2020 3:29 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - Bylaw C-8082-2020

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

From:

Scott and Maxine Fofonoff 51 Cheyanne Meadow Way

To Whom it may Concern,

In regards to the proposed bylaw C-8082-2020, we would like to be on record and adamantly oppose the rezoning application by Lehigh Hanson for the gravel extraction mine.

As new residents to the area we were a bit shocked to hear of the application for this development, which to my understanding was rejected twice was proceeding, and had we been aware would have used this information negative detractor when choosing to buy our home here.

This application and potential mine will have a huge impact on the beautiful residential community we chose to call home including but not limited to:

- Noise pollution
- Dust pollution
- Increase industrial and vehicle traffic
- Impacts to surrounding wildlife.
- Residential property values.

This type of gravel extraction mine and conveyor system does not seem to align or fit in the area given the types of residential developments which have been approved and encouraged in the past.

Should you have any questions or require anything further please let me know.

Scott and Maxine Fofonoff

From: Wayne

Sent: December 2, 2020 8:49 AM **To:** Legislative Services Shared

Cc:rockyviewgravelwatch@gmail.comSubject:[EXTERNAL] - bylaw C-8082-2020

Do not open links or attachments unless sender and content are known.

Good morning,

My name is Wayne Desabrais and I would like to address my concern regarding the gravel pit proposed for Burma rd. I know most of the people that are against this gravel pit have been in this area for many years but I would like to state my objection from the perspective of someone who just moved here.

My wife and I just bought a beautiful property at 24231 Burma Rd in August and couldn't be happier with our choice of house and neighborhood. When we first looked at this property I voiced my concern with the realtor regarding the traffic on Burma road and was assured that this was a very quiet road that was designated "local traffic only" as the signs state along the road.

We were told by the realtor and the builder that this area was the future of estate size properties in the Calgary area which was exactly what we were looking for.

We Invested 1.6m in this property but are now wondering if this was a good choice.

I am very concerned regarding this gravel pit as both my wife and I have health concerns that can be exaggerated by the dust that this will create

We have only been here for a couple months and are already thinking we made a mistake buying this property and want you to know we are STRONGLY against this.

Wayne Desabrais

Sent from Mail for Windows 10



This email has been checked for viruses by Avast antivirus software. www.avast.com

From: Barry Mjolsness

Sent: December 8, 2020 3:01 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020 Application Number: PL20200093

(066605001/002/003/004/005)

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Rocky View County

RE: Bylaw C-8082-2020 Application Number: PL20200093 (066605001/002/003/004/005)

To whom it may concern,

I am a resident of the MD of Rocky view residing at #11 Bearspaw ridge cr and am writing to support Lehigh Hanson's proposed Scott Property Project.

The reasons for my support are as follows:

Aggregates are a critical component of supporting long term growth and development in the region. They are also a scarce, non-renewable resource which if not extracted prior to development of an alternative use at that site, will simply never be used and essentially go to waste.

New development is important to keep people working and support the recovery of our struggling economy.

Lehigh's proposal is thorough and adequately addresses any concerns with the development. The proposed conveyor system is a very creative idea and will eliminate concerns with transportation of gravel on public roads.

The project will contribute millions of dollars through employment, taxes and other indirect benefits at a time when our economy desperately needs stimulation.

Unfortunately, far to often similar projects have held up or stopped by a vocal minority who are simply opposed to development of any kind. If we want to continue to maintain good quality roads both in the MD of Rockyview and the surrounding City we must have access to good quality aggregate.

Trusting this project will proceed.

Yours truly Barry G Mjolsness

Barry Mjolsness



BURNCO Rock Products Ltd Main Floor, 155 Glendeer Circle SE Box 1480, Station T Calgary, AB, Canada T2H 2P9

burnco.com Phone: 403 255 2600

December 2, 2020

Rocky View County 262075 Rocky View Point Rocky View County, AB, T4A 0X2

Delivered Via Email

Attention: Planning Services Department

To whom it may concern:

Subject: BYLAW C-8082-2020; Application Number: PL20200093 (066605001/002/003/004/005)

As the gravel pit operator on the neighboring parcels: SE4-26-2W5, SW4-26-2W5, and NW4-26-2W5; BURNCO Rock Products Ltd supports Lehigh's Master Site Development Plan and redesignation for the subject lands in application PL20200093.

