



***Coal Conservation Act Application Nos. 1844520, 1902073,
Environmental Protection and Enhancement Act Application No. 001-00403427, and
Water Act Application Nos. 001-00403428, 001-00403429, 001-00403430, 001-00403431,
Public Lands Act Application Nos. MSL160757, MSL160758, LOC160841, LOC160842,
and LOC970943***

**Joint Review Panel
Impact Assessment Agency of Canada Reference No. 80101
Reply Argument**

Benga Mining Limited
Grassy Mountain Coal Project

January 15, 2021

Table of Contents

	Page
1.0 REPLY ARGUMENT OVERVIEW.....	1
2.0 KEY MATTERS RAISED IN PARTICIPANTS’ FINAL ARGUMENTS	2
2.1 Project need and socioeconomic effects	2
2.1.1 Project need.....	2
2.1.2 Socioeconomic effects	2
2.2 Species at risk considerations before the Panel	3
2.3 WSCT in Gold Creek.....	6
2.3.1 Benga has provided the most robust and detailed inventory to date for WSCT in Gold Creek....	6
2.3.2 Population fluctuations, decline, and the 2015 sedimentation event	7
2.3.3 Gold Creek is not good habitat, but it can be improved.....	9
2.4 Specific response to Environment and Climate Change Canada (“ECCC”) and Fisheries and Oceans Canada (“DFO”).....	10
2.4.1 ECCC	10
2.4.2 DFO.....	13
2.5 Saturated backfill zones (“SBZs”).....	14
2.6 Human health and air.....	16
2.7 Adjacent landowners and access issues	21
2.8 Ktunaxa Nation Council (“KNC”) and the Aboriginal Consultation Office (“ACO”).....	24
2.9 The Project is in the public interest and is unlikely to cause significant adverse effects	25
2.9.1 The Project is unlikely to cause significant adverse effects.....	26
2.9.2 The precautionary principle does not paralyze development.....	26
2.9.3 The Project is in the public interest.....	27
3.0 CONCLUSION.....	29

1.0 REPLY ARGUMENT OVERVIEW

1. Benga Mining Limited (“Benga”) submits this reply argument in response to final arguments filed by participants in the Joint Review Panel’s (“JRP” or “Panel”)’s review of applications with respect to the Grassy Mountain Coal Project (“Project” or “Grassy Mountain Project”).¹ Benga addressed the majority of points raised in the participants’ final arguments in its submissions filed on August 24, 2020 (CIAR #503) and October 5, 2020 (CIAR #571), and in its final argument filed on December 11, 2020 (CIAR #962). Benga continues to rely on its previous submissions and will not repeat them again in reply.
2. This reply argument addresses the following matters with respect to the Project:
 - a. Project need and socioeconomic effects;
 - b. Species at risk considerations before the Panel;
 - c. Westslope Cutthroat Trout (“WSCT”) in Gold Creek;
 - d. Specific responses to Environment and Climate Change Canada (“ECCC”) and Fisheries and Oceans Canada (“DFO”);
 - e. Saturated backfill zones (“SBZs”);
 - f. Human health and air;
 - g. Adjacent landowners’ access issues;
 - h. Ktunaxa Nation Council (“KNC”) and the Aboriginal Consultation Office (“ACO”); and,
 - i. Public interest and environmental effects.
3. To the extent this reply argument does not specifically address matters raised by participants in their final arguments, Benga’s position remains as expressed in its previous submissions and through the public hearing.

¹ These final arguments are available on the Canadian Impact Assessment Registry (“CIAR”) at CIAR #1339 (Coalition of Alberta Wilderness Association and Grassy Mountain Group); CIAR #1347 (Canadian Parks and Wilderness Society – Southern Alberta Chapter); CIAR #1487 (Crownsnest Conservation Society); CIAR #1342 (Government of Canada); CIAR #1351 (Livingstone Landowners Group); CIAR #1337 (Municipal District of Ranchland No. 66); CIAR #1346 (Timberwolf Conservation Society and Mike Judd); CIAR #1327 (Barbara Janusz); CIAR #1284 (Jim Rennie); and CIAR #1336 (Ktunaxa Nation Council).

2.0 KEY MATTERS RAISED IN PARTICIPANTS' FINAL ARGUMENTS

2.1 Project need and socioeconomic effects

2.1.1 *Project need*

4. Several parties argue that the need for the Project has not been demonstrated. For instance, the Coalition of Alberta Wilderness Association and Grassy Mountain Group (“Coalition”) argues that “demand is not from Canada [...] but from other countries.” The Coalition also argues the Project is not needed to meet Canadian demand or for use in constructing critical infrastructure in Canada.² These arguments are incorrect and demonstrate a fundamental misunderstanding of the issue.
5. The Project will produce metallurgical coal, one of the key raw materials required to produce steel. There is absolutely no evidence in this proceeding that Canadian or global use of steel is declining. Canadians will continue to require steel for construction activities in Canada. In addition, Canadians will continue to purchase goods manufactured elsewhere that are composed of steel. There is no government policy in Canada aimed at curbing the use of steel in Canada or the import of goods manufactured with steel. Steel remains the world’s most important engineering and construction material.
6. To the extent Canadians can contribute to, and derive value from, the production of metallurgical coal, it is imperative they do so. Otherwise, Canada’s ongoing imports of steel and goods manufactured with steel will simply result in a wealth transfer from Canada to other jurisdictions. This is not in the public interest. Canadians should benefit as much as possible from the global and domestic demand of steel by producing metallurgical coal in an environmentally responsible way. This clearly establishes the need for the Project.

2.1.2 *Socioeconomic effects*

7. A significant portion of the Livingstone Landowners Group’s (“LLG”)’s argument focuses on the Project’s socioeconomic effects. With respect, the arguments put forward by the LLG are gross oversimplifications or misrepresentations of the record. In addition, LLG ignores one inescapable and uncontroversial fact. If the Project is approved, and if Benga proceeds with the development of the Project, hundreds of jobs will be created, significant capital investments will be made, and governments will collect revenues from income taxes and royalties that can be directed to support needed social programs. If the Project is not approved, or if Benga chooses not to proceed with the Project, none of these benefits will accrue.
8. The emphasis on benefits is intentional. As it pertains to socioeconomic benefits, it is clear that any investment by Benga associated with the Project is beneficial. Alberta’s unemployment rate was 11% in October, and 12% in September 2020. COVID-19 and other factors have decimated Alberta’s economy. Federal, provincial, and municipal government budgets are in unprecedented deficit situations. The suggestion that the additional jobs and government revenues that will result from the Project are not a benefit is absurd. No municipality has intervened in this proceeding on the basis that its infrastructure is

² CIAR #1339 at para 53.

under undue pressure. The factors that existed in 2006, when municipalities argued that benefits were outweighed by the cumulative costs of industrial development,³ do not exist today.

9. While economists may debate whether the input-output model or the cost-benefit analysis (“CBA”) should be the preferred tool in regulatory proceedings, this is irrelevant as it pertains to the Panel’s deliberations. As it pertains to this proceeding, Benga was never required to prepare a CBA. LLG asserts that Directive 061 requires a CBA. However, Directive 061 does not specifically state a CBA is required. In any event, Directive 061 is repealed.
10. Finally, LLG argues that Benga has assessed economic and environmental effects based on different coal prices. LLG’s argument in this regard is flawed and demonstrates a misunderstanding of the evidence. Figure C.1.2-1 depicts certain pit boundaries. As stated in the Application:⁴

The figure also shows the ultimate pit boundary, which was developed based on the \$100 pit extent and limited to the north due to marginal stripping ratios.

11. LLG fails to appreciate that the pit targeting exercise, and the values shown in Figure C.1.2-1 are based on costs:⁵

The economic targeting input parameters were derived from mine plan quantities and cost estimates developed for a preliminary mine plan for the Grassy Mountain Project in early 2015. Table C.1.2-1 summarizes the input parameter unit costs applied for pit targeting and optimization.

12. Benga’s decision to develop the Project using the \$100 pit extent means that if prices are lower than anticipated (\$140), the Project remains viable. Benga chose not to target the more expensive resources in its pit targeting exercise. This is an entirely responsible approach. Contrary to the LLG’s assertion, Figure C.1.2-1 does not represent Benga’s forecasts of future coal prices.

2.2 Species at risk considerations before the Panel

13. Protection of species at risk and the Panel’s role under the *Species at Risk Act*⁶ (“SARA”) are raised in several participants’ final arguments. While Benga has addressed these issues throughout the environmental assessment (“EA”) process, it wishes to respond to select issues at this stage. These issues

³ See *Suncor Energy Inc.* (14 November 2006), EUB Decision 2006-112, online: AER <<https://static.aer.ca/prd/documents/decisions/2006/2006-112.pdf>> at PDF 12; *Imperial Oil Resources Ventures Limited* (February 27, 2007), EUB/CEAA Joint Review Panel Report and EUB Decision 2007-013, online: AER <<https://static.aer.ca/prd/documents/decisions/2007/2007-013.pdf>> at PDF 101.

⁴ CIAR #42, Section C at PDF 19.

⁵ CIAR #42, Section C at PDF 18.

⁶ SC 2002, c 29.

are the Panel's obligations under the *SARA*, identification of critical habitat, and novel interpretations of the *SARA*'s permitting provisions advanced by certain participants.

