

Benjamin Isitt
Barrister and Solicitor
Benjamin Isitt Law Corporation
2547 Prior Street, Victoria, BC V8T 3X5
Email. ben@isitt.ca | Tel. 250.882.9302

June 14, 2024

VIA EMAIL AND REGISTERED MAIL

Chris Trumpy
Deputy Minister and Acting Chief Executive Assessment Officer
Environmental Assessment Office
PO Box 9426 Stn Prov Govt, Victoria, BC V8W 9V1
Email. EAOinfo@gov.bc.ca

Dear Mr. Trumpy:

**Re: Submissions and evidence regarding reviewability of
proposed Record Ridge mine (Rossland, British Columbia)**

Further to our letters to the Environmental Assessment Office (“EAO”) of January 10, 2024, March 25, 2024, and April 25, 2024, we provide these submissions on behalf of our client, the Save Record Ridge Action Committee Society (“SRRAC”), with respect to the requirement for an environmental assessment certificate for the proposed Record Ridge mine in the vicinity of Rossland, British Columbia (the “**Proposed Mine**”).

SRRAC notes that it has reviewed the City of Rossland’s letter to the EAO dated May 28, 2024 and adopts the city’s submissions in their entirety, while expanding on them below.

SRRAC has also reviewed the following materials and adopts the submissions contained therein:

- (1) the United States Environmental Protection Agency’s position that an environmental assessment should be completed to ensure potential impacts of the Proposed Mine on waters of the United States are properly evaluated;
- (2) Environment and Climate Change Canada’s position that further mapping of the threatened Mountain Holly Fern on Record Ridge is required;
- (3) the Washington State Department of Ecology’s position that an environmental assessment should occur before further steps are taken in the permitting process, including detailed analysis of air emissions and fugitive dust, water pollution, potential exposure of asbestos and chromium, potential to re-entrain existing soil contaminants, and environmental justice for communities in Washington State; and
- (4) the Shuswap Band of the Secwépemc Nation’s position that it does not support the Proposed Mine given multiple adverse effects on cultural and ecological values.

In the first part of this letter, we reiterate SRRAC's position that the Proposed Mine is properly categorized as a mineral mine pursuant to Section 9 of the *Environmental Assessment Act*, SBC 2018, c 51 (the "**Act**") and Sections 9 and 10 of the *Reviewable Projects Regulation*, BC Reg 243/2019 (the "**Regulation**"), and that based on the production capacity at Record Ridge, an environmental assessment certificate is automatically required pursuant to Sections 6 and 9 of the Act.

In support of this submission, SRRAC provides the attached expert opinion evidence of Dr. Lee Groat, Professor with the Department of Earth, Ocean and Atmospheric Sciences at the University of British Columbia (as Exhibit "A" of this letter, along with Dr. Groat's curriculum vitae as Exhibit "B" and our instruction letter to Dr. Groat as Exhibit "C"), in which Dr. Groat states that:

"The substance that WHY proposes to remove at Record Ridge is serpentinite rock. If we assume that by silica the regulation actually means quartz, then in my opinion the material would only be an 'industrial mineral' if >50% of the material removed was quartz.

If the Regulation actually means to state that silica is the predominant oxide, not mineral, the serpentine subgroup minerals are ... silicates containing approximately 40-43 wt.% SiO₂, the oxide present in the highest concentration.

... In my opinion the substance that WHY proposes to remove at Record Ridge is not a substance in which silica is the predominant mineral because silica is not a mineral according to the IMA.

... Based on the definition in the Mineral Tenure Act, in my opinion, the substance that WHY proposes to remove at Record Ridge is an ore of metal (magnesium) that can be mined and is in the place or position in which it was originally formed. Therefore in my opinion it is a 'mineral' according to the Act but not a mineral according to the IMA.

... I was also asked to comment on a letter that WHY sent to the BC EAO in February 2024. The letter states that silica is a mineral, which in my opinion is incorrect according to the IMA definition. The letter also states that 'two of those silicates (garnet and corundum) do not manifest silica in their chemical composition as SiO₂.' Garnet is a silicate mineral group, and any analysis of garnet will show considerable wt.% SiO₂. Corundum has the formula Al₂O₃, and therefore is not a silicate mineral."

In the second part of this letter, SRRAC provides an alternative submission in the event that the EAO deems that the Proposed Mine is not automatically reviewable and rather, that it is an eligible project under Section 11 of the Act (which SRRAC submits would be an unlawful determination based on an incorrect interpretation of the statute, as reviewable projects are expressly excluded from the definition of "eligible projects" under Section 11(1)

of the Act). SRRAC's alternative submission is that the Minister ought to designate the Proposed Mine as reviewable, applying the factors enumerated under Section 11(4) of the Act, and that the EAO ought to advise the Minister accordingly.

In the further alternative, in the event that the EAO deems that the Proposed Mine is not automatically reviewable and the Minister declines to designate the Proposed Mine as reviewable under Section 11, SRRAC submits that the Chief Executive Assessment Officer ought to designate the Proposed Mine as reviewable under Section 12(3)(a) of the Act, in light of the multiple adverse effects on environmental health and human health and wellbeing.

In support of the submissions and alternative submissions in this letter, SRRAC appends the Memorandum of Argument (Exhibit "D") and Book of Evidence ("**BOE**", Exhibit "E") that it submitted to the Ministry of Energy, Mines and Low-Carbon Innovation ("**EMLI**") and Ministry of Environment and Climate Change Strategy ("**ENV**") during public consultation on the application of the proponent West High Yield Resources Ltd. ("**WHY**") for permits under the *Mines Act*, RSBC 1996, c 293 and *Environmental Management Act*, SBC 2003, c 53 (the "**Application**", which we are appending as Exhibit "G").

SRRAC's Book of Evidence includes the following materials that are relevant to the EAO's and the Minister's understanding of (1) the impacts of the Proposed Mine, (2) the sufficiency of WHY's Application materials, and (3) the public interest with respect to the Application and Proposed Mine:

- a. expert opinion evidence of Dr. Kenneth Froese, PhD, PChem (BOE Ex. 1 to Ex. 3);
- b. expert opinion evidence of Dr. Rina Freed, PhD, PEng (BOE Ex. 4 to Ex. 6);
- c. 78 affidavits from residents and business operators in Rossland and environs (BOE, Ex. 7 to Ex. 85);
- d. correspondence and other materials that are relevant to procedural fairness and the public interest (BOE Ex. 86 to Ex. 107);
- e. impact statements from an additional 39 residents and business operators in Rossland and environs (BOX Ex. 108); and
- f. a petition signed by 1,361 people, of whom 57% reside in Rossland, 81% reside in the local area and 92% reside in British Columbia (BOX Ex. 109).

As stated in the Memorandum of Argument, it is SRRAC's position that:

- (1) the Application is not satisfactory, as required under Section 10 of the *Mines Act*, and the Chief Permitting Officer therefore ought to decline to issue a permit;
- (2) the Application is not sufficiently protective of the environment, as required under Section 14 of the *EMA*, and the Director of Waste Management therefore ought to decline to issue a permit; and

(3) the permitting process is tainted by multiple breaches of the duty of procedural fairness that EMLI and ENV owe to SRRAC, to its members, and to other members of the public, and the Chief Permitting Officer and the Director ought to decline to issue permits on this procedural ground as well.