Responsible aggregate resource extraction should be encouraged in this area to avoid sterilization of a valuable natural resource. The plan submitted adequately addresses the impacts of the development and the pit's operation will contribute to the economic success of Rocky View County.

Sincerely,

BURNCO Rock Products Ltd

Neil O'Connor

NCCom57

Chief Operating Officer

[NO /us]

From: Jerry Haasen

Sent: December 4, 2020 2:26 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] -

Follow Up Flag: Follow up Flag Status: Completed

Do not open links or attachments unless sender and content are known.

Subject: BYLAW C-8082-2020; Application Number: PL20200093 (066605001/002/003/004/005)

To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a [resident /] of Rocky View County, I support this application based on the following:

- Aggregates are a critical component of supporting long-term growth and development in the region.
 They are also a scarce, non-renewable resource which if not extracted prior to the assignment of an alternative use at that site, will be potentially lost forever.
- New development is important to keep people working and support the recovery of our economy both locally and provincially.
- Lehigh's proposal is thorough and adequately addresses any concerns I have with the development. In particular, the proposed conveyor essentially eliminates any safety concerns, road degradation and emissions typically caused by haul traffic.
- The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will to work with its neighbours and the community, if any concerns arise that haven't been addressed by their proposal.

[OPTIONAL ADDITIONAL COMMENTS]

Sincerely,

Jerry Haasen] 43 Willow Creek Heights, Calgary T3R-0K3

Thank you,

Jerry Haasen

From: Sent: To: Subject:	December 8, 2020 10:53 AM Legislative Services Shared [EXTERNAL] - BYLAW C-8082-2020; Application Number: PL20200093 (066605001/002/003/004/005)
Follow Up Flag: Flag Status:	Follow up Completed
Do not open links or attachmen	ts unless sender and content are known.
To whom it may concern,	
I am writing regarding Lehigh F County, I support this application	lanson's proposed Scott Property Project. As a landowner of Rocky View on based on the following:
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 The project will contribute property taxes and other 	te millions of dollars through the CAP levy, transportation levy, application fees, r indirect benefits.
	a responsible operator who will to work with its neighbours and the community, n't been addressed by their proposal.
Sincerely,	
John Haasen	
31057 Coyote Valley Road	
Thank you	

From: Jennifer WESLOWSKI < jennifer.weslowski@lafargeholcim.com>

Sent: December 18, 2020 5:04 PM **To:** Legislative Services Shared

Cc: James Wilson

Subject: [EXTERNAL] - Bylaw C-8082-2020 Letter of Support **Attachments:** Letter of Support (Bylaw 8082-2020 - Lehigh Hanson).pdf

Do not open links or attachments unless sender and content are known.

Good Afternoon,

Please see the attached Letter of Support for Bylaw C-8082-2020 regarding the redesignation of lands from Agricultural, General District to Direct Control District in order to facilitate Lehigh Hanson's proposed aggregate operation.

Thanks,

Jennifer Weslowski

Land Manager, SAB & WCAN Cement
Lafarge Canada Inc.
2213 - 50th Avenue SE Calgary, AB T2B 0R5
Mobile (403) 312-0480
Email jennifer.weslowski@lafargeholcim.com



Website <u>www.lafarge.ca</u>

This e-mail is confidential and intended only for the use of the above named addressee. If you have received this e-mail in error, please delete it immediately and notify us by e-mail or telephone.



December 18, 2020

Rocky View County
Planning Services Department
262075 Rocky View Point Rocky View County, AB T4A 0X2

Attention: Municipal Clerk

Re: Bylaw C-8082-2020 Redesignation Application (File PL20200093)

Lafarge Canada Inc. is the owner of Section 34-25-2-W5M and the operator of the N1/2 of 28-25-2-W5M and Section 33-25-2-W5M. Lehigh Hanson Materials has shown a great effort and commitment to work with adjacent landowners and gravel operators to mitigate and address and cumulative effects of their proposed operations. Lafarge has no objections and supports Lehigh's application for land use redesignation and approval by Rocky View County.