14. Timberwolf Conservation Society's ("Timberwolf")'s final argument states that ss. 79(2) and (3) of the *SARA* require the Panel to identify the Project's adverse effects on *SARA*-protected WSCT and its critical habitat, and to ensure that measures are taken to avoid or to lessen those effects. These measures must be undertaken in a manner consistent with the *Recovery Strategy and Action Plan for the Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) Alberta Population (also known as Saskatchewan-Nelson River Populations) in Canada* ("RS-AP").⁷ Benga agrees with Timberwolf that this is the Panel's obligation. This requirement is also included in the JRP's Terms of Reference ("JRP ToR").⁸
15. *SARA* protections apply to the genetically pure WSCT population found in a portion of Gold Creek. The RS-AP identifies WSCT critical habitat as including a section of Gold Creek's main stem and, potentially, portions of Gold Creek's tributaries. As Benga noted in its final argument, the RS-AP uses a bounding box approach to identify critical habitat and states "critical habitat is not comprised of the entire area within the identified boundaries but only those areas within the identified geographical boundaries where the described biophysical feature and function it supports occur."⁹ As discussed further below, Benga began collecting data regarding the Gold Creek WSCT population in 2016 and has proposed mitigations to improve habitat in view of supporting the WSCT's survival and recovery.
16. Benga reiterates that there is no application before the Panel for a *SARA* ss. 73 or 74 permit. The DFO has stated that it could not grant such a permit on the basis of the information currently on the record.¹⁰ Benga understands that further information will be required in preparing its application for such a permit. It would be improper for this Panel to make a decision relating to the legal requirements that must be met for a *SARA* s. 73 permit. Addressing the requirements of these permitting provisions risks fettering DFO's eventual permit determination. Recommending against approval of the Project on the assumption that Benga might not obtain a permit would prejudice an application that has not been made.
17. Even though the Panel is not considering an application for a permit under s. 73 of the *SARA*, Benga would like to respond briefly to the novel and incorrect interpretations of this provision put forth by Timberwolf and the Canadian Parks and Wilderness Society – Southern Alberta Chapter's ("CPAWS").
18. Section 73 of the *SARA* states:

⁷ CIAR #1346 at paras 46-54; CIAR #493 [RS-AP].

⁸ Appended to the agreement ("JRP Agreement") entered into between the federal Minister of the Environment and the Alberta Energy Regulator ("AER") to allow a joint review of the Project: CIAR #80 at PDF 9.

⁹ CIAR #493 at PDF 29.

¹⁰ CIAR #1342 at para 39.

73 (1) The competent minister may enter into an agreement with a person, or issue a permit to a person, authorizing the person to engage in an activity affecting a listed wildlife species, any part of its critical habitat or the residences of its individuals.

(2) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

...

(c) affecting the species is incidental to the carrying out of the activity.

(3) The agreement may be entered into, or the permit issued, only if the competent minister is of the opinion that

(a) all reasonable alternatives to the activity that would reduce the impact on the species have been considered and the best solution has been adopted;

(b) all feasible measures will be taken to minimize the impact of the activity on the species or its critical habitat or the residences of its individuals; and

(c) the activity will not jeopardize the survival or recovery of the species.

19. Timberwolf’s final argument states that “incidental” in the context of s. 73 (2)(c) should be understood as synonymous with “minor” or “inconsequential”.¹¹ CPAWS argues “that ‘incidental’ requires that the impacts on the species at risk be negligibly small”.¹²
20. The plain meaning of “incidental” has no relationship to the magnitude of an impact. Timberwolf’s and CPAWS’ proposed interpretations are put forth with no credible support, and would result in a regime that effectively bans any industrial activity in a SARA-listed species’ vicinity. If this were the SARA’s intent, the statute would say so.
21. Canadian courts consistently hold 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.”¹³ This approach does not allow us to ignore a word’s ordinary meaning.
22. Timberwolf argues that an interpretation of s. 73 (2)(c) based on the ordinary meaning of “incidental” is inconsistent with the SARA’s purposes to protect listed species and facilitate their recovery.¹⁴ This argument does not properly account for s. 73(3) of the SARA, which places pre-conditions on the

¹¹ CIAR #1346 at para 36.

¹² CIAR #1347 at para 100.

¹³ *Rizzo & Rizzo Shoes Ltd. (Re)*, [1998] 1 SCR 27, 154 DLR (4th) 193 at para 21.

¹⁴ CIAR #1346 at para 26.

Minister's ability to enter into agreements and to issue permits. These pre-conditions ensure that any agreement entered into, or permit issued, under s. 73 is consistent with the SARA's protective objectives.

23. Benga is mindful of the importance of ensuring the survival, and contributing to the recovery, of SARA-protected WSCT, and looks forward to continued engagement with DFO regarding the mitigations to which Benga has committed.

2.3 WSCT in Gold Creek

24. Several participants expressed concerns in their final arguments with respect to the accuracy of estimated WSCT abundance in Gold Creek, and reasons for the observed general decline in populations. None of the criticisms submitted by the Coalition, CPAWS, Timberwolf, or Mr. Jim Rennie raise any real doubts as to the reliability of data collected by Benga to date, or with Benga's commitments to further research and monitoring leading up to, and throughout the life of the Project.

2.3.1 Benga has provided the most robust and detailed inventory to date for WSCT in Gold Creek

25. Benga's assessment of WSCT and their habitat in Gold Creek reflect the most site-specific, detailed, and robust data collection conducted on the local population to date. Benga provided a substantial review of historical data and initial monitoring results on WSCT numbers and habitat in CIAR #44, Addendum 1, Appendix A1 – Fisheries and Aquatics Technical Baseline Report, and Appendix A3 – Instream Flow Assessment. These resources include a review of pertinent historical information generated by the Fish and Wildlife Management Information System; the *Alberta Westslope Cutthroat Trout Recovery Plan: 2012-2017*; the DFO's 2014 *Recovery Strategy for the Alberta populations of Westslope Cutthroat Trout (Oncorhynchus clarkii lewisi) in Canada [Final]*; reports published by the Alberta Conservation Association; surveys of traditional knowledge and traditional land use with members of the Treaty 7 First Nations; and peer-reviewed literature, including Blackburn J.'s 2011 Technical Report entitled "Crownsnest River drainage sport fish population assessment".¹⁵ To the extent participants allege Benga has overlooked these historical resources available for WSCT in Gold and Blairmore Creeks, the record shows this is simply untrue.
26. Benga carried out its initial fish surveys in the Blairmore Creek system in 2014, and in the Gold Creek system in 2016.¹⁶ Initial fish habitat assessments and biophysical surveys were completed from 2014 to 2016 to help describe the quality, composition, and distribution of fish habitats throughout the mainstems and tributaries of Gold and Blairmore Creeks.¹⁷ Benga has continued to assess the local WSCT

¹⁵ CIAR #44, Addendum 1, Appendix A1 – Fisheries and Aquatics Technical Baseline Report at PDF 20-21, 85-89; CIAR #42, Section E at PDF 113-114.

¹⁶ CIAR #44, Addendum 1, Appendix A1 – Fisheries and Aquatics Technical Baseline Report at PDF 63-64, 71-73.

¹⁷ CIAR #44, Addendum 1, Appendix A1 – Fisheries and Aquatics Technical Baseline Report at PDF 27.

populations and has provided updated estimates for fish relative abundance in Gold and Blairmore Creeks between 2016 and 2020, up to and during the hearing.¹⁸

27. Benga does not contest Mr. Rennie’s personal fish catch records submitted to the Panel, but it is clear that Benga’s review of historical information, combined with over five years of monitoring data, forms the most robust data collection available on WSCT in Gold Creek. This data should not be set aside in preference for Mr. Rennie’s personal records, Mr. Jeremy Benson’s Master’s thesis research, or peer reviewed research conducted on streams other than Gold Creek, as recommended to the JRP by the Coalition, Timberwolf, and CPAWS.
28. As Timberwolf points out in its final argument, Benga has supported Mr. Benson’s Master’s thesis research on WSCT in Gold Creek.¹⁹ Benga looks forward to collaborating with other researchers and groups in the future to continue expanding the knowledge available on WSCT, and to continue gathering the information required to sustain WSCT in Gold Creek. As Mr. Benson noted in his thesis entitled “Ecology of Westslope Cutthroat Trout Populations in Three Small Rocky Mountain Headwater Streams”, further research and monitoring is key to identifying limitations and opportunities for this species,²⁰ and Benga has committed to such pursuits should the Project proceed.

2.3.2 *Population fluctuations, decline, and the 2015 sedimentation event*

29. As Benga stated in its October 5, 2020 submission, findings from multi-year surveys show that relative abundance of WSCT in Gold Creek has varied dramatically over the last four years, with fish counts ranging from more than 100 in 2016 to less than 20 in 2019.²¹ Benga’s most recent update to population inventory data for Gold Creek shows fish numbers vary from year to year, but also reflects a notable decline between 2016 and 2017.²²
30. Timberwolf suggests that declines in WSCT numbers in Gold Creek are due to a “sediment release event in 2016”.²³ Meanwhile, CPAWS urges the Panel to conclude “Benga’s core hole drilling program and the associated roadwork in 2015 caused the 2015 coal sediment incident and associated release into Gold Creek”, and that this “incident most likely caused the population collapse in Gold Creek”.²⁴ The Coalition points to a “2015 event that allowed legacy mine spoil to spill into the stream”, possibly causing what the

¹⁸ CIAR #843.

¹⁹ CIAR #1346 at para 95.

²⁰ CIAR #859 at PDF 175.

²¹ CIAR #571 at PDF 27.

²² CIAR #843.

²³ CIAR #1346 at para 79.

²⁴ CIAR #1347 at paras 82, 84.