TABLE OF CONTENTS

PART 1: THE PROPOSED MINE IS AUTOMATICALLY REVIEWABLE UNDER THE ACT AND REGULATION..... 5

A. The Proponent describes the substance being removed at Record Ridge as “serpentinite rock” and “serpentine” 5

B. The Proponent does not describe the substance being removed as “silica” anywhere in its Application 9

C. The Proponent admits that ultramafic rock is “rich in iron and magnesium minerals” and “relatively low in silica” 9

D. The Proponent does not propose to use the substance being removed for an industrial purpose..... 9

E. Applying the criteria for reviewability in the Act and Regulation 10

F. Categorization as a mineral mine..... 11

G. Precedent for categorizing a magnesium mine as a mineral mine: The Cogburn Magnesium Project 13

H. Reply to the Proponent’s claims regarding categorization 13

I. Irrelevant factors..... 17

J. Conclusion regarding categorization..... 18

PART 2: ALTERNATIVE SUBMISSIONS REGARDING MINISTERIAL DESIGNATION UNDER SECTION 11 OR EAO DESIGNATION UNDER SECTION 12..... 19

A. Effects on Indigenous Nations 20

B. The potential effects of the Proposed Mine will be equivalent to or greater than effects of mines extracting 250,000 tonnes of mined product per year 21

C. Environmental assessment of the Proposed Mine is consistent with the purposes set out in the Act 25

D. Designation of the Proposed Mine as a reviewable project is in the public interest . 27

PART 3 - CONCLUSION..... 29

PART 1: THE PROPOSED MINE IS AUTOMATICALLY REVIEWABLE UNDER THE ACT AND REGULATION

As stated in our previous correspondence to the EAO, SRRAC asserts that the Proposed Mine is automatically reviewable as a mineral mine based on the definitions in the Act, the Regulation and the *Mineral Tenure Act*, and requests confirmation from the EAO that an environmental assessment certificate is required before any work can proceed on the Proposed Mine.

SRRAC's position regarding reviewability of the Proposed Mine is based on the following considerations, as confirmed in Dr. Groat's expert opinion evidence (Ex. A).

A. The Proponent describes the substance being removed at Record Ridge as "serpentinite rock" and "serpentine"

In correspondence to the EAO dated December 11, 2023, the proponent WHY states that it "aims to extract serpentine ore" at the proposed Record Ridge mine.¹

Furthermore, in WHY's Project Notification materials submitted to the EAO in May 2023, WHY states that its mine is targeting "magnesium bearing material known as serpentine."²

This characterization is further supported by WHY's NI 43-101 Technical Report (Preliminary Economic Assessment), prepared by SRK Consulting Engineers in June 2013, which we have appended as Exhibit "J" and which provides assay results that show Record Ridge ore as containing 74.1% serpentine.³

Furthermore, WHY's notice of application posted in the *Rossland News* on April 18, 2024 (for permits under the *Mines Act* and *Environmental Management Act*) (the "**Notice**", which we have appended as Exhibit "F") describes the Proposed Mine as follows:

"The proposed Record Ridge Industrial Mineral Mine Project includes mining at a rate of no greater than 200,000 tonnes of magnesium-bearing serpentinite rock per year."

SRRAC notes that the Notice makes no mention of silica nor any other substance listed in Appendix 3 of the Regulation.

SRRAC submits that the contents of the Notice support SRRAC's position that the Proposed Mine is properly categorized as a reviewable mineral mine pursuant to Section 9 of the Act and Sections 9 and 10 of the Regulation.

¹ WHY to EAO, December 11, 2023, p. 2 < <https://projects.eao.gov.bc.ca/project-notifications> >.

² Greenwood Environmental Inc., *Record Ridge Industrial Mineral Mine Project – Project Notification* (May 2023), p. 4 < <https://projects.eao.gov.bc.ca/project-notifications> >.

³ SRK Consulting, *Revised NI 43-101 Technical Report: Preliminary Economic Assessment, Record Ridge Project, British Columbia, Canada* (June 3, 2013), p. 46 ("Table 11.2.2: Resource Elemental Composition").

Turning to WHY's application for permits under the *Mines Act* and *Environmental Management Act* (the "**Application**", which we have appended at Exhibit "G" of this letter, along with the Application Summary as Exhibit "H"), SRRAC draws the EAO's attention to several relevant excerpts where the Proponent describes the substance being removed as "serpentinite rock" and "serpentine", including the following statements:

EXECUTIVE SUMMARY

The proposed RRIMM Project is designed to supply two years of run of mine (ROM) magnesium-bearing serpentinite rock at a rate no greater than 200,000 tonnes per year.⁴

Ex. G, p. 3

PURPOSE AND SCOPE OF APPLICATION

The proposed RRIMM Project is designed to supply two years of run of mine (ROM) magnesium-bearing serpentinite rock (i.e., ore) at a rate no greater than 200,000 tonnes per year.⁵

Ex. G, p. 33

1.3 PROJECT OVERVIEW

1.3.1 PROJECT HISTORY

The RRIMM Project is focused on mining the mineral serpentine, a complex magnesium-iron phyllosilicate. The serpentine-bearing host rock is known as the "Record Ridge Ultramafic Body".⁶

Ex. G, p. 37

1.3.2 OVERVIEW OF PRODUCTS AND MARKETS, AND PROJECTED PROJECT BENEFITS

1.3.2.1 PRODUCTS AND MARKETS

The Canadian portion of the RRIMM Project does not include processing of the host serpentinite rock other than crushing, which reduces the rock from a run of mine (ROM) size to that suitable for highway truck transport.

... Although magnesium is found in more than 60 minerals, the industry-standard source rock for magnesium is magnesite $MgCO_3$ and dolomite $CaMg(CO_3)_2$. The Record Ridge host rock is different as it is a polymorphous phyllosilicate of a mineral group called serpentine, basically $(Mg, Fe)_3 Si_2 O_5(OH)_4$.⁷

Ex. G, p. 40

⁴ West High Yield Resources Ltd., *Joint Mines Act and Environmental Management Act Permit Application* (October 2023), Page 3 (Page i of internal page numbering).

⁵ West High Yield Resources Ltd., *Application*, p. 33 (internal p. 1-2).

⁶ West High Yield Resources Ltd., *Application*, p. 37 (internal p. 1-6).

⁷ West High Yield Resources Ltd., *Application*, p. 40 (internal p. 1-9).

1.3.4.2 OPEN PIT

The two-year open pit is designed targeting near-surface magnesium bearing material known as serpentinite.⁸

Ex. G, p. 50

RECORD RIDGE ULTRAMAFIC

The RRIMM Project area hosts a variably serpentinitized ultramafic body, the Record Ridge Ultramafic, which underlies an area of approximately 6.2 square kilometers (km²) The Record Ridge Ultramafic comprises variably serpentinitized, and locally carbonatized, ultramafic cumulates, including Dunite, Pyroxene-bearing Dunite, Olivine-bearing Wehrlite, Wehrlite and Lherzolite, dependent upon the relative proportion of olivine to pyroxene. Disseminated chrome spinel (chromite) is present in all ultramafic rocks.⁹

Ex. G, p. 65

3.0 MINE PLAN

3.1 MINE PLAN OVERVIEW

The proposed Record Ridge Industrial Mineral Mine (RRIMM) Project mine plan will be a conventional truck and shovel open pit operation which will include ripping, loading, and hauling of magnesium-bearing serpentinite.¹⁰

Ex. G, p. 157

9.9.2 WASTE ROCK GEOCHEMICAL CHARACTERIZATION

9.9.2.1 CONCEPTUAL GEOCHEMICAL MODEL

Sources of ML/ARD potential at the Record Ridge Project include waste rock, pit wall rock, and ore stockpiles. The ore will be processed offsite, so tailings are not a consideration for the Project. Borrow material for construction purposes is considered unlikely to be required in the current mine plan.

Waste rock and pit wall rock will be comprised of serpentinite, andesite, and monzosyenite. Ore will be largely serpentinite.¹¹

Ex. G, p. 302

⁸ West High Yield Resources Ltd., *Application*, p. 50 (internal p. 1-19).

⁹ West High Yield Resources Ltd., *Application*, p. 65 (internal p. 2-8).

¹⁰ West High Yield Resources Ltd., *Application*, p. 157 (internal p. 3.1). See also p. 186 (internal p. 5-1) for identical language.

¹¹ West High Yield Resources Ltd., *Application*, p. 302 (internal p. 9-29).

In Section 2.3.2.3 of the Application on “Record Ridge Deposit and Mineralogy”, the Proponent states that: “The principal element of commercial interest is magnesium hosted within serpentinized ultramafic rocks.”¹²

Ex. G, p. 72

SRRAC notes that nearly identical statements are reproduced in the Application Summary that the Proponent submitted to EMLI in November 2023, including at pages 6, 7, 8, 10 and 20.¹³ This includes the following statements:

1.3.2.1 PRODUCTS AND MARKETS

Metallurgical processing of RRIMM Project industrial mineral rock will be done in the United States (US). The final products are considered critical and strategic to both Canada and the US, encompassing high-purity magnesium oxide (MgO), magnesium hydroxide (Mg(OH)₂) and eventually, using the ALCOA Magnatherm process, Magnesium Metal. Additionally, the process yields high purity silica, nickel, and iron.