Sincerely,

Jennifer Weslowski

Land Manager, SAB & WCAN Cement

From: Loren John

Sent: December 3, 2020 5:37 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020; Application Number: PL20200093

(066605001/002/003/004/005)

Follow Up Flag: Follow up **Flag Status:** Completed

Do not open links or attachments unless sender and content are known.

To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a resident of Rocky View County, I support this application based on the following:

- Aggregates are a critical component of supporting long-term growth and development in the region.
 They are also a scarce, non-renewable resource which if not extracted prior to the assignment of an alternative use at that site, will be potentially lost forever.
- New development is important to keep people working and support the recovery of our economy both locally and provincially.
- Lehigh's proposal is thorough and adequately addresses any concerns I have with the development. In particular, the proposed conveyor essentially eliminates any safety concerns, road degradation and emissions typically caused by haul traffic.
- The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will to work with its neighbours and the community, if any concerns arise that haven't been addressed by their proposal.

Sincerely,

Loren John, P. Eng. 32227 Willow Way, Rocky View County, AB, T4COG6 QTR-LSD/SEC/TWP/RGE/M - SW/15/26/03/05 LOT/BLOCK/PLAN - /3/7711032 OTHER – exc plan 9612412 1/4

From: Phil Vanderveen

Sent: December 2, 2020 3:02 PM **To:** Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020; Application number: PL20200093

(066605001/002/003/004/005)

Follow Up Flag: Follow up Flag Status: Follow up

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To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a resident/landowner of Rocky View County, I support this application based on the following:

Aggregates are a critical component of supporting long-term growth and development in the region. They are also a scarce, non-renewable resource which if not extracted prior to the assignment of an alternative use at that site, will be potentially lost forever.

New development is important to keep people working and support the recovery of our economy both locally and provincially.

Lehigh's proposal is thorough and adequately addresses any concerns I have with the development. In particular, the proposed conveyor essentially eliminates any safety concerns, road degradation and emissions typically caused by haul traffic.

The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will to work with its neighbours and the community, if any concerns arise that haven't been addressed by their proposal.

Sincerely,

Phil VANDERVEEN 285249-Horsecreek rd Legal-NE-36-028-05-5













From: Russell Vanderveen

Sent: December 2, 2020 2:31 PM

To: Legislative Services Shared

Subject: [EXTERNAL] - BYLAW C-8082-2020; Application Number: PL20200093

(066605001/002/003/004/005)

Do not open links or attachments unless sender and content are known.

To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a resident/landowner of Rocky View County, I support this application based on the following:

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I believe Lehigh Hanson will be a responsible operator who will to work with its neighbours and the community, if any concerns arise that haven't been addressed by their proposal.

Sincerely,

Russell Vanderveen 39 Pinecone Lane SW Rocky View County AB, T3Z3K4 Legal Description: Plan 07911041, Block 3, Lot 10 To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a business owner of Rocky View County, I support this application based on the following:

- Aggregates are a critical component of supporting long-term growth and development in the region. They are also a scarce, non-renewable resource which if not extracted prior to the assignment of an alternative use at that site, will be potentially lost forever.
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- The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will to work with its neighbours and the community, if any concerns arise that haven't been addressed by their proposal.

Sincerely,

Denis Maille, Owner Scorpio Concrete LTD.

42 A griffin Industrial point

Cochrane, AB T4C 0A3



42 Griffin Industrial Point, Cochrane, Alberta, T4C 0A3, Tel: (403) 932-4666, Fax (403) 932-7552

December 8th, 2020

Subject: BYLAW C-8082-2020; Application Number: PL20200093 (066605001/002/003/004/005)

To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a landowner and business owner of Rocky View County, I support this application based on the following:

- Aggregates are a critical component of supporting long-term growth and development in the region. They are also a scarce, non-renewable resource which if not extracted prior to the assignment of an alternative use at that site, will be potentially lost forever.
- New development is important to keep people working and support the recovery of our economy both locally and provincially.
- Lehigh's proposal is thorough and adequately addresses any concerns I have with the development. In particular, the proposed conveyor essentially eliminates any safety concerns, road degradation and emissions typically caused by haul traffic.
- The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will work with its neighbours and the community, if any concerns arise that have not been addressed by their proposal.