Coalition refers to as a “large fish kill”.²⁵ Mr. Rennie said in his final argument that Benga’s surveys “were done AFTER the 2015 coal spill, so their surveys done downstream of Caudron Creek were after the coal spill and fish kill, thus only measuring the few survivors of the spill”.²⁶

31. The above assertions fail to take into account several facts before the Panel. For one, there is absolutely no evidence of there being a “fish kill” in Gold Creek in 2015, or at anytime since then. Secondly, it is noted in the Alberta Energy Regulator’s (“AER”)’s *Investigation Summary Report*²⁷ (“AER Report”) that a sedimentation event did in fact take place in Gold Creek on July 17, 2015, following significant rainfall. Benga’s population inventory data shows that numbers of WSCT in Gold Creek declined between 2016 and 2017.²⁸ If the sedimentation event had any effect on fish numbers, that effect for some reason did not occur until two years after the incident. A decline in fish numbers is also recorded for Blairmore Creek in the same time period,²⁹ which could suggest other potential causes for a population decline, including regional drought conditions, rather than the 2015 sedimentation event as suggested by other participants.
32. The AER Report drew no connection between the 2015 sedimentation event and any activities carried out by Benga with respect to the Grassy Mountain Project. There is no evidence that Benga conducted core hole drilling anywhere on the Project site at the time of the incident. The AER Report noted evidence of scouring and erosion in the coal seam connected to the sedimentation incidents, suggesting that erosion and transport of sediments and coal into Gold Creek has been happening for some time.³⁰ Benga’s review of the area, as discussed in the AER Report, indicated that these kinds of incidents have likely been occurring since the historical mining operations were abandoned in the 1960s.³¹
33. The decline in the measured WSCT numbers in Gold Creek between 2016 and 2017 is not connected to Benga’s monitoring or exploration activities, or to the 2015 sedimentation event. Rather, it is most likely that the fluctuations in fish numbers, noted by both Benga and Mr. Rennie, reflects the sub-optimal nature of Gold Creek habitat, and its current susceptibility to damage due to floods and droughts.
34. Mr. Rennie has restated in his argument his concern that: “a number of spoil piles along the east side of Grassy Mountain are at a steep angle, easily disturbed by any future coal mining activity. Repeat spills

²⁵ CIAR #1339 at para 710.

²⁶ CIAR #1284 at PDF 1.

²⁷ CIAR #897, AER, *Investigation Summary Report – 2015-020: Benga Mining Limited, operating as Riversdale Resources* (8 March 2017) [AER Report].

²⁸ CIAR #843.

²⁹ CIAR #843 at PDF 3-4.

³⁰ AER Report at PDF 10.

³¹ AER Report at PDF 10.

would be likely if the mine went ahead.”³² However, he also acknowledged in the hearing that “slumping events and downslope transportation of debris coming off ... Grassy Mountain for a long time”.³³ Mr. Rennie’s evidence given at the hearing and the AER Report both suggest that repeat sedimentation events will likely occur if the Project does not proceed.³⁴ Should the Project proceed, Benga will be reclaiming the entirety of the legacy mining disturbance that falls within the Project’s footprint, including the spoil piles which currently pose an ongoing threat to Gold Creek.

2.3.3 *Gold Creek is not good habitat, but it can be improved*

35. As Benga has submitted previously, Gold Creek contains critical habitat for WSCT, but this habitat has been degraded by multiple, existing stressors. These stressors range from competition from invasive Brook Trout in some locations, to man-made barriers, historical mining, logging, flooding events, cattle grazing and stream crosses, angling, and recreational off highway vehicles.³⁵
36. While other participants suggest otherwise, Gold Creek suffers from a marked lack of over-wintering habitat with few pools deep enough to support over-wintering.³⁶ This is consistent with Coalition witness Mr. Allan Locke’s observation that “overwintering habitat, in particular deep pool habitat in east slopes streams is naturally limiting to fish populations”.³⁷ Benga’s assessments have shown that primary deep pool habitat is extremely limited through the mainstems of both Gold and Blairmore Creeks,³⁸ and no participant contested the fact that overwintering habitat is critical to WSCT survival.
37. Benga has proposed several actions in its draft Fisheries Offsetting Plan (“FOP”)³⁹ to convert low value habitat in both Gold and Blairmore Creeks to higher quality habitat, including, among other measures: the creation of overwintering pools, re-establishing critical habitat connectivity, and enhancing riparian zones.⁴⁰ These actions will promote the long-term sustainability of local WSCT populations, and nothing in the participants’ final arguments seriously challenges that proposal.

³² CIAR #1284 at PDF 1.

³³ CIAR #903 at 5077:13-23.

³⁴ We discuss this in Benga’s final argument at CIAR #962 at paras 438-442.

³⁵ CIAR #962 at para 357; CIAR #571 at 24, 27-28.

³⁶ CIAR #89 at PDF 834.

³⁷ CIAR #553 at PDF 141.

³⁸ CIAR #44, Addendum 1, Appendix A1 – Fisheries and Aquatics Technical Baseline Report at PDF 65-67.

³⁹ CIAR #42, Addendum 8, Appendix B-1.

⁴⁰ See CIAR #962 at paras 379-385.

2.4 Specific response to Environment and Climate Change Canada (“ECCC”) and Fisheries and Oceans Canada (“DFO”)

38. ECCC and DFO highlighted a number of points in their final arguments which Benga has already addressed in its earlier submissions to the JRP, or in its final argument. Benga responds below to a few salient points that warrant further comment.

2.4.1 ECCC

39. ECCC has recommended that Benga implement a biomonitoring program in an effort to protect sensitive egg-laying aquatic-dependent vertebrates.⁴¹ Benga has presented a plan for Aquatic Effects Monitoring within its draft Aquatics Monitoring Plan.⁴² This plan includes biomonitoring to evaluate the potential effects of mine effluent on the downstream aquatic environment (including fish and wildlife).

40. In its final argument, ECCC expressed its continued concern with Benga’s site-specific water quality objective (“SSWQO”) for selenium in Blairmore Creek, particularly with respect to the selenium species that will be present in Blairmore Creek following selenium attenuation. Benga maintains that, as ECCC said in its September 21, 2020 submission, a “sulphate-adjusted guideline for selenate is based on sound science”.⁴³ Benga has further committed to employ technology and stringent monitoring to ensure that the residual selenium in Blairmore Creek is selenate, and not selenite. Benga has provided a range of SSWQOs approved for other projects, an example of successful selenium attenuation using a saturated rock fill, and modelled results for Blairmore Creek, all of which support the conclusion that Benga’s proposed SSWQO for selenium will adequately protect aquatic life.⁴⁴

41. Benga witness Mr. Steve Day explained in oral evidence the issue of selenium speciation in water treated using a SBZ:

MR. DAY: ... So the -- the way the SBZ works is -- is that the incoming water contains selenium, is in the form of selenate, and the whole concept of the -- the SBZ is -- is that the -- the selenate is reduced -- chemically reduced to -- to forms of selenite and also down to elemental selenium. And both those two forms are held within the -- the SBZ -- SBZ. We've talked about that over the last few days previously, I think. But -- so the -- the selenite is -- is very surface reactive. It will -- is electrostatically attached to the -- the minerals in the rocks in the SBZ, and elemental selenium is a solid, and so it's filtered out. And so any water exiting the -- the SBZ that contains a residual selenium is more likely to be selenate. It's not expected to be selenite because of it being -- being

⁴¹ CIAR #1342 at para 3; CIAR #542 at PDF 30.

⁴² CIAR #42, Addendum 11, Appendix 6.23-1 Aquatic Monitoring Plan – Draft at PDF 1132.

⁴³ CIAR #571 at PDF 20; CIAR #542 at PDF 43.

⁴⁴ CIAR #962 at paras 334-341; CIAR #571 at PDF 20-22.

retained within the SBZ. And so that's -- and that's -- you know, I've been -- I've been involved in Teck's work on their SRF, as they call it, and -- and that's been the finding.⁴⁵

42. As stated in Benga's October 5, 2020 submission, it is also important to note that Benga is not simply "assuming" that the residual selenium will be selenate rather than selenite:

Benga has committed to ensure that this will be the case. As stated in response to Information Request 6.20:

"Benga will implement advanced oxidation processes with powerful oxidant like hydrogen peroxide injection or ozone addition, if necessary, to further the conversion of carry-over selenite to selenate."⁴⁶

43. Benga agrees with ECCC that the Project's final Aquatic Monitoring Program should include an analysis of selenium speciation, biomonitoring of the aquatic environment, and comprehensive triggers for adaptive management in the case of elevated selenium concentrations. Benga has presented the foundations for this type of monitoring in Addendum 11, Appendix 6.23-1 (draft Aquatic Monitoring Plan). As noted above, Benga has already committed to implementation of an advanced oxidation process to reduce selenium species to selenate or, if it becomes necessary, to implement alternate or additional treatment processes such as gravel bed reactors or water treatment plants.⁴⁷
44. With respect to air quality, ECCC recommended that Benga conduct monitoring of nitrogen dioxide and fine particulate matter in nearby communities for a minimum of one year prior to construction.⁴⁸ The Municipality of Crowsnest Pass ("MCNP") similarly recommended before the hearing that Benga install a permanent air quality monitoring station at the Crowsnest Pass Health Centre and the Crowsnest Pass Medical Clinic, or other suitable proximate locations.⁴⁹ As discussed in Benga's October 5, 2020 submission, Benga installed an air monitoring station in 2019 at the site of the proposed future rail load out, near the Crowsnest Pass Medical Clinic. Benga has collected baseline data from this site for over a year, and has committed to continue air monitoring for the Project's life at this location, or at another location in the Blairmore townsite that can be agreed upon between the MCNP and regulators.⁵⁰
45. Benga is willing to install a new air monitoring station that meets the Alberta Air Monitoring Directive, and to run that station in parallel with existing equipment for at least one year. This would facilitate a correlation between the existing air quality data and readings from the new equipment. However, given

⁴⁵ CIAR #876 at 4139:11-26, 4140:1-4.