Ex. H, p. 10

SRRAC further notes that the Proponent has consistently described the substance been mined as “serpentine” over many years, including in a 2018 presentation to EMLI and ENV staff (appended as Exhibit “I”), in which WHY states (at Page 9) that the “Deposit is comprised of Mg-rich ultramafic lithologies variably altered to serpentine” and (at Page 23) that it plans to “Mine 498k tonnes of Mg-O rich mine product over two years.”

Ex. I, pp. 9 and 23

SRRAC submits that these statements by the Proponent in its Application, Application Summary and associated materials support SRRAC’s assertion that the Proposed Mine does not contemplate removing any of the substances listed under Appendix 3 of the Regulation, and rather, that it proposes to remove a substance that meets the definition of a mineral under the Act, the Regulation and the *Mineral Tenure Act* (as cited and discussed in Section F below and in Dr. Groat’s expert report at Exhibit “A”): a material that is predominantly serpentine (according to the Proponent’s written materials), which is an ore or natural substance that can be mined, that is in the place or position in which it was originally formed or deposited.

As a result, the Proposed Mine is a reviewable mineral mine and an environmental assessment certificate is required.

¹² West High Yield Resources Ltd., *Application*, p. 72 (internal p. 2-15).

¹³ West High Yield Resources Ltd., *Record Ridge Industrial Mineral Mine Project Joint Mines Act and Environmental Management Act Application Summary* (November 2023), pp. 6, 7, 8, 10 and 20.

B. The Proponent does not describe the substance being removed as “silica” anywhere in its Application

SRRAC further notes that the Proponent does not describe the substance being removed as “silica” anywhere in its Application or associated materials (nor as “quartz”, “quartzite”, “garnet” or “corundum”, which are expressly identified in Section 1(e) of Appendix 3 of the Regulation).

As a result, SRRAC submits that this further supports the reviewability of the Proposed Mine and the conclusion that the Proposed Mine is not properly categorized as an “industrial mineral” quarry, since the predominant substance is not any of the substances listed under Appendix 3 of the Regulation.

C. The Proponent admits that ultramafic rock is “rich in iron and magnesium minerals” and “relatively low in silica”

In its Application, the Proponent admits that ultramafic rock is “rich in iron and magnesium minerals” and “relatively low in silica”:

“The geology of the Record Ridge Ultramafic is described in Chapter 2.3.2 with a mineralogy comprising predominantly dunite, with subordinate wehrlite and/or lherzolite. They have well-preserved primary cumulate textures typical of both Alaskan- and Alpine-type ultramafics. Ultramafic (or ultrabasic) rocks are dark-coloured, heavy, and rich in iron and magnesium minerals and relatively low in silica.”¹⁴

Ex. G, p. 351

This admission by the Proponent in its Application further supports SRRAC’s assertion that the Proposed Mine is properly categorized as a reviewable mineral mine, rather than an industrial mineral quarry, based on the definitions in Section 9 of the Act and Sections 9 and 10 and Appendix 3 of the Regulation.

D. The Proponent does not propose to use the substance being removed for an industrial purpose

The definition of industrial minerals under Section 1(e) of Appendix 3 of the Regulation includes a requirement that the substance be used for an industrial purpose, extending the definition of industrial minerals to “all substances in which silica is the predominant mineral and that are used for an industrial purpose”

As stated by the Proponent in its Application and associated materials (and as cited in the excerpts above), the Proponent intends to remove the serpentinite rock from Record Ridge for the purpose of extracting and selling magnesium, which is a metal. This is not an industrial purpose.

¹⁴ West High Yield Resources Ltd., *Application*, p. 351.

SRRAC further notes that WHY issued a media release on December 7, 2021 (attached as Exhibit “L”) announcing that it had signed a letter of intent with APG Galaxy Trade and Technology, LLC, “a U.S.-based company focused on the acquisition and production of magnesium and other precious metals, for the purchase and sale of magnesium serpentine ore produced by West High Yield at its Record Ridge magnesium deposit.”

WHY President and CEO Frank Marasco Jr. described the letter of intent as a “critical step in building a strategic collaboration with Galaxy for the objective of securing a future market for a range of magnesium products that could be produced from the Record Ridge project.” Galaxy Board Chairman and CEO Michael North stated that: “The magnesium serpentine ore controlled by West High Yield in British Columbia is one of the largest and richest verified deposits of its type in the world”, and discussed the potential for “an efficient supply chain of cost-effective pure magnesium and alloy products for years to come.”

Based on the foregoing, SRRAC submits that the Proponent fails to satisfy the requirement for an industrial purpose under Section 1(e) of Appendix 3 of the Regulation, and that the substance being removed at Record Ridge is therefore not an industrial mineral.

E. Applying the criteria for reviewability in the Act and Regulation

Turning to the applicable legislative and regulatory requirements for determining reviewability of projects in British Columbia, Appendix 3 of the Regulation specifies those substances that are considered to be “industrial minerals” for the purposes of Section 9 of the Regulation (and thereby distinguished from “mineral mines” and the associated reviewability criteria):

Appendix 3

Industrial Minerals

1 For the purposes of the definitions of "industrial mineral" in section 9, the following substances are industrial minerals:

- (a) all rock or stone used to produce dimension stone or building facing stone, or for any other ornamental or decorative purpose;
- (b) barite, calcite, dolomite, gypsum, limestone, magnesite, phosphate rock, wollastonite;
- (c) bentonite, clay, diatomaceous earth, pozzolanic materials, zeolite, kaolin clay, and all related substances;
- (d) pumice, lava, volcanic ash and all related substances;
- (e) all substances in which silica is the predominant mineral and that are used for an industrial purpose, including massive silica, quartz, quartzite, garnet and corundum;

- (f) jade, rhodonite and all decorative stone and rock;
- (g) talc;
- (h) marl;
- (i) feldspar;
- (j) shale and slate;
- (k) graphite.

Serpentine is not listed among the substances in Appendix 3 of the Regulation. It is therefore not an industrial mineral for the purposes of determining reviewability under Section 9 of the Regulation or Sections 6 and 9 of the Act.

In its December 11, 2023 letter to the EAO, WHY states that “RRIMM’s ore contains a significant 44.9% silica” and that, on this basis, the Proposed Mine satisfies the requirements for being categorized as an industrial mineral mine under the Regulation.¹⁵

However, WHY’s letter appears to refer to the processed feed material that WHY proposes to utilize from Record Ridge, rather than referring to the actual substance being removed.

As noted in a Pre-Feasibility Study prepared for WHY in 2022 (the “**2022 PFS**”, by Kevin Watson of Kingston Process Metallurgy Inc. and Florent Baril of Bumigeme Inc., appended as Exhibit “K”), the feed material for the proposed demonstration plant (and, presumably, for WHY’s longer-term operations) is anticipated to undergo a leaching process after being extracted from the Earth, thereby altering its chemical composition.¹⁶

SRRAC acknowledges that serpentine can indeed be processed in a manner that produces silica, as can many other minerals.

However, SRRAC notes that the assay in the 2013 PEA clearly indicates that the sample only contains 0.034% SiO₂, which is silica.¹⁷ Silica is simply not the predominant mineral in the substance being mined at Record Ridge.

F. Categorization as a mineral mine

WHY’s Project Notification submitted to the EAO in May 2023 specifically refers to “Mg-rich product material”, “mineralized material” and “magnesium bearing material.”¹⁸

This clearly points to the substance being mined as a mineral and specifically mentions Magnesium, which is a metal.

¹⁵ WHY to EAO, December 11, 2023.

¹⁶ Kevin Watson and Florent Basil, *NI 43101 - Technical Report: Pre-Feasibility Study for Record Ridge Magnesia Production* (November 24, 2022), pp. 1, 4, 11-12.

¹⁷ SRK Consulting, *Revised NI 43-101 Technical Report: Preliminary Economic Assessment, Record Ridge Project, British Columbia, Canada* (June 3, 2013), p. 46.