Sincerely,

Richard Bach

President / Owner

Cell: (403) 615-7557



42 Griffin Industrial Point, Cochrane, Alberta, T4C 0A3, Tel: (403) 932-4666, Fax (403) 932-7552

December 8th, 2020

Subject: BYLAW C-8082-2020; Application Number: PL20200093 (066605001/002/003/004/005)

To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a landowner and business owner of Rocky View County, I support this application based on the following:

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- The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will work with its neighbours and the community, if any concerns arise that have not been addressed by their proposal.

Sincerely,

Richard Bach
President / Owner

Cell: (403) 615-7557



42 Griffin Industrial Point, Cochrane, Alberta, T4C 0A3, Tel: (403) 932-4666, Fax (403) 932-7552

December 8th, 2020

Subject: BYLAW C-8082-2020; Application Number: PL20200093 (066605001/002/003/004/005)

To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a landowner and business owner of Rocky View County, I support this application based on the following:

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- The project will contribute millions of dollars through the CAP levy, transportation levy, application fees, property taxes and other indirect benefits.

I believe Lehigh Hanson will be a responsible operator who will work with its neighbours and the community, if any concerns arise that have not been addressed by their proposal.

Sincerely,

Richard Bach
President / Owner

Cell: (403) 615-7557

From: Greg Hooper <GregHooper@volkerstevin.ca>

Sent: December 9, 2020 9:58 AM **To:** Legislative Services Shared

Cc: Greg Hooper

Subject: [EXTERNAL] - BYLAW C-8082-2020; Application Number: PL20200093

(066605001/002/003/004/005)

Follow Up Flag: Follow up Flag Status: Completed

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To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As an industry Executive with over 30 years of experience, I support this application based on the following:

- 1. Aggregates are used in most if not all of the building materials that are essential for the infrastructure that society needs to carry on our daily lives.
- 2. The Scott Property is ideally located in close proximity to established and legacy gravel production, asphalt production and ready mix concrete operations.
- 3. Should the decision not to extract aggregates from this location go-forward the use of this existing infrastructure would not be leveraged thereby resulting in much higher costs to the taxpayer.
- 4. Aggregate resources of this quality are very scarce and the optimal location of this deposit will reduce transportation costs and emissions. Leveraging this existing infrastructure is efficient and cost effective.
- 5. Lehigh's proposal is thorough and adequately addresses any concerns I have with the development. In particular, the proposed conveyor essentially eliminates any traffic safety concerns, road degradation and emissions caused by additional heavy truck activity. I believe the substantial investment is a show of good faith to the community and a commitment to ESG concerns.
- 6. The project will contribute millions of dollars through the cap levy, transportation levy, application fees, property taxes and other indirect benefits. This project will not only save tax payer money in the long term but will meaningfully contribute to broader infrastructure and development projects in the province through the cap levy program.

I believe Lehigh Hanson will be a responsible operator who will to work with its neighbors and the community, if any concerns arise that haven't been addressed by their proposal. Lehigh has a history of responsible development and management of aggregate resources. I believe the overall benefits vastly outweigh community concerns.

Sincerely,

Greg Hooper 7175-12 St. SE Calgary, AB T2H 2S6

Greg Hooper

Sr. Vice President **VOLKER STEVIN CANADA**

T: 403.571.5828 C: 403.620.6320

GregHooper@VolkerStevin.ca

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From:

Sent: December 4, 2020 11:01 AM
To: Legislative Services Shared

Subject: [EXTERNAL] - Subject: BYLAW C-8082-2020; Application Number: PL20200093

(066605001/002/003/004/005)

Follow Up Flag: Follow up **Flag Status:** Completed

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To whom it may concern,

I am writing regarding Lehigh Hanson's proposed Scott Property Project. As a landowner of Rocky View County, I support this application based on the following:

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I believe Lehigh Hanson will be a responsible operator who will to work with its neighbours and the community, if any concerns arise that haven't been addressed by their proposal.

Sincerely,

743263 Alberta Ltd. NE-03-27-04-05

Thank you,

Walter Krahn P.Eng.



Fax: 403-531-3001

WALTER.kRAHN@lehighhanson.com www.lehighhansoncanada.com



Virus-free. www.avast.com