⁴⁶ CIAR #571 at PDF 21, citing CIAR #313 at PDF 229.

⁴⁷ CIAR #962 at para 332; CIAR #854 at 3645 – 3646; CIAR #848 at 3280 – 3281.

⁴⁸ CIAR #1342 at para 9; CIAR #542, ECCC Recommendation 6.1-1 at PDF 73.

⁴⁹ CIAR #545 at para 77.

⁵⁰ CIAR #571 at PDF 14.

the level of baseline air quality monitoring and modelling that has already taken place, the Project should not be delayed solely to allow for additional calibration monitoring to take place.

46. ECCC also speaks to the issue of fugitive dust emissions in its final argument.⁵¹ Benga agrees that monitoring and adaptive management on haul roads must be undertaken to assess and mitigate fugitive dust to ensure Benga's proposed level of mitigation is achieved. Benga considers that monitoring of dust along the rail haul corridor and, if necessary, reapplication of latex binder, to be the responsibility of CP Rail. Benga notes that CP Rail has already installed reapplication stations along the rail route, which they employ as necessary, along with other mitigation measures to achieve acceptable dust mitigation.
47. Another issue raised by ECCC relating to dust is Benga's current plan to use water from the raw water pond for dust control on haul roads.⁵² This topic arose at the hearing when Panel member Mr. O'Gorman asked whether this water might be a vector for selenium to enter the environment via runoff.⁵³
48. Benga acknowledges the possibility that water from the raw water pond could contain elevated levels of selenium. However, Benga will continuously monitor water quality in the raw water pond, so Benga will be aware if any contaminants of potential concern ("COPCs") are present in concentrations that pose a threat were the water to be used for dust control on roads. Additionally, the runoff from the haul roads within the Project footprint will not be freely released into the environment, as it will be recaptured in the ditches and ponds comprising the Project's water management system. To put the quantity of water used for dust suppression into context, Benga has applied to divert a total of 558,772 m³ of non-recycled surface water on an annual basis.⁵⁴ Annual water used for dust suppressant on haul roads is estimated to be 60,000 m³.⁵⁵ While this amount is not insignificant, Benga will be able to draw this water from other locations, such as pit dewatering sumps, if necessary due to water quality issues.
49. With respect to greenhouse gas ("GHG") emissions, Benga has committed to feasible mitigation measures intended to minimize GHG emissions associated with the Project. Benga's draft GHG Management Plan⁵⁶ includes commitments to monitoring, specific mitigations to reduce GHG emissions, and continuous

⁵¹ CIAR #1342 at para 10.

⁵² CIAR #1342 at para 3.

⁵³ CIAR #931 at 5962 – 5966.

⁵⁴ CIAR #42, Addendum 2, Appendix 1E at PDF 6.

⁵⁵ CIAR #931 at 5960:7.

⁵⁶ CIAR #251, Addendum 10, Package 1, Appendix 1.8-1.

improvement.⁵⁷ Benga has addressed the GHG emissions associated with the Project in its October 5, 2020 submission and in its final argument.⁵⁸

2.4.2 DFO

50. Benga responded to DFO's submissions in detail in its October 5, 2020 submission⁵⁹ and in final argument. It is worth repeating that Benga recognizes the need for further study and engineering design work, in collaboration with both DFO and Alberta Environment and Parks, to further develop Benga's proposed offsetting and monitoring plans to meet *Fisheries Act* and *SARA* requirements.⁶⁰
51. Benga acknowledges that there will be a loss of WSCT habitat in Gold Creek related to changes in hydrology. Benga has provided an estimate of this loss and an assessment that it is not a significant effect.⁶¹ Further, Benga has proposed a draft FOP⁶² that is intended to provide compensation measures for all losses with a significant margin of over-compensation to be conservative. Benga has indicated it will continue to work with DFO to provide additional modelling if necessary, to support its future applications for *Fisheries Act*⁶³ authorizations and *SARA* permits.⁶⁴
52. Benga recognizes that the RS-AP includes a 30-meter riparian buffer for WSCT habitat. Benga would simply remind the Panel that it has committed to maintaining a 100-meter buffer along the mainstems of Gold and Blairmore Creeks, and a 30 meter setback for all non-disturbed portions of Gold Creek and Blairmore Creek tributaries.⁶⁵ In regards to loss of riparian habitat for portions of affected tributaries, Benga has indicated it will work with DFO to quantify the actual riparian habitat losses within these buffers in support of its future *Fisheries Act* and *SARA* applications. Benga considers that an on-site meeting with DFO representatives and clarification of the methodologies to be used for this work will assist in developing confidence in these estimates.

⁵⁷ See CIAR #571 at PDF 17.

⁵⁸ CIAR #962 at paras 460-466.

⁵⁹ CIAR #571 at PDF 23-35; CIAR #962 at paras 386-400.

⁶⁰ CIAR #962 at para 397.

⁶¹ CIAR #42, Addendum 1, Aquatic Ecology Effects Assessment Addendum Consultant Report #6 at PDF 90-94; Addendum 8, Appendix B-1, Detailed Fisheries Offsetting Plan at PDF 879-880.

⁶² CIAR #42, Addendum 8, Appendix B-1.

⁶³ RSC 1985, c F-14.

⁶⁴ CIAR #962 at paras 399; CIAR #571 at PDF 28-29.

⁶⁵ CIAR #42, Addendum 12 at PDF 95, Table 2-6; CIAR #42, Addendum 11 at PDF 1124, Table 5.0-1.

53. Benga has proposed substantial offsetting measures in its draft FOP and has confirmed its willingness to pursue additional offsetting opportunities in collaboration with DFO as needed.⁶⁶ As noted above, Benga fully recognizes that additional work is required to finalize the draft FOP, including proposed engineering for overwintering pools and the realignment of the Gold Creek stream channel to ensure year-round continuity.⁶⁷
54. DFO repeated in its final argument that offsetting should be constructed and proven effective prior to impacts.⁶⁸ As Benga discussed briefly in its final argument, Benga sees a requirement that all mitigations be implemented and verified before the Project proceeds as simply unworkable in “real life”, given that it would mean significant scheduling delays and up front expenses without any returns on the horizon.⁶⁹ Benga has already committed to a number of mitigation measures to avoid and minimize impacts to WSCT in Gold and Blairmore Creeks, and agrees with early implementation of offsetting measures, but not full, prior implementation.
55. Benga looks forward to the additional work that it recognizes is a necessary precursor for DFO to issue *Fisheries Act* authorizations and SARA permits, should the Project proceed.

2.5 Saturated backfill zones (“SBZs”)

56. The LLG makes several incorrect or misleading assertions regarding the SBZ. For instance, the LLG states that the Teck saturated rockfill “only attenuated approximately 90%” and in support of this, references a question by Panel member Mr. O’Gorman where he referred to a PowerPoint slide prepared by Teck.⁷⁰ However, that slide does not state that attenuation was approximately 90%. Instead, it clearly states that attenuation was greater than 90%. In addition, that same PowerPoint presentation contains an additional slide showing that as selenium concentrations in the influent increased, selenium concentrations in the effluent remained low, in the range of 10 ug/L.⁷¹
57. More importantly, Mr. Jensen, a chemical engineer, was specifically asked by Panel member Mr. O’Gorman about his confidence in the performance of the SBZ and stated:

MR. JENSEN: I mean, no, there -- there's -- there's no question there's site-specific questions that have to be answered and addressed on-site, but when I -- but on the

⁶⁶ CIAR #571 at PDF 28.

⁶⁷ CIAR #571 at PDF 28; CIAR #962 at paras 396-397.

⁶⁸ CIAR #1342 at para 29.

⁶⁹ CIAR #962 at para 398.

⁷⁰ CIAR #1351 at para 128; CIAR #881 at 4353:1-26; CIAR #503 at PDF 35.

⁷¹ CIAR #503 at PDF 42.

particular point of selenium and nitrate removal, for that matter, I would -- I would express a high degree of confidence.

Q: A high degree of confidence in what?

MR. JENSEN: In the performance of removing selenium and nitrate.

Q: To achieve 99 percent removal? Do you have high degree of confidence in that?

MR. JENSEN: Yeah. Or to achieve 15 micrograms per litre of selenium in the effluent and less than 1 milligram per litre of nitrate nitrogen in the effluent, yes.

Q: Okay. Thank you, Mr. Jensen. You put it at high, not even moderate?

MR. JENSEN: No. I -- I put it at high.⁷²

58. Mr. Jensen's evidence on this point should be accepted by the Panel. He has extensive experience studying and working with SBZs, and as evidenced in his curriculum vitae, has designed and implemented mine water management plans and water treatment processes at various mines across western Canada.⁷³ It should be noted that none of the experts tendered by any of the interveners has direct experience working with SBZs.