¹⁸ Greenwood Environmental Inc., *Record Ridge Industrial Mineral Mine Project – Project Notification* (May 2023), p. 4 < <https://projects.eao.gov.bc.ca/project-notifications> >.

In addition, Section 9 of the Regulation states that a “mineral mine” is “a mine where a mineral, as defined in the *Mineral Tenure Act*, is or could be mined, but does not include a mine where industrial minerals are or could be mined.”

As Dr. Groat states in his expert report (Ex. A, page 3):

“Based on the definition in the Mineral Tenure Act, in my opinion, the substance that WHY proposes to remove at Record Ridge is an ore of metal (magnesium) that can be mined and is in the place or position in which it was originally formed. Therefore in my opinion it is a ‘mineral’ according to the Act but not a mineral according to the IMA.”

The *Mineral Tenure Act*, RSBC 1996, c 292 states at Section 1 that a “mineral” means

“an ore of metal, or a natural substance that can be mined, that is in the place or position in which it was originally formed or deposited or is in talus rock, and includes:

- (a) rock and other materials from mine tailings, dumps and previously mined deposits of minerals,
- (b) dimension stone, and
- (c) rock or a natural substance prescribed under section 2 (1),

but does not include:

- (d) coal, petroleum, natural gas, marl, earth, soil, peat, sand or gravel,
- (e) rock or a natural substance that is used for a construction purpose on land that is not within a mineral title or group of mineral titles from which the rock or natural substance is mined,
- (f) rock or a natural substance on private land that is used for a construction purpose, or
- (g) rock or a natural substance prescribed under section 2 (2);”

With respect to the regulatory power conferred under Sections 2 (1) and 2 (2) of the *Mineral Tenure Act*, the Lieutenant Governor in Council has excluded fossils from the definition of “minerals”, with the *Mineral Definition Modification Regulation*, BC Reg 5/2005 stating:

Fossil exclusion

1 For the purpose of paragraph (g) of the definition of “mineral” in section 1 of the Mineral Tenure Act, a fossil, defined as follows, is not a mineral:

“fossil” does not include limestone, dolomite, coal, petroleum or natural gas.

Based on the definition of “mineral” in both the Regulation and the *Mineral Tenure Act* (and the regulations associated with that statute), the substance being removed at Record Ridge is properly classified as a mineral. As noted by Dr. Groat (and as confirmed in WHY’s Application materials), the substance that WHY proposes to remove at Record Ridge is an ore of metal (magnesium) that can be mined and is in the place or position in which it was originally formed.

Furthermore, serpentine is not among those substances that are excluded from the definition of “mineral” under subsections (d) through (g) of Section 1 of the *Mineral Tenure Act* or under Section 1 of the *Mineral Definition Modification Regulation*, BC Reg 5/2005.

***G. Precedent for categorizing a magnesium mine as a mineral mine:
The Cogburn Magnesium Project***

In November 2004, North Pacific Alloys Ltd., a subsidiary of Leader Mining International Inc., submitted an application to the EAO for the proposed Cogburn Magnesium Project northwest of Hope, BC (the “**Cogburn Project**”).

The Cogburn Project targeted an ultramafic body of high-grade magnesium (consisting of approximately 24% magnesium)¹⁹ and tested samples for hydrochloric acid leach extraction of magnesium — a process mirrored in WHY’s proposed Record Ridge project. The Cogburn proponent repeatedly referred to their project as a “quarry” in their Project Notification to the EAO and in other materials.

However, the EAO upheld its legislative mandate and categorized the Cogburn Project as a mineral mine — properly interpreting and applying the applicable legislative and regulatory provisions. The Cogburn Project was deemed to be a reviewable project under the Act and Regulation, requiring an environmental assessment certificate based on the production capacity of mineral to be mined.

SRRAC submits that the same principle and factual and legal basis are applicable to WHY’s Record Ridge project. As a result, the EAO should exercise its statutory authority in a manner that is fair, proper and transparent for all proponents and stakeholders, and make a consistent determination with respect to the Record Ridge magnesium mine, categorizing the Proposed Mine as a mineral mine.

H. Reply to the Proponent’s claims regarding categorization

SRRAC has reviewed the Proponent’s letter to the EAO dated February 23, 2024 and provides the following submissions in reply.

Reliance on factors other than the composition of the substance being mined

WHY acknowledges that the issue before the EAO is whether the Record Ridge deposit

¹⁹ Geospectrum Engineering, *Technical Report on the Cogburn Magnesium Project* (December 15, 2004).

meets the definition of an “industrial mineral” under the Regulation. However, WHY’s subsequent arguments continue to mischaracterize the deposit as silica, notwithstanding the substantial evidence referenced above, as well as the following statements in its 2022 NI 43-101 Technical Report (Pre-Feasibility Study) (Ex. K, at pages 1 and 4):

“[P]romising results were obtained regarding production of a silica by-product from the leach residue. ...

In the leaching process, the raw material supplied to the system (Serpentine) is leached with a hydrochloric acid (HCl) solution.”

As SRRAC explains above, WHY’s discussion regarding raw material relies on the material produced at a different stage in the process, *after the chemical leaching process has occurred*. WHY refers to a substance that, after chemical processing, purportedly makes silica predominate, but this is not relevant. Allowing such a classification would enable proponents to simply reference proposed processes for altering their ore, in order to fit the industrial mineral category and avoid a proper environmental assessment. Accepting this approach would allow any proponent to categorize their project as an industrial mineral mine based on the mere mention of a proposed processing approach, undermining regulatory standards. SRRAC submits that the regulatory focus must remain on the composition of the extracted substance at the point of mining.

SRRAC further notes that WHY continues to rely on irrelevant factors in arguing for categorization of its Proposed Mine as a so-called “industrial mineral mine” (presumably, a Category 5 Industrial Mineral Quarry under the Regulation), including the following statement at Page 4 of its letter to the EAO:

“[I]t will not involve any onsite chemical processing and it will not result in the creation or storage of onsite tailings. ... As such, it is entirely in keeping with the underlying purpose of the Environmental Assessment Act that the trigger applicable to it be that of industrial mineral mine.”

This claim lacks any foundation in law, as there is nothing in the Act or Regulation identifying onsite chemical processing or creation or storage of onsite tailings as relevant factors for determining the appropriate categorization of a mining project.

WHY also suggests (at Page 5 of its letter to the EAO) that its self-description of the project as the “Record Ridge Industrial Mineral Mine” since 2018 should be given weight, as should any potential delays arising from categorizing the project as a mineral mine.

SRRAC submits, as stated throughout this letter, that the only relevant factors with respect to the categorization issue under the Regulation are the substance, production capacity and use of the substance being removed at Record Ridge, and that the EAO should place no weight on irrelevant factors cited by the Proponent.

Conflating serpentinite, silica and silicates

WHY further errs in its February 2024 letter to the EAO in conflating serpentinite, silica and silicates, which as Dr. Groat states (at Ex. A) are mineralogically distinct:

“The substance that WHY proposes to remove at Record Ridge is serpentinite rock. If we assume that by silica the regulation actually means quartz, then in my opinion the material would only be an ‘industrial mineral’ if >50% of the material removed was quartz.

If the Regulation actually means to state that silica is the predominant oxide, not mineral, the serpentine subgroup minerals are ... silicates containing approximately 40-43 wt.% SiO₂, the oxide present in the highest concentration.

... In my opinion the substance that WHY proposes to remove at Record Ridge is not a substance in which silica is the predominant mineral because silica is not a mineral according to the IMA.

... In my opinion serpentinite is a rock composed of one or more of the serpentine subgroup minerals.

In my opinion the serpentine subgroup is a set of 20 minerals, the most important of which are antigorite, lizardite, and chrysotile.

In my opinion silica is an oxide of silicon with the chemical formula SiO₂, commonly found in nature as quartz.

... I was also asked to comment on a letter that WHY sent to the BC EAO in February 2024. The letter states that silica is a mineral, which in my opinion is incorrect according to the IMA definition. The letter also states that ‘two of those silicates (garnet and corundum) do not manifest silica in their chemical composition as SiO₂.’ Garnet is a silicate mineral group, and any analysis of garnet will show considerable wt.% SiO₂. Corundum has the formula Al₂O₃, and therefore is not a silicate mineral.”