59. The LLG makes other assertions that are simply incorrect. The LLG asserts that Benga has insufficiently identified the potential for water escaping the SBZ through dikes, underground works and groundwater flows⁷⁴ and in support of this states that Mr. Houston conceded Benga has not done "exhaustive geotechnical work".⁷⁵ The LLG argues that therefore, because Benga will proceed with construction without knowing these things, water will escape the SBZ. However, this argument is disingenuous and relies on a mischaracterisation of Mr. Houston's comments. Mr. Houston's complete response was as follows:

MR. HOUSTON: So all of the features are obviously on the site. We haven't done exhaustive geotechnical investigation at all of the sites. So some of the features we're going to want to go in before we do our detailed engineering and gather more information about the -- the subsurface conditions.⁷⁶

60. Contrary to the LLG's assertions, Benga is fully aware of the need to conduct further detailed work when doing the detailed design of the SBZ. As stated by Mr. Houston, further investigations will be done. Then, a mine pit will be excavated thereby providing Benga with further information regarding the site. This work and the detailed design of the SBZ will be undertaken by qualified engineers and subject to ongoing

⁷² CIAR #881 at 4370:12-26, 4371:1.

⁷³ CIAR #571 at PDF 209-210.

⁷⁴ CIAR #1351 at para 165.

⁷⁵ CIAR #1351 at para 163.

⁷⁶ CIAR 854 at 3503:4-9.

oversight by the AER. The arguments presented by LLG are based on an irresponsible assumption that Benga will proceed with the construction of the SBZ based only on the information contained in the Application. This is simply not the case. Benga has provided extensive evidence demonstrating that the SBZ is a technically achievable and feasible mitigation measure.

2.6 Human health and air

61. Several participants, most notably the Government of Canada, the Coalition, and the LLG, maintain some concerns with the Project's potential impacts on air quality and human health.
62. First, with respect to the Project's human health risk assessment ("HHRA"), the HHRA, along with its updates provided through Information Request ("IR") responses and undertaking responses at the hearing, have been completed to ensure compliance with Health Canada's directions, and the AER ToR,⁷⁷ the JRP ToR,⁷⁸ and the Agency's Guidelines for the Preparation of an Environmental Impact Statement.⁷⁹ The HHRA's results demonstrate that emissions from the Project are not predicted to pose a risk of adverse health effects at receptor locations accessible to the general public.⁸⁰ This is the case even with several conservative assumptions built into the HHRA's exposure assessment to intentionally overestimate the Project's potential risks to human health.⁸¹
63. Nevertheless, Benga has recognized that uncertainties remain with respect to the Project's potential impacts on human health. However, the fact that uncertainties remain at this stage is not unique to this Project – it is the case for any proposed project that monitoring must be carried out diligently to check actual results against modelled results. As such, Benga has committed to ongoing monitoring for air, water, and COPCs associated with the Project.⁸² Health Canada suggests – and Benga agrees – that a comprehensive and robust environmental monitoring program of all relevant environmental media must be developed and implemented through the life of the Project and post-mine closure.⁸³ Benga also agrees

⁷⁷ Alberta Energy Regulator, *Terms of Reference for Environmental Impact Assessment Report for Benga Mining Limited Grassy Mountain Coal Project* (19 March 2015) online: <open.alberta.ca/dataset/12ab5b0c-c74d-4936-8fe7-2d550a2fa69e/resource/cd64e6d3-d7c9-4553-acf2-2b43e5b2cbc2/download/ftor-grassy-mtn-coal-project_19mar2015_final-np.pdf> [AER ToR].

⁷⁸ CIAR #80.

⁷⁹ CIAR #11.

⁸⁰ CIAR #962 at para 516.

⁸¹ See e.g. CIAR #42, Addendum 12 at PDF 12, 17 – 18; CIAR #42, Consultant Report 12 at PDF 57 – 58.

⁸² CIAR #962 at paras 518 and 522; CIAR #907 at 5261:11-14.

⁸³ CIAR #1342 at para 41.

that the results of the monitoring program should be used to implement additional mitigation measures, where necessary, to minimize risks to human health.⁸⁴

64. ECCC and the Coalition noted in their final arguments continued concerns with the Project's potential impacts on air quality.⁸⁵ Leading up to the hearing, Benga provided the JRP with a revised model approach with new predictions of NO₂ for all receptors within the regional study area established for the Project's Air Quality Assessment ("AQA").⁸⁶ This was done primarily to address concerns that the AQA's previous predictions were based on estimated background concentrations from Lethbridge, a community much larger than Blairmore. The results were reasonably consistent with the results of all the air quality model approaches taken over the EA process, and with one year of monitored NO₂ concentrations at the air monitoring station near Blairmore.⁸⁷ This satisfied ECCC's recommendation 6.1.2 from its September 21, 2020 submission (CIAR #542).⁸⁸
65. The Coalition has asserted, on behalf of Ms. Shirley Kirby, that Benga's AQA and proposed air quality mitigations are unreliable, ethically questionable, incomplete, and inadequate.⁸⁹ This is a bald assertion not supported by any evidence on the record, and is a view clearly not expressed by Health Canada or ECCC.
66. As noted above in Benga's specific response to ECCC's final argument, Benga has already installed an air monitoring station at the site of the proposed future rail load out, near the Crowsnest Pass Medical Clinic, and has collected data from that station since 2019. Additionally, Benga committed in its October 5, 2020 submission to continue air monitoring for the Project's life at this location, or at another location in Blairmore that can be agreed upon between the MCNP and regulators. Benga has further committed to providing the air monitoring data it collects to regulators, the MCNP, Indigenous communities, and the public through routine reports.⁹⁰
67. The LLG submitted in its final argument its concern that Benga's AQA does not accurately portray the Project's potential for fugitive dust emissions. Benga makes the following points in response:

⁸⁴ CIAR #1342 at para 44.

⁸⁵ CIAR #1342 at paras 8-10; CIAR #1339 at paras 786-791.

⁸⁶ CIAR #571 at PDF 14 and Appendix B.

⁸⁷ CIAR #571 at PDF 14.

⁸⁸ CIAR #1342 at para 8.

⁸⁹ CIAR #1339 at para 787.

⁹⁰ CIAR #571 at PDF 14.

- a. LLG’s witness, Dr. Jim Young, confirmed at the hearing that he was retained to review the Project’s AQA, having particular regard to the assessment’s consideration of Chinook winds.⁹¹ Dr. Young said in his expert report that “chinooks are most prevalent over southern Alberta, especially in a belt from Pincher Creek and Crowsnest Pass through Lethbridge, which get 30–35 chinook days per year, on average.”⁹² In testimony, he guessed that Chinook climatology in the area “suggests 20 to 35 days of Chinook winds each year.”⁹³ He stated in his report that “[w]ind speeds up to 120 km/hour are possible”.⁹⁴ Dr. Young provided no references for these figures in his report, and he made no attempt to explain how the range of 20 to 35 days, or 30 to 35 days (it is unclear which is correct, if either), varies across the wide breadth of area between Crowsnest Pass, Pincher Creek, and Lethbridge. He made no attempt in oral testimony to refute Mr. Randy Rudolph’s evidence that when speaking of Chinook winds, they are typically described as more prevalent on the lee side of the mountain ranges, so in areas such as Lethbridge, located over 100 km west of the Project.⁹⁵

- b. As Mr. Rudolph stated at the hearing, strong winds do occur in the Crowsnest Pass and at the Project site. Those winds are recorded at the ECCC monitoring stations, and they are modelled appropriately in Benga’s AQA.⁹⁶ Benga used wind data from the ECCC Crowsnest and Beaver Mines stations and from the Alberta Environment dataset from 2002 to 2006 to develop its meteorological data for dispersion modelling.⁹⁷ Benga also set up two on-site monitoring stations during periods of two and three months in 2014 to provide information regarding how the local terrain influences wind. While not representative of a year-round assessment, the on-site stations provided site-specific information to help inform Benga’s modelling.⁹⁸ Benga’s AQA is based on the most relevant information available, and Dr. Young’s criticisms do not credibly challenge the AQA’s results.

- c. Dr. Young argued in his report for an assessment methodology that assumes particle emissions increase to the third power of wind speed and that dispersion increases by the inverse of wind speed.⁹⁹ While the LLG maintains in final argument that Dr. Young is correct in his assertion, Dr. Young did not put forward a convincing argument to refute the fact that regulators, including ECCC and the United States Environmental Protection Agency (“USEPA”), do not

⁹¹ CIAR #942 at 6175:8-13.

⁹² CIAR #552 at PDF 55.

⁹³ CIAR #943 at 6191:19-24.

⁹⁴ CIAR #552 at PDF 55.

⁹⁵ CIAR #919 at 5489-5491.

⁹⁶ CIAR #919 at 5490:13-15, 5491:10-14.

⁹⁷ CIAR #919 at 5468-5469.

⁹⁸ CIAR #919 at 5467-5469.

⁹⁹ CIAR #552 at PDF 55.

recommend Dr. Young's proposed methodology for emission modelling.¹⁰⁰ Benga conducted its assessment of fugitive dust emissions following the approaches recommended for assessing proposed development projects in Canada.¹⁰¹

- d. Dr. Young's reliance on a paper by Duane Ono and Scott Weaver titled "Quantifying Particulate Matter Emissions from Windblown Dust Using Realtime Sand Flux Measurements" ("Ono & Weaver")¹⁰² to reinforce his assertion that Benga's assessment underpredicts dust emissions is not convincing. As expanded upon in Benga's final argument,¹⁰³ the Ono & Weaver paper is not applicable to the Project. It includes unverified assumptions and was based on a 285 km² saline California lakebed that reflects environmental conditions drastically different from those present at Grassy Mountain.
- e. The LLG's final argument picks out quotes from the transcript to make it appear that Benga's AQA underestimated fugitive dust emissions by underestimating the area that will be disturbed and contribute to wind blown dust emissions at any one time.¹⁰⁴ Benga assumed in its assessment of wind driven fugitive dust emissions from the Project that 35 hectares of the mine area would be disturbed on a more or less continuous basis.¹⁰⁵ Mr. Rudolph explained at the hearing that this actively disturbed area was determined on the assumption that approximately 10% of the total modelled mining and stripping area is active for wind driven emissions, even though the actual percentage of area assumed to be active for wind driven emissions depends on the specific use of different subsets of the total area (e.g. whether the area is unpaved haul road, waste strip area, or coal pile).¹⁰⁶ Benga's assessment of fugitive dust emissions included the assumption that wind driven emissions from active area and stock piles would occur 24 hours each day for 365 days a year, with hourly winds above 5.36 m/s. These assumptions would tend to overestimate fugitive dust emissions, most notably due to the fact that wind driven emissions at night would be lower due to reduced operational activity.¹⁰⁷ Benga's modelling also conservatively assessed wind driven emissions by not taking into account reductions to annual wind driven emissions due to precipitation.¹⁰⁸ Benga's predictions for fugitive dust emissions are sound, reasonable, and conservative, and neither Dr. Young's evidence or the LLG's final argument diminish the credibility of that aspect of the AQA.