To expand on this discussion, the substance that WHY proposes to remove at Record Ridge is serpentinite rock and serpentinite is a rock composed of one or more of the serpentine subgroup of minerals. It is these minerals that are predominant in serpentinite rock. Silica is not one of the minerals in the serpentine subgroup and is not the predominant mineral in serpentinite rock. The substance that WHY proposes to remove at Record Ridge is therefore not a substance in which “silica is the predominant mineral.”

SRRAC notes that with approximately 1,000 known silicates making up roughly 90% of the Earth's crust, it is evident that the Regulation does not intend to broadly include all silicates. Allowing such an overly broad interpretation would enable virtually any mine to be categorized as an industrial mineral quarry, undermining the intent of the Act and Regulation.

Moreover, if the Regulation has been improperly drafted by the Lieutenant Governor in Council, based on an imprecise understanding of mineralogy, SRRAC submits that any ambiguity must be interpreted in favour of a more restrictive reading of the Regulation (so as to exclude rather than include all silicates within the scope of Section 1(e) of Appendix 3), based on the remedial object and intent of the *Environmental Assessment Act* in promoting sustainability and protection of the natural environment, in a manner consistent with best available science (Section 2(b)(i) of the Act). Authority for this submission can be found in the *Interpretation Act*, RSBC 1996, c 238, Section 8, and *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 SCR 27, at para. 21, which states that, “the words of an Act are to be read in their entire context and in their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act, and the intention of Parliament.”

Comparison with the Cogburn Project

WHY argues in its February 2024 letter that the Record Ridge project is distinguished from the Cogburn Magnesium Project, on account of (1) the proximity of the chemical processing facility to the Cogburn mine and (2) the quantity of groundwater used by the processing facility. SRRAC submits that these are irrelevant considerations with respect to the categorization issue.

As stated in Section 10 of the Regulation, the only proper criteria with respect to categorization of a Category 5 Industrial Mineral Quarry is whether or not the project “involves the removal of ... industrial minerals” (and whether the operation is regulated under the *Mines Act* and meets the annual production capacity threshold of 250,000 tonnes). With respect to categorization of a Category 2 Mineral Mine, the only relevant criteria is whether the new mine facility will have an annual production capacity of 75,000 tonnes of mineral ore.

In both the Record Ridge and Cogburn projects, the predominantly serpentine substance being mined for the mining purpose of producing magnesium, with an annual production capacity exceeding 75,000 tonnes, means that both projects should be categorized in the same way, as mineral mines. The Cogburn Project set a helpful precedent with respect to interpreting and applying the Regulation. SRRAC submits that the same approach should be applied with respect to the Record Ridge project, with an equal degree of scrutiny and oversight through a proper environmental assessment.

Disregard for community and stakeholder input

WHY’s letter to the EAO implies that concerns raised by opponents of the Proposed Mine are unfounded and intended to cause delays. However, community and stakeholder input is a critical component of the environmental assessment and regulatory processes, and is expressly recognized in the purposes of the EAO, with the Act stating at Section 2(b)(i)(B) that the EAO’s purposes include “facilitating meaningful public participation throughout assessments”.

SRRAC submits that ensuring all voices are heard and all potential impacts are considered is fundamental to the integrity of the environmental assessment and regulatory processes. Concerns raised by the City of Rossland, the Regional District of Kootenay Boundary, Environment and Climate Change Canada, the US Environmental Protection Agency, the Washington State Department of Ecology, the Shuswap Band, the Autonomous Sinixt, Wildsight, the Kootenay Columbia Trails Society, SRRAC, and other stakeholders are legitimate and deserve careful consideration.

Reliance on an “industrial mineral mine” category that does not exist in the legislation

SRRAC is also concerned that WHY’s repeated reliance on the term “industrial mineral mine” (which does not exist anywhere in the Act, the Regulation or the *Mineral Tenure Act*) may be an attempt to create a new *sui generis* category that does not fit the existing regulatory framework.

Moreover, WHY’s correspondence with the EAO in 2023 and 2024 fails to properly describe or engage where the Proposed Mine fits within the categories established in Table 6 of Section 10 of the Regulation: Category 2 (“Mineral Mines”) and Category 5 (“Industrial Mineral Quarries”). To SRRAC, this appears to indicate either (1) that WHY lacks a cursory understanding of the regulatory framework governing its mine, or (2) that WHY is attempting to circumvent the regulations and avoid a proper environmental assessment (and potential future enforcement), by refusing to clearly state which category it believes its Proposed Mine falls within.

Accepting the Proponent’s undefined self-description of “industrial mineral mine” risks allowing the Proponent to evade the stricter oversight and regulatory requirements that apply to mineral mines, including the requirement for an environmental assessment for a project with an annual production capacity of 200,000 tonnes.

SRRAC submits that WHY’s “industrial mineral mine” category is a legal fiction and that the EAO should place no weight on the Proponent’s use of, and reliance on, this term.

I. Irrelevant factors

In its December 11, 2023 and February 23, 2024 letters to the EAO, WHY cites a wide array of factors in arguing that the Proposed Mine should be considered an “industrial mineral mine”, rather than a mineral mine. These include industry definitions, references to strategic minerals, process descriptions, information on CO₂ emissions, the presence or absence of tailings, and whether chemical processing facilities are located in proximity to the mine site.

SRRAC submits that these factors are not relevant to the EAO’s determination of the proper categorization of the Proposed Mine and should be accorded no weight.

If the EAO were to categorize the Record Ridge mine based on factors other than those prescribed in the Regulation, it would be acting in a manner contrary to its delegated statutory authority, and would simultaneously establish a dangerous and unreasonable precedent regarding oversight and evaluation of natural resource projects in British Columbia.

If categorization is determined in an arbitrary, non-transparent or *ad hoc* manner — and specifically if proposed mining projects are evaluated and categorized based on arbitrary and irrelevant criteria such as those proposed by WHY — then virtually any mining operation could be deemed an “industrial mineral” quarry subject to less onerous reviewability thresholds.

This result would be contrary to the reviewability thresholds for mineral mines expressly and clearly established by the Lieutenant Governor in Council in the Regulation. It would also allow project proponents such as WHY to evade the Legislature’s intended requirements regarding environmental assessment, defying the letter and spirit of the Act and Regulation.

Allowing proponents to qualify for the less rigorous reviewability thresholds — and thereby avoid the environmental assessment procedures established by the Legislature in the Act — would have far-reaching impacts and undermine BC’s environmental assessment process and public confidence in the regulatory system.

SRRAC therefore submits that it is important for the EAO to properly exercise its statutory authority with respect to the Proposed Mine, based on application of relevant and appropriate factors and criteria, to ensure the EAO remains within its legislative mandate and to avoid setting a dangerous precedent whereby the definition of an industrial mineral quarry can be stretched or re-interpreted to avoid an environmental assessment.

SRRAC submits that industrial mineral categorization should only be available to mines that satisfy the definition under Section 9 and Appendix 3 of the Regulation.

J. Conclusion regarding categorization

Based on a careful review of available materials, the *Environmental Assessment Act*, SBC 2018, c 51, the *Mineral Tenure Act*, RSBC 1996, c 292, and the *Reviewable Projects Regulation*, BC Reg 243/2019, SSRAC asserts that the Proposed Mine is not an industrial mineral quarry, as it is not mining a substance that is defined as an industrial mineral in Appendix 3 of the Regulation.

Furthermore, SSRAC asserts that the Proposed Mine proposes to mine a substance that meets the definition of a mineral under the Regulation and the *Mineral Tenure Act*: a material that is predominantly serpentine (according to WHY’s written materials and to Dr. Groat’s expert report), which is a natural substance that can be mined, that is in the place or position in which it was originally formed or deposited.

SRRAC states that the Cogburn Magnesium Project provides a strong and clear precedent where the EAO properly exercised its statutory authority under the *Environmental Assessment Act*, looking to the actual substance being mined, rather than to the proponents' preferred characterization of the project. The Cogburn Project shared key elements with Record Ridge — in terms of the magnesium-bearing substance being mined, the production capacity threshold being exceeded, and the proponents' attempts to have their projects characterized as industrial mineral projects (notwithstanding the express provisions of the Act and Regulation).