¹⁰⁰ CIAR #919 at 5455-5456.

¹⁰¹ As noted in CIAR #962 at para 452.

¹⁰² CIAR #911.

¹⁰³ CIAR #962 at paras 450-452.

¹⁰⁴ CIAR #1351 at paras 255-263.

¹⁰⁵ CIAR #919 at 5417:19-24; CIAR #42, Consultant Report 1 at PDF 45.

¹⁰⁶ CIAR #919 at 5420; CIAR #42, Consultant Report 1 at PDF 45, 193.

¹⁰⁷ CIAR #42, Consultant Report 1 at PDF 45.

¹⁰⁸ CIAR #42, Consultant Report 1 at PDF 45.

- f. The AQA assumed in its assessment of fugitive dust emissions that 30% of the total unpaved hauling road will be actively disturbed and contributing to dust emissions.¹⁰⁹ Mr. Rudolph explained at the hearing that this assumption means that about 10 to 15 meters of the haul road would be used at any one time, and thereby be actively disturbed.¹¹⁰ The LLG suggested in its final argument that the actively disturbed area should be much greater than 30%, because two-way traffic is possible on the haul road, and there will be instances where trucks have to pass each other going opposite directions on the road.¹¹¹ It is understood that when two trucks pass each other, a width greater than 30% of the road is likely to be disturbed – Mr. Rudolph said as much in cross examination.¹¹² It is fair to assume that when there is a single truck driving on the haul road, its points of contact with the road are likely to be less than 30% of the road’s total width. The assumption that 30% of the hauling road will be actively disturbed at any one time is therefore perfectly reasonable and conservative for the purpose of predicting fugitive dust emissions.
- g. The LLG’s final argument notes that the predicted fugitive dust emissions from haul roads assumed a “control efficiency” of 80% in summer and 90% in winter.¹¹³ The record supports these control efficiencies. Benga has provided several examples of projects that have achieved control efficiencies greater than 80% through road watering or the application of chemical suppressants.¹¹⁴ Benga assumed 90% control efficiency in winter, based reasonably on the fact that roads will be frozen or snow-covered for much if not all of the winter, and based on measured road dust emissions associated with the Grande Cache Coal Mine.¹¹⁵ As Mr. Rudolph and Mr. Gary Houston pointed out at the hearing, Benga will achieve its control efficiencies through a number of mitigation measures, including, but not limited to road watering.¹¹⁶

68. With respect to the HHRA, the LLG relies on evidence provided by Dr. John Dennis, whose main criticism is that Benga’s HHRA does not include express reference to epidemiological studies carried out on communities located in the Appalachian Mountains (“Appalachians”) in northeastern United States. As Benga’s final argument explains in greater detail, Dr. Dennis did not connect the Appalachian studies he cites to coal mining in Canada, let alone to mining at Grassy Mountain in the Crowsnest Pass. His evidence

¹⁰⁹ CIAR #42, Consultant Report 1 at PDF 193.

¹¹⁰ CIAR #919 at 5425:7-13.

¹¹¹ CIAR #1351 at paras 264-265.

¹¹² CIAR #919 at 5425:14-23.

¹¹³ CIAR #1351 at para 267 referring to CIAR #42, Consultant Report 1 at PDF 190-191.

¹¹⁴ CIAR #42, Consultant Report 1 at PDF 190-191; CIAR #55, Attachment 2 at PDF 10-11.

¹¹⁵ CIAR #42, Consultant Report 1 at PDF 191; CIAR #919 at 5488.

¹¹⁶ CIAR #919 at 5501-5502; see also Air Quality (AQ) Mitigation and Commitments Summary Table at CIAR #42, Addendum 12 at PDF 85-86.

is based on a piece of email correspondence he received from an American professor who did not turn his mind to this Project, and attaches a “meta analysis” that clearly sets out the data’s limitations.¹¹⁷

69. The LLG argues that definitive predictions of health risk, which it says all proponents present, including Benga in this instance, are inappropriate.¹¹⁸ In response, Benga recognizes that there are uncertainties. That is one of the reasons robust monitoring is so vital through the life of the Project to assess actual against predicted results, and that the results of a monitoring program be used to implement additional mitigation measures, where necessary, to minimize risks to human health. Nevertheless, without modelling and quantifying definitive risks to human health, the JRP would not have the information required to reach an informed decision.

2.7 Adjacent landowners and access issues

70. The Coalition reiterated in its final argument that Norman and Connie Watmough and their son, Tyler Watmough, Larry and Ed Donkersgoed, Vern Emard, and Fran Gilmar (the “Adjacent Landowners”) remain concerned that the Grassy Mountain Project will make it more difficult to access their lands. As Benga explained in its October 5, 2020 submission, Benga has allowed the Adjacent Landowners to use Benga’s privately owned Grassy Mountain Road (“GMR”) in the past to access their properties.¹¹⁹ The GMR is the most convenient access route, but there are at least two other access routes, as shown in CIAR #571 at PDF 38. The Adjacent Landowners acknowledged these other access routes at the hearing and in the Coalition’s final argument.¹²⁰ While some of the Adjacent Landowners have said that portions of those routes are “not that great”,¹²¹ that they can take longer,¹²² and that they should be upgraded to improve access, Benga is not responsible for obtaining the necessary permissions or for expending the funds required to carry out those upgrades.¹²³
71. The Coalition argues that restrictive covenants, easements, and/or a road-use agreement between one of the Adjacent Landowners and a previous landowner should force the hand of this Panel. These arguments raised by the Adjacent Landowners should have no impact on the Panel’s deliberation.
72. For one, the Coalition argues that land parcels through which the GMR runs were subject to a restrictive covenant between Devon Canada Corporation (“Devon”), Consol of Canada Inc. (“Consol”), and

¹¹⁷ CIAR #962 at paras 523-532.

¹¹⁸ CIAR #1351 at para 290.

¹¹⁹ CIAR #571 at PDF 7-9.

¹²⁰ CIAR #1339 at paras 92-99.

¹²¹ See e.g. CIAR #782 at 1240:9-24.

¹²² See e.g. CIAR #782 at 1239:22-26, 1240:1-8, 1241:1-16.

¹²³ As noted in CIAR #571 at PDF 8.

Crowsnest Pass Golf & Country Club (“Golf Club”).¹²⁴ The restrictive covenant referred to by the Coalition states that it is intended to reflect the wishes of Devon and to restrict the use and/or development of the Golf Course Lands.¹²⁵ The restrictive covenant states that the Grantor (the Golf Club), is restricted from permitting the re-zoning of the golf course lands for any use which is incompatible with the Grantee's (Devon's and Consol's) mining activities. As noted by the Coalition, the restrictive covenant also restricts the Golf Club from using all or any portion of the golf course lands for residential purposes.¹²⁶

73. The record makes clear that neither Devon, Consol, or the Golf Club are parties to this review of the Grassy Mountain Project. The restrictive covenant was created to restrict the development of the golf course lands to ensure that the use of the golf course lands did not interfere with Devon's and Consol's mining activities. To the extent that Benga now owns land previously held by Devon, Consol, or the Golf Club, Benga now seeks to develop the lands for the purpose of mining activities. The restrictive covenant has nothing to do with the Adjacent Landowners, and is completely irrelevant to the Panel's mandate. The restrictive covenant does not in any way prevent the Adjacent Landowners' lands from falling within a mine permit boundary if they are being used for residential purposes.
74. With respect to the Coalition's submissions regarding easements, there are no easements, registered or otherwise, that grant the Adjacent Landowners continued access to the GMR. With respect to the registered easements discussed in the Coalition's final argument,¹²⁷ Benga has explained that these easements do not provide a contiguous pathway to a public roadway. The Adjacent Landowners have in the past used Benga's privately owned GMR, along with access over other private and public lands to access their properties, and part of that access route has been over Section 24-8-4-W5M. These easements do not refer to the GMR, and they do not relate to the GMR. The easements do not give the Adjacent Landowners any right to continued access to the GMR.
75. The Coalition relies in its final argument on the Alberta Court of Appeal decision of *Nelson v 1153696 Alberta Ltd*¹²⁸ to argue that the Adjacent Landowners' historic use of the GMR, and its existence as a usable and navigable road, creates an easement of necessity. The Coalition asserts this easement guarantees the Adjacent Landowners' continued use of the GMR to access their lands.
76. Benga agrees with the Coalition that an easement of necessity can be implied onto a land title even though an easement is not registered on title, in a narrow set of circumstances. In *Nelson*, the Court of Appeal clarified that:

¹²⁴ CIAR #1339 at para 79.