SRRAC stresses that categorization of natural resource projects by the EAO, including the proposed Record Ridge mine, must be based on appropriate criteria, factors and definitions set out in the legislation and Regulation. Allowing project proponents to circumvent the Legislature's intent or re-interpret regulations in a manner that introduces arbitrary, *ad hoc* or irrelevant factors into the EAO's statutory role (or *ad hoc* categories such as "industrial mineral mines") would establish a dangerous precedent, allowing WHY and future proponents to evade statutory environmental assessment requirements.

Based on all the foregoing, SRRAC asserts that the proposed Record Ridge mine is properly categorized as a mineral mine and subject to a reviewability threshold of 75,000 tonnes per year. Based on the Proponent's production capacity of 200,000 tonnes per year, the Proposed Mine substantially exceeds the threshold and is therefore reviewable. An environmental assessment certificate is required before any activity can occur at the site (as per Section 6 of the *Environmental Assessment Act*).

In closing, SRRAC urges the Environmental Assessment Office to properly exercise its legislative mandate and confirm that the Record Ridge mine is automatically categorized as reviewable, based on the applicable provisions in the Act and Regulation, rather than relying on irrelevant factors as urged by the Proponent.

Moreover, given the protracted period of uncertainty surrounding the categorization issue, which creates unnecessary anxiety and uncertainty for members of the public living in proximity to the mine site, SRRAC submits that the EAO owes a duty of procedural fairness to SRRAC members and other members of the public to clearly state the EAO's position on categorization of the Proposed Mine. This will ensure a reasonable and fair decision that is capable of being upheld on judicial review (as per the Supreme Court of Canada's decisions in *Canada (Minister of Citizenship and Immigration) v. Vavilov*, 2019 SCC 65 and *Baker v. Canada (Minister of Citizenship and Immigration)*, [1999] 2 S.C.R. 817), should a challenge be initiated by either the Proponent or opponents of the Proposed Mine.

PART 2: ALTERNATIVE SUBMISSIONS REGARDING MINISTERIAL DESIGNATION UNDER SECTION 11 OR EAO DESIGNATION UNDER SECTION 12

If the EAO does not agree with SRRAC's position that the Proposed Mine is reviewable under Section 9 of the Act and instead deems that it is an eligible project under Section 11 of the Act (which SRRAC submits would be an incorrect interpretation of the law, as stated

above, as reviewable projects are expressly exempted from the definition of “eligible projects” at Section 11(1)), then we have provided an alternative submission below supporting designation of the Proposed Mine as a reviewable project under Section 11 of the Act.

We also provide the further alternative submission that the Chief Executive Assessment Officer ought to designate the Proposed Mine as reviewable pursuant to Section 12(3)(a) of the Act, in light of the multiple adverse effects on environmental health and human health and wellbeing, in the event that the EAO deems that the Proposed Mine is not automatically reviewable and the Minister declines to designate the Proposed Mine as reviewable under Section 11.

In preparing these alternative submissions, we have reviewed the City of Rossland’s letter to the EAO dated May 28, 2024 and adopt the city’s submissions in their entirety, as stated above, while expanding on them below.

These alternative submissions also build on, and draw from, SRRAC’s submissions in its Memorandum of Argument and evidence to EMLI and ENV on WHY’s Mine Permit Application, which we have appended to this letter as Exhibits “D” and “E”.

A. Effects on Indigenous Nations

As noted in SRRAC’s Memorandum of Argument at paras. 38 to 45 (Ex. D), SRRAC is concerned that deficiencies in the Application combined with a lack of clarity surrounding Indigenous rights and title in the Rossland area will prevent adequate consultation with the appropriate Indigenous rights and title holders, and that the Proposed Mine could have effects on Indigenous Nations and on rights recognized and affirmed by Section 35 of the *Constitution Act, 1982*, being Schedule B to the Canada Act 1982 (UK), 1982, c 11.

SRRAC recognizes this area as Sinixt territory, and notes that two entities assert collective rights and title on behalf of the Sinixt Peoples: the Autonomous Sinixt and the Confederated Tribes of the Colville Reservation.

SRRAC also recognizes that Secwépemc and Ktunaxa Peoples have asserted interests in the area, as stated in the Shuswap Band’s letter to the EAO dated May 7, 2024.

SRRAC further understands based on communications from WHY that the Osoyoos Indian Band (one of eight bands in the Okanagan Nation Alliance), has entered into a cooperation agreement and letter of intent with the Proponent with respect to the Proposed Mine, while another member of the Okanagan Nation Alliance (the Confederated Tribes of the Colville Reservation) has expressed concern regarding the Proposed Mine.

Overlapping Indigenous claims to the Rossland area by the Autonomous Sinixt, Confederated Tribes of the Colville Reservation, Syilx (Okanagan), Secwépemc and Ktunaxa Peoples create a real risk that WHY Resources and the Province will sidestep proper consultation protocols and authorize the Proposed Mine in the absence of free, prior and informed consent of the appropriate Indigenous rights and title holders.

SRRAC therefore submits that recognizing or designating the Proposed Mine as a reviewable project—and ensuring a proper environmental assessment process—will help to ensure these Indigenous interests are properly considered, informed by a thorough understanding of the environmental, economic, social, cultural and health effects of the Proposed Mine on Indigenous interests and other interests.

B. The potential effects of the Proposed Mine will be equivalent to or greater than effects of mines extracting 250,000 tonnes of mined product per year

In the event that the Environmental Assessment Office does not agree with SRRAC's position that the Proposed Mine is reviewable under Section 9 of the Act, then SRRAC makes the alternative submission that the Minister should designate the Proposed Mine as a reviewable project because the potential effects of the Proposed Mine will be equivalent to or greater than the potential effects of mines with a production capacity of 250,000 tonnes of mined product per year, as per Part 3 of the *Reviewable Projects Regulation*, BC Reg 243/2019.

As described below, the adverse effects of the Proposed Mine on human health and environmental health are amplified on account of:

- (1) the project location in close proximity to the communities of Paterson, Big Sheep Creek, Rossland, Warfield and Trail;
- (2) the socio-economic dependence of these communities (particularly Rossland), on a quality-of-life and outdoor recreation-oriented tourism sector; and
- (3) the rare and red-listed grassland ecosystem at Record Ridge, including the threatened Mountain Holly Fern (as recognized under the *Species at Risk Act*).

While WHY proposes to extract 200,000 tonnes of mined product per year in its amended Mine Permit Application (dated October 2023, reducing the production capacity from 249,000 tonnes in the previous iteration of its application), SRRAC notes that the inadequate transportation infrastructure in the area for mining operations—particularly the Old Rossland-Cascade Highway and Highway 22 between the Paterson border crossing and the Trimac Transportation facility east of Trail—will amplify the transportation issues noted in SRRAC's Memorandum of Argument (at paragraphs 68-81 and 94-96) and in correspondence from the City of Rossland. This includes:

- (1) Heightened safety risks to persons and property from collisions between trucks travelling to and from the Proposed Mine and pedestrians, motorists and other road users (with haul trucks travelling through downtown Rossland every nine minutes);
- (2) Increased noise, dust and emissions from mine-related trucking, owing to the inadequate transportation infrastructure cutting through the heart of Rossland and surrounding communities; and

- (3) Heavy volumes of mine-related traffic in the immediate vicinity of homes, businesses, farms and other properties.

Based on the foregoing, SRRAC submits that the effects of the Proposed Mine on Rossland and surrounding communities with respect to transportation impacts will be equivalent to or greater than a mine with an annual production capacity of 250,000 tonnes.

SRRAC further submits that other impacts described in its Memorandum of Argument to EMLI and ENV, and in the City of Rossland's letter to you, will be similarly amplified on account of the Proposed Mine's close proximity to small communities and rural residential properties, including but not limited to:

- a. Unmitigable impacts on the economy, tourism and recreation in Rossland and surrounding communities, including unmitigable impacts on the world-renowned Seven Summits Trail and the corresponding unmitigable and devastating impacts on Rossland's image for tourists and on its local economy and community wellbeing, as described in SRRAC's Memorandum of Argument at paragraphs 82-119;
- b. Unmitigable impacts on the Red Mountain Ski Resort, which is located in close proximity to the Proposed Mine site, and corresponding unmitigable adverse affects on Rossland's economy and population;
- c. Unmitigable impacts on wildlife, biodiversity and species of concern, owing to presence of the threatened Mountain Holly Fern and the red-listed grassland ecosystem at Record Ridge, as described in our Memorandum of Argument (at paras. 126 to 138) and in Environment and Climate Change Canada's letter to you of May 30, 2024;
- d. Unmitigable impacts on water quality, water quantity and timing of flow, owing to the proximity of the Proposed Mine site to residents' homes in Paterson and Big Sheep Creek, as well as to agricultural lands (and a lack of clarity in WHY's Application materials with respect to site-specific water-impact modelling, an incomplete water management plan, and lack of contingencies for water use, which could have significant adverse impacts to downstream water users that have not been properly assessed); and
- e. Unmitigable impacts of blasting, including noise and dust and their impacts on human health and wellbeing and on non-human species.

With respect to impacts on surrounding communities, SRRAC notes that British Columbia currently has only eight operating mine projects where metal ores are extracted: Brucejack, Copper Mountain, Gibraltar, Highland Valley Copper, Mount Milligan, New Afton, Premier and Red Chris. Most of these projects are in remote locations (i.e. one is located 90 kilometres away from the nearest community; two are located approximately 65 kilometres away from the nearest communities; and the majority are located more than 15 kilometres away from the nearest communities).

In contrast, the Proposed Mine is located 7.5 kilometres southwest of the City of Rossland, far closer than these other metal mining projects. While WHY clearly indicates the proximity to Rossland in its Application, the Proponent fails to clearly indicate that the smaller communities of Big Sheep Creek and Paterson are much closer to the mine site (within 3-4 kilometres). Further, according to WHY's Desk-based Land Use Baseline study completed in 2018 (Appendix 2-S of its Application materials), 60 properties are located within a 1-kilometre "zone of influence" of the Project and transportation route (two-thirds of which are occupied by residential homes, many of which are located directly downstream from the mine site and the proposed direct discharge location on Sophia Creek). If approved, the Proposed Mine would be the closest ore extraction project to local communities in British Columbia.

This proximity to local communities means that environmental and social impacts are experienced more directly and more acutely, and by a larger number of people. SRRAC submits that the significant impacts of a project located so close to local communities make these adverse effects equivalent to or greater than those resulting from a mine with an annual production capacity of 250,000 tonnes, further supporting a proper environmental assessment, to ensure the Proposed Mine is subjected to adequate oversight and scrutiny and that sustainable and safe practices are implemented.

SRRAC has identified the following specific adverse effects of the Proposed Mine, which are equivalent to or greater than a 250,000-tonne per year mine:

Noise impacts

The proximity of the Proposed Mine to populated areas means that the noise from blasting, rock crushing and continual heavy truck traffic will significantly disrupt the peace of residents and visitors. Unlike a 250,000-tonne per year mine in remote locations, the noise pollution from this operation will directly affect communities including Rossland, Paterson, Big Sheep Creek, Warfield, and Trail. This disruption threatens the tranquility that draws tourists to the resort municipality, potentially leading to a decline in tourism and adversely impacting local businesses.

Wildlife and habitat loss

As stated above, the Proposed Mine threatens the habitats of red-listed species and sensitive ecological communities, including the threatened Mountain Holly Fern and red-listed grassland ecological community on Record Ridge. The destruction and fragmentation of these habitats will have severe consequences for biodiversity. Mining activities will disrupt these complex ecosystems, exacerbating the risk of extirpation or extinction of vulnerable species and destabilizing the ecological balance. The ecological values of this area amplify the impact of the Proposed Mine, making its environmental footprint comparable to or greater than that of a 250,000-tonne per year mine in a less sensitive region.

Old Growth Management Area

The Proposed Mine is located in an Old Growth Management Area, which is crucial for maintaining biodiversity and ecological balance. These areas are designated to preserve complex ecosystems that have developed over centuries. Disturbance in such a critical habitat can have cascading effects on the broader environment, emphasizing the need for rigorous conservation measures. The impacts of disrupting an Old Growth Management Area are comparable to or greater than those of a 250,000-tonne per year mine in less ecologically sensitive areas.

Water quality and resource stress

The Record Ridge mine threatens water quality through airborne dust deposition into Rossland's drinking water reservoirs, potential leaching from waste rock, and discharges into Sophia Creek. Residents draw drinking water from groundwater sources downstream of the mine, making them susceptible to contamination from heavy metals and other contaminants leached from waste rock. Additionally, Rossland already experiences water shortages annually, and the mine's significant water usage could exacerbate these shortages as there is no clear explanation of water use or contingencies for water sources in the Proponent's Application. There is a very real possibility this would place significant further strain on the community's limited water resources, particularly in dry years when the project is more likely to also experience water shortages. The water quality and availability impacts of this 200,000-tonne per year mine will be as (or more) severe as those of a 250,000-tonne per year mine.

Economic impacts

The local economy, heavily reliant on recreation tourism, is at risk due to the Proposed Mine's operations. The presence of the mine, if approved, will disrupt prime recreational areas, including a need to reroute the famed Seven Summits Trail around the project, very likely diminishing the area's appeal to tourists. The economy of Rossland, which depends on the influx of visitors, could be destabilized, affecting dozens of local businesses. The economic disruption from this 200,000-tonne per year mine is therefore comparable to or greater than that from a 250,000-tonne per year mine in a less tourism-dependent area.

Resort Municipality and tourism impacts

The Proposed Mine, if approved, would have a devastating impact on the economy and socio-economic structure of Rossland, a designated resort municipality, due to (1) the proximity of the mine site 7.5 kilometres southwest of this small community and (2) overlap of the mine footprint with recreational trails associated with this resort municipality status. Resort municipalities in British Columbia, such as Rossland, are vital to the Province's tourism industry, attracting visitors with high-quality services, infrastructure and amenities. The Resort Municipality Initiative (RMI) recognizes the unique needs of these communities, investing \$10-million annually to support local tourism economies. There are only 14 resort municipalities in BC, each with a significant investment in tourism development (as described in SRRAC's Memorandum of Argument at Paragraphs 93, 99 and 121).

Rossland is the only resort municipality in the West Kootenay region. With its high ratio of tourism accommodation units and robust destination marketing, Rossland is crucial to BC's reputation as a premier tourist destination. Furthermore, BC has never approved a project like this in a resort municipality. Given these unique factors, the adverse effects of the Proposed Mine in the Rossland area would be equal to or greater than a 250,000-tonne per year mine, necessitating a proper environmental assessment to protect the resort values and significant investments that the Province and City of Rossland have made in Rossland, as well as protecting the broader BC tourism economy.

Dust-related impacts

With respect to impacts of blasting and dust on human health and environmental health, SRRAC notes that impacts related to dust depend significantly on the methods being used, the environmental conditions, the distance from receptors, and the composition of the dust. These factors can matter more than the quantity of ore being extracted. Blasting, drilling, and transportation activities can create significant amounts of dust regardless of the scale of operations. Prevailing winds in the Record Ridge project area blow from west to east towards nearby communities. As stated above, the Proposed Mine is located in very close proximity to local communities. The deposit at Record Ridge contains hazardous materials including asbestos. This means that the Proposed Mine will have dust-related impacts that are equivalent to or greater than the effects of a 250,000-tonne-per-year project extracting with different methods, with different prevailing winds, further from local communities, and with materials that are less hazardous.

SRRAC submits that all these adverse effects will be equivalent to or greater than the potential effects of mines with an annual production capacity of 250,000 tonnes, due to the Proposed Mine's proximity to the communities of Paterson, Big Sheep Creek and Rossland and the area's recreational tourism draws, supporting the requirement for a proper environmental assessment.

C. Environmental assessment of the Proposed Mine is consistent with the purposes set out in the Act

SRRAC further submits that an environmental assessment of the Proposed Mine is consistent with the purposes set out in Section 2 of the *Environmental Assessment Act*, SBC 2018, c 51.