¹²⁵ CIAR #752 at PDF 29, cl 5.

¹²⁶ CIAR #752 at PDF 30, cl 2(b); CIAR #1339 at para 79.

¹²⁷ CIAR #1339 at paras 82-86.

¹²⁸ 2011 ABCA 203 [*Nelson*].

A way of necessity can be implied where both dominant and servient tenements have been in a common ownership and one or other of the tenements is disposed of by the owner, rendering it “impossible to make any use of the dominant tenement” without the implication of an easement ...

The land granted (or retained) must be absolutely inaccessible or useless before a right of way of necessity will be implied. Mere inconvenience is not a sufficient reason for granting an easement of necessity [emphasis added]¹²⁹

77. The Court of Appeal recognized an easement of necessity in *Nelson*, where, notably, the lands in question were bounded on three sides by the North Saskatchewan River. There were no other reasonable access routes to the lands, aside from an existing road.
78. The Alberta Court of Queen’s Bench in *Germain v Brar*¹³⁰ declined to grant an easement of necessity on the basis that this type of easement does not come into being just because a subset of a parcel is inaccessible by vehicle. There, the Court quoted the following passage from an earlier decision made by the Ontario Court of Appeal:

... it is clear on the facts of this case that the plaintiff cannot claim an easement of necessity. It cannot, for example, be shown in this case that upon the grant of the servient tenement, the retained property of the grantor became “land-locked” or otherwise “inaccessible” except by means of the contended-for easement. At the most his inability to gain access to his garage resulted in an inconvenience to the grantor, albeit a serious inconvenience in this age of dependence on the automobile as a means of transportation, but this consideration does not satisfy the requirements that must be met in order to establish an easement of necessity.¹³¹

79. This is not a case where, without the GMR, the Adjacent Landowners’ lands become “absolutely inaccessible or useless”. Access is less convenient without the GMR, but other possible and reasonable routes remain available.
80. The Coalition further asserts in its final argument that one group of landowners within the Adjacent Landowners, the Donkersgoed family members, are entitled to continued use of the GMR because of a Road Use Agreement dated June 13, 2003, between Raynelle Kyle and Devon (“Devon Agreement”). The Coalition entered a copy of the Devon Agreement into the record as CIAR #772. Also contained in that record is a letter from Devon to a law office presumably acting for the Donkersgoeds, and the letter appears to give Devon’s consent for Raynelle Kyle to assign the Devon Agreement to the Donkersgoeds, subject to the following: “Devon Canada Corporation hereby consents to the assignment of the subject road use agreement provided the purchasers agree to adhere to the terms of the road use agreement and a

¹²⁹ *Nelson* at paras 40 and 43.

¹³⁰ 2010 ABQB 530 at paras 41-42 [*Germain*].

¹³¹ *Germain* at para 41, quoting *Barton v Raine* (1980), 29 OR (2d) 685, 1980 CanLII 1932 (Ont CA).

formal assignment is received by our office”.¹³² No “formal assignment” between Raynelle Kyle and the Donkersgoeds was ever entered onto the record.

81. Notably, the Devon Agreement was never assigned to Benga, and Benga is not bound by the terms of the Devon Agreement. The Donkersgoeds raised the existence of the Devon Agreement for the very first time at the hearing, despite having discussions with Benga regarding the sale of the Donkersgoeds’ lands over the last five years.¹³³ It is uncontested that none of the other Adjacent Landowners have brought forward a similar road use agreement. As noted in Benga’s final argument, the Devon Agreement is also subject to termination on 120 days’ notice.¹³⁴ Furthermore, a private agreement between Devon and a former landowner, neither of whom are parties to the review of this Project, should not impose restrictions on the Panel’s mandate.
82. The Coalition correctly points out in its final argument that s. 15 of the *Responsible Energy Development Act*¹³⁵ (“*REDA*”) instructs the Panel to consider the Project’s impacts on the interests of landowners. This does not put upon the Panel the mandate to interpret and enforce private agreements between landowners, particularly where those private agreements do not involve the project proponent and were not made with respect to the project in question.¹³⁶ The Coalition also raised the point that like the Adjacent Landowners, Benga is a private landowner whose interests the Panel must consider under *REDA*, s. 15. The Coalition provided no authority for its submission that Benga’s interests should be overridden by its position as a project proponent, and that Benga’s interests should therefore not be considered.¹³⁷

2.8 Ktunaxa Nation Council (“KNC”) and the Aboriginal Consultation Office (“ACO”)

83. The KNC raises concerns regarding the Alberta ACO process and submits that the Panel should “request the ACO to [...] provide its advice on the adequacy of consultation with the KNC, before the AER makes any decision on the Project.”¹³⁸ Benga does not agree that this is required, legally or practically, and submits that doing so would not in any way assist the JRP in carrying out its mandate.

¹³² CIAR #772 at PDF 1.

¹³³ CIAR #756 at 690-691; CIAR #762 at 266-277; CIAR #782 at 1368-1369.

¹³⁴ CIAR #962 at para 154.

¹³⁵ SA 2012, c R-17.3 [*REDA*].

¹³⁶ See CIAR #962 at paras 162-165; *Trans Mountain Detailed Route Hearing* (26 April 2018), NEB Decision MH-033-2017, online: Canada Energy Regulator <<https://apps.cer-rec.gc.ca/REGDOCS/Item/Filing/A91505>> at PDF 43; see also *Trans Mountain Detailed Route Hearing* (26 April 2018), NEB Decision MH-049-2017, MH-050-2017, MH-051-2017, MH-052-2017, MH-057-2017 and MH-058-2017, online: Canada Energy Regulator <<https://apps.cer-rec.gc.ca/REGDOCS/Item/Filing/A91504>> at PDF 12.

¹³⁷ CIAR #1339 at para 116.

¹³⁸ CIAR #1336 at para 26.

84. The Panel granted the KNC full participatory rights in the hearing and the KNC has provided the Panel, and therefore the AER, with evidence and argument regarding the Project's potential effects on KNC and KNC's proposed mitigation measures. The Panel, therefore, has before it all the information required to make its necessary findings as it pertains to the KNC. Additional information from the ACO will not assist the Panel with its deliberations since, as confirmed by the KNC, the ACO has not engaged in any consultation with the KNC.¹³⁹
85. KNC's concerns with the process followed by the ACO in this proceeding are not matters for the Panel to rectify. The Panel, in its capacity as the AER, has no jurisdiction to assess the adequacy of Crown consultation.¹⁴⁰ Consistent with this, the AER does not have a supervisory role over the consultation undertaken or not undertaken by the ACO or the Crown in Right of Alberta. Whether consultation with the KNC has been adequate will be decided upon by the Lieutenant Governor in Council if and when it issues authorizations pursuant to ss. 21 and 24 of the *Coal Conservation Act* ("CCA").¹⁴¹
86. To the extent that KNC has concerns with the processes of the ACO, these should be raised by the KNC directly with the ACO. In this regard, it should be noted that the KNC has not provided any evidence (or argument) in this proceeding indicating that it has already expressed its concerns to the ACO. Doing so, either before or after this Panel issues its report, is the appropriate first step to be pursued by the KNC.

2.9 The Project is in the public interest and is unlikely to cause significant adverse effects

87. The Panel's mandate in reviewing Benga's applications for the Grassy Mountain Project is set out in the JRP ToR.¹⁴² The Panel was formed to conduct an EA of the Project and to consider the Project applications in a manner consistent with the requirements of the *Canadian Environmental Assessment Act, 2012* ("CEAA 2012"), the *REDA*, the *Environmental Protection and Enhancement Act* ("EPEA"),¹⁴³ the *CCA*, the *Water Act*,¹⁴⁴ and the *Public Lands Act*.¹⁴⁵ Pursuant to *CEAA 2012*, the Panel is to make recommendations to the Minister of ECCC¹⁴⁶ on whether the Project is likely to cause any significant adverse environmental effects, taking into account Benga's proposed mitigations. The Panel is charged under Alberta legislation with determining whether the Project is in the public interest.

¹³⁹ CIAR #1336 at para 24.

¹⁴⁰ *REDA*, s 21.

¹⁴¹ RSA 2000, c C-17 [*CCA*].

¹⁴² Appended to the agreement ("JRP Agreement") entered into between the federal Minister of the Environment and the Alberta Energy Regulator ("AER") to allow a joint review of the Project: CIAR #80.

¹⁴³ RSA 2000, c E-12.

¹⁴⁴ RSA 2000, c W-3 [*Water Act*].

¹⁴⁵ RSA 2000, c P-40. 1 [*PLA*].

¹⁴⁶ SC 2012, c 19, s 52.

2.9.1 *The Project is unlikely to cause significant adverse effects*

88. The evidence before the Panel demonstrates that the Grassy Mountain Project is unlikely to cause significant adverse effects, taking into account Benga's proposed mitigations. Benga has proposed credible mitigations based on the best information available. Benga acknowledges that elements of uncertainty remain, but this uncertainty is to be expected in the course of responsible natural resource development aligned with adaptive management. Of course, as mentioned above, monitoring must be carried out diligently to check actual results against those modelled for any proposed project, including this one.

2.9.2 *The precautionary principle does not paralyze development*

89. Several participants' final arguments note the importance of applying the precautionary principle where uncertainties remain.¹⁴⁷ To be clear, the precautionary principle does not preclude a project from proceeding in the face of uncertainty and should not be applied to paralyze development.¹⁴⁸ In *Homalco Indian Band v British Columbia (Minister of Agriculture, Food & Fisheries)*,¹⁴⁹ the British Columbia Supreme Court stated that the precautionary principle "does not require governments to halt all activity which may pose some risk to the environment until that can be proven otherwise".¹⁵⁰ Requiring proof that an activity will pose no risk would be contrary to regulatory schemes that are expressly designed to enable responsible development to proceed.