As you are aware, these purposes include:

(1) promoting sustainability by protecting the environment and fostering a sound economy and the well-being of British Columbians and their communities by

(A) carrying out assessments in a thorough, timely, transparent and impartial way,

- (B) considering the environmental, economic, social, cultural and health effects of assessed projects,
 - (C) facilitating meaningful public participation throughout assessments,
 - (D) using the best available science, Indigenous knowledge and local knowledge in decision making under the Act, and
 - (E) coordinating assessments with other governments, where appropriate, including Indigenous nations, and with other provincial ministries and agencies;
- (2) supporting reconciliation with Indigenous peoples in British Columbia by
- (A) supporting the implementation of the United Nations Declaration on the Rights of Indigenous Peoples,
 - (B) recognizing the inherent jurisdiction of Indigenous nations and their right to participate in decision making in matters that would affect their rights, through representatives chosen by themselves,
 - (C) collaborating with Indigenous nations in relation to reviewable projects, consistent with the United Nations Declaration on the Rights of Indigenous Peoples, and
 - (D) acknowledging Indigenous peoples' rights recognized and affirmed by section 35 of the Constitution Act, 1982 in the course of assessments and decision making under this Act.

(emphasis added)

SRRAC submits that an assessment of the Proposed Mine is consistent with these purposes—and would help to advance these purposes—by:

- a. providing for a thorough and proper understanding and consideration of the environmental, economic, social, cultural and health effects of the Proposed Mine;
- b. facilitating meaningful public participation by residents and businesses in Rossland and surrounding communities, as well as other stakeholders, on the Proposed Mine;
- c. ensuring that the best available science, Indigenous knowledge and local knowledge are available to the statutory decision makers under the *Mines Act* and *Environmental Management Act*, to ensure this science and knowledge is properly considered prior to any decisions being made with respect to issuance of permits;

- d. ensuring that local government interests, including the interests of the City of Rossland, the Village of Warfield, the City of Trail and the Regional District of Kootenay Boundary, as well as Indigenous Nations, are properly engaged through coordination in the assessment process;
- e. ensuring that reconciliation with Indigenous Peoples is supported by ensuring proper consultation, collaboration and recognition with the appropriate Indigenous rights and title holders through the assessment process, including proper consultation with the Autonomous Sinixt, Confederated Tribes of the Colville Reservation, Secwépemc, Syilx and Ktunaxa Peoples; and
- f. ensuring that international interests and transboundary considerations, as articulated by the United States Environmental Protection Agency and Washington State Department of Ecology, are properly engaged through the assessment process.

D. Designation of the Proposed Mine as a reviewable project is in the public interest

SRRAC submits that designation of the Proposed Mine as a reviewable project is in the public interest.

The reasons for this include:

- a. a broad range of stakeholders, including public agencies in the United States of America, local governments in British Columbia, and Indigenous organizations, have gone on record expressing concern with the Proposed Mine and called for a proper environment assessment. Ensuring all voices are heard and all potential impacts are considered is fundamental to the integrity of the regulatory process, as SRRAC states above. Concerns raised by the City of Rossland, the Regional District of Kootenay Boundary, Environment and Climate Change Canada, the US Environmental Protection Agency, the Washington State Department of Ecology, the Shuswap Band, the Autonomous Sinixt, Wildsight, the Kootenay Columbia Trails Society, SRRAC and other stakeholders are legitimate and deserve careful consideration;
- b. residents and business operators in Rossland and the surrounding communities of Paterson, Big Sheep Creek, Warfield and Trail have demonstrated a strong interest in the Proposed Mine, as evidenced by the participation of more than 500 residents at two Open House meetings convened by the Proponent in May 2023;
- c. hundreds of individuals have communicated their concerns in writing to WHY and the Province;

- d. 1,361 people have signed a petition opposing the Proposed Mine, of whom 57% reside in Rossland, 81% reside in the local area and 92% reside in British Columbia;

BOE Ex. 109

- e. 78 residents and business operators in Rossland and environs provided affidavits as part of SRRAC's submissions to EMLI and ENV opposing the issuance of permits for the Proposed Mine;

BOE Ex. 7 to Ex. 85

- f. small communities are socio-economically fragile, and upsetting this balance by introducing an ecologically, socially and economically destructive open-pit mine would have a devastating effect on the local recreation-tourism-based community and the health and wellbeing of its residents and businesses in the short, medium and long term;
- g. residents and businesses in Rossland and environs have worked in concert for several decades to transition the community to a strong socio-economic foundation, assisted by substantial financial support from the Province. This foundation, rooted in green business, recreation tourism and a high quality of life connected to a healthy natural environment, is placed at risk by the Proposed Mine; and
- h. WHY clearly has much larger aspirations for mine development at Record Ridge, as stated in SRRAC's Memorandum of Argument at Paragraphs 9(m) and 12(j), in Dr. Froese's expert report (BOE, Ex. 1, page 4), in WHY's 2013 NI 43-101 Technical Report (Ex. J) and 2018 Desk-based Land Use Baseline Study (Appendix 2-S of its Application), and as repeated by WHY in an April 2024 media release, where the company promotes the fact that, "The Company's Record Ridge magnesium deposit located 10 kilometers southwest of Rossland, British Columbia has approximately 10.6 million tonnes of contained magnesium" SRRAC submits that procedural fairness strongly supports conducting a proper environmental assessment at the front end for the full scale of the project, in light of the Proponent's stated intentions to develop a major mine at Record Ridge and the associated multiple adverse impacts on the community and environment.

For all these reasons, SRRAC adopts and reiterates the City of Rossland's alternative submissions that designating the Proposed Mine as a reviewable project is strongly in the public interest.

PART 3 - CONCLUSION

In conclusion, SRRAC submits that the proposed Record Ridge mine is a reviewable project pursuant to Section 9 of the *Environmental Assessment Act*, SBC 2018, c 51 and Sections 9 and 10 of the *Reviewable Projects Regulation*, BC Reg 243/2019.

In the alternative, if the EAO does not agree (based on an incorrect application of the Act and Regulation), then SRRAC requests that the Minister or Chief Executive Assessment Officer designate the Proposed Mine as a reviewable project pursuant to Sections 11 or 12 of the Act, ensuring that a proper environmental assessment is conducted that adequately accounts for Indigenous interests and the environmental, economic, social, cultural and health effects of the Proposed Mine.

As stated above, SRRAC asserts in support of this alternative submission that:

- (1) the Proposed Mine could have effects on Indigenous Nations and on rights recognized and affirmed by Section 35 of the *Constitution Act*, 1982;
- (2) the potential effects of the Proposed Mine will be equivalent to or greater than the potential effects of mines with a production capacity of 250,000 tonnes of mined product per year;
- (3) environmental assessment of the Proposed Mine is consistent with the purposes set out in the *Environmental Assessment Act*; and
- (4) designation of the Proposed Mine as a reviewable project is in the public interest.

All of which is respectfully submitted,



Benjamin Isitt, BA, MA, LLB, PhD (Law), PhD (Hist.)
Counsel for the Save Record Ridge Action Committee Society

- cc. Honourable George Heyman, Minister of Environment & Climate Change Strategy
Honourable Josie Osborne, Minister of Energy, Mines & Low-Carbon Innovation
Katrine Conroy, MLA for Kootenay West
Brittney Anderson, MLA for Nelson-Creston

Attachments:

1. Exhibit "A" – Report of Dr. Lee Groat, PhD;
2. Exhibit "B" – Curriculum vitae of Dr. Lee Groat;
3. Exhibit "C" – Instruction letter to Dr. Lee Groat;
4. Exhibit "D" – SRRAC Memorandum of Argument (for EMLI / ENV permitting process), May 28, 2024
5. Exhibit "E" – SRRAC Book of Evidence (for EMLI / ENV permitting process), May 28, 2024

6. Exhibit "F" – "Mines Act & Environmental Management Act Notice of Application," *Rossland News*, April 18, 2024
7. Exhibit "G" – WHY Joint *Mines Act / EMA* Application, October 2023
8. Exhibit "H" – Application Summary, October 2023
9. Exhibit "I" – WHY Presentation to EMLI / ENV, 2018
10. Exhibit "J" – NI 43-101 Technical Report (Preliminary Economic Assessment), June 2013
11. Exhibit "K" – NI 43-101 Technical Report (Pre-Feasibility Study), November 2022
12. Exhibit "L" – WHY media release re: sale of magnesium serpentine ore, December 7, 2021