90. Benga has made adaptive management a key feature of its response to uncertainties that are bound to remain at this stage of review for any resource development project. The Federal Court of Appeal has noted that adaptive management counters the potential paralysis induced by the precautionary principle.¹⁵¹ The Federal Court has held that adaptive management is an important tool for addressing uncertainty, and permits projects with uncertain effects to proceed:

[A]daptive management permits projects with uncertain, yet potentially adverse environmental impacts to proceed based on flexible management strategies capable of adjusting to new information regarding adverse environmental impacts where sufficient information regarding those impacts and potential mitigation measures already exists.¹⁵²

¹⁴⁷ See e.g. CIAR #1342 at paras 39 and 41, CIAR #1327 at para 20, CIAR #1351 at paras 3 and 30-36, CIAR #1346 at para 124.

¹⁴⁸ See *Canadian Parks & Wilderness Society v Canada (Minister of Canadian Heritage)*, 2003 FCA 197 at para 24 [*CPAWS v Canada*].

¹⁴⁹ 2005 BCSC 283 [*Homalco*].

¹⁵⁰ *Homalco* at para 45.

¹⁵¹ *CPAWS v Canada* at para 24.

¹⁵² *Pembina Institute for Appropriate Development v Canada (AG)*, 2008 FC 302 at para 32.

This approach allows projects to proceed in the face of uncertainty in a manner that is consistent with the precautionary principle. Otherwise, no projects would ever proceed.

91. As Benga stated in its final argument,¹⁵³ the EA process cannot eliminate uncertainty and is not intended to provide finality. The Federal Court of Appeal has stated, in regard to an assessment conducted under the *Canadian Environmental Assessment Act*, SC 1992, c 37: “By its nature the panel’s exercise is predictive and it is not surprising that the statute specifically envisages the possibility of ‘follow up’ programmes. Indeed, given the nature of the task we suspect that finality and certainty in environmental assessment can never be achieved.”¹⁵⁴
92. *CEAA 2012*’s statutory scheme – which, like its predecessor provides for follow-up programs – recognizes that not all relevant information will be available at this stage of the Project’s development. It is incorrect and misleading to suggest that Benga’s intention to continue to gather information, monitor, and apply adaptive management is contrary to the precautionary principle.

2.9.3 *The Project is in the public interest*

93. Alberta legislation requires the Panel to determine whether the Project is in the public interest. The Alberta Court of Appeal has recognized that the public interest is not a static concept, but a standard that will vary “with the circumstances and the context in which it arises”.¹⁵⁵ Determining what is in the public interest requires weighing the relevant “benefits and burdens” in each case.¹⁵⁶
94. CPAWS argues that no conditions or mitigations would suffice to find the Grassy Mountain Project is in the public interest.¹⁵⁷ However, this suggestion clearly conflicts with recent EA reports recommending approval of open-pit mines in Canada.
95. In 2019, then ECCC Minister, Catherine McKenna, issued her Decision Statement finding the Côté Gold Mine Project was not likely to cause significant adverse environmental effects under *CEAA 2012*.¹⁵⁸ The Côté Gold Mine Project includes an open-pit gold mine, on-site metal mill, and structures for diverting water. The Project is located 20 kilometers from the Gogoma community in northeastern Ontario. The

¹⁵³ CIAR #962 at paras 42-45.

¹⁵⁴ *Alberta Wilderness Assn v Express Pipelines Ltd* (1996), 137 DLR (4th) 177 (FCA) at para 13.

¹⁵⁵ *ATCO Electric Limited v Alberta (Energy and Utilities Board)*, 2004 ABCA 215 at para 134.

¹⁵⁶ *Emera Brunswick Pipeline Company Ltd.* (May 2007), NEB Decision GH-1-2006, online: Canada Energy Regulator <<https://apps.cer-rec.gc.ca/REGDOCS/Item/Filing/A15654>> at PDF 28, reproduced with approval in *Montana Alberta Tie Ltd*, 2009 ABCA 167 at para 67, leave to appeal to SCC refused, 2009 CarswellAlta 1674 (SCC).

¹⁵⁷ CIAR #1347 at 33.

¹⁵⁸ Minister of the Environment, *Decision Statement Issued under Section 54 of the Canadian Environmental Assessment Act, 2012 for the Côté Gold Mine Project* (25 February 2019), online: Canadian Environmental Assessment Agency <<https://ceaa-acee.gc.ca/050/evaluations/document/126842?culture=en-CA>>.

Canadian Environmental Assessment Agency's ("Agency")'s EA Report for the Côté Gold Mine Project identified potential adverse effects from the Project as including, among other things:

- effects on fish and fish habitat from loss and alteration of habitat, changes to water levels and flows, and potential surface water contamination;
- effects on migratory birds and species at risk due to vegetation clearing, habitat loss and fragmentation, sensory disturbances (i.e. artificial light, sound and human presence) and vehicle collisions;
- effects on the health of Aboriginal peoples due to fugitive dust and airborne contaminants;¹⁵⁹

Notwithstanding the potential effects, the Minister determined the Mine Project was not likely to cause significant adverse environmental effects, taking into account its proposed mitigations.

96. The Coalition's final argument lists decisions of the AER and its predecessors dating back to 1994 which denied applications as not being in the public interest. Unfortunately, these decisions provide no assistance to this Panel. The Coalition listed no decisions that considered mining projects, and in many of the listed decisions, the regulator denied the applications on the basis of inadequate emergency response plans for sour gas wells in proximity to intervenors' residences.¹⁶⁰ In three of the decisions the Coalition relied on, the proponent failed to adequately consider feasible, alternative locations.¹⁶¹ As the Coalition itself states, the regulator's reasons for denying the applications in the listed decisions are "varied". The one consistent theme in the denied applications is that they involved considerations entirely different from those engaged by the Grassy Mountain Project.
97. Benga has undertaken extensive studies of the Project's predicted effects, and this work will continue. Benga has designed a Project that meets the need for metallurgical coal, which is integral to global steel-making capacity, and which provides employment, taxes, and royalty revenues. The Grassy Mountain Project will contribute to the local, provincial, and national economy while meeting rigorous standards of

¹⁵⁹ Canadian Environmental Assessment Agency, *Environmental Assessment Report - Côté Gold Mine Project* (April 2016), online: Impact Assessment Agency of Canada <<https://iaac-aeic.gc.ca/050/evaluations/document/120637>> at PDF 4.

¹⁶⁰ *Bashaw Oil Corp.* (28 March 2018), AER Decision 2018 ABAER-002, online: AER <<https://static.aer.ca/prd/documents/decisions/2018/2018-ABAER-002.pdf>> ; *Polaris Resources Ltd.* (16 December 2003), EUB Decision 2003-101, online: AER <<https://static.aer.ca/prd/documents/decisions/2003/2003-101.pdf>>; *Shell Canada Ltd.* (20 March 2001), EUB Decision 2001-09, online: AER <<https://static.aer.ca/prd/documents/decisions/2001/2001-09.pdf>>; *Stampede Oils Inc.* (19 December 1999), EUB Decision 99-30, online: AER <<https://static.aer.ca/prd/documents/decisions/1999/d99-30.pdf>>.

¹⁶¹ *Intrepid Energy Corporation* (30 October 2007), EUB Decision 2007-080, online: AER <<https://static.aer.ca/prd/documents/decisions/2007/2007-080.pdf>>; *Omers Energy Inc.* (14 October 2008), ERCB Decision 2008-092, online: AER <<https://static.aer.ca/prd/documents/decisions/2008/2008-092.pdf>>; *Trilogy Blue Mountain Ltd.* (15 December 2009), ERCB Decision 2009-072, online: AER <<https://static.aer.ca/prd/documents/decisions/2009/2009-072.pdf>>.

environmental responsibility. The evidence before the Panel demonstrates this Project is in the public interest.

3.0 CONCLUSION

98. In conclusion, Benga reiterates that there is no credible evidence that this Project will have significant adverse environmental effects. The potential impacts of this Project can and will be addressed by a responsible and committed corporation through the mitigations and initiatives that are already in place or to which Benga has committed.
99. Benga has demonstrated that there is need for this Project, in terms of the jobs, taxes, and royalties it will bring to local residents and their communities, to Alberta, and to Canada.
100. It is also important to restate that Benga has engaged extensively on the Project with potentially affected Indigenous communities. Benga has worked in collaboration with Indigenous communities to develop its work plans and mitigations, and has undertaken engagement activities including the sharing of Project information, facilitating discussions around site specific information, site tours, field work, Traditional Ecological Knowledge studies, Traditional Use studies, workshops, and open houses. Benga's extensive consultation and engagement efforts are well-evidenced by the provision of letters of non-objection or support from all Treaty 7 Nations and the Métis Nation of Alberta, Region 3.¹⁶²
101. We ask that the Panel approve this Project as the AER, and we ask that as the *CEAA 2012* Joint Review Panel, you recommend that this Project is not likely to cause any significant adverse environmental effects that cannot be mitigated.

All of which is respectfully submitted on January 15, 2021, in Calgary, Alberta.

Original signed by

<Original signed by>

Martin Ignasiak

Osler, Hoskin & Harcourt LLP

Counsel for Benga Mining Limited

¹⁶² CIAR 962 at paras 229-233. These letters of non-objection or support are on the Agency's registry as records CIAR #200, #207, #263, #299, #324, and #358.