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May 1, 2020

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The Honourable Jonathan Wilkinson MP
Minister of Environment and Climate Change
200 Sacré-Coeur Boulevard
Gatineau QC K1A 0H3

Impact Assessment Agency of Canada
22nd Floor, Place Bell
160 Elgin Street
Ottawa ON K1A 0H3

Dear Minister Wilkinson,

Re: Request for Designation of the Vista Thermal Coal Mine Expansion Phase under s. 19(a) of the Schedule to the *Physical Activities Regulations* and s. 9(1) of the *Impact Assessment Act*

1. INTRODUCTION

I write to you on behalf of Keepers of the Water, Keepers of the Athabasca and the West Athabasca Bioregional Society regarding the Coalspur Mines Ltd. ("Coalspur") Vista Thermal Coal Mine (the "Vista Coal Mine"). Shortly after your December 20, 2019 decision to not designate the Phase II expansion of the Vista Coal Mine for an impact assessment (in response to my clients' May 17, 2019 s. 9(1) designation request), the project proponent filed an additional provincial regulatory application proposing new underground mining operations.

Based on the information contained in this additional application, as well as Coalspur's previously identified expansion plans outlined in my clients' May 17, 2019 s. 9(1) request, Coalspur's expansion plans for the Vista Coal Mine now include the Phase II Open Pit mine, highwall mining operations in and around the Phase II Open Pit and a test underground mine adjacent to Phase I of the Project (together, the "Expansion Phase").

Given the new information regarding the scope of the Expansion Phase provided by the underground mining proposal and the fact that your previous determination was therefore unable

to consider the totality of the planned expansion, my clients submit this request for designation of the Expansion Phase under the *Impact Assessment Act*, SC 2019, c 28, s 1 ("*IAA*"). Specifically, my clients submit that the Expansion Phase must be designated pursuant to s. 19(a) of the Schedule to the *Physical Activities Regulations*, SOR/2019-285 (the "*Regulations*"), and in the alternative, that it warrants designation under s. 9(1) of the *IAA*.

The grounds for this request are that:

1. The Expansion Phase is an expansion of an existing coal mine that would increase the size of the area of mining operations by more than 50%, exceeding the threshold for prescribed projects under the *Regulations*; and
2. The size and potential adverse impacts of the Expansion Phase warrant designating this project under s. 9(1) of the *IAA*.

The *IAA* and *Regulations* do not specify the decision-making authority responsible for determining whether a project meets the threshold set out in the project list, and so my clients ask that in the event that you decide you are unable to make the determination that the Expansion Phase is a prescribed project under the *Regulations*, the Impact Assessment Agency of Canada (the "Agency"), to whom this letter is also directed, should make this determination for the reasons set out in Section 4(b) of this letter.

2. BACKGROUND

a. Phase I

Phase I of the Vista Coal Mine is an open pit thermal coal mine 3.5 km east of Hinton, Alberta. In 2012, the Canadian Environmental Assessment Agency ("CEA Agency") determined that a federal environmental assessment was not required for Phase I under the *Canadian Environmental Assessment Act*, SC 1992, c 37 ("*CEAA*"). At the time, Phase I was proposed to have an annual production capacity of around 5.0 MT.

Phase I of the Vista Coal Mine became operational in or around the spring of 2019.

b. Expansion Phase

Over the last two years, Coalspur has sought various provincial regulatory approvals to expand the Vista Coal Mine. While some of these components of the Expansion Phase were previously considered by the Impact Assessment Agency of Canada (the "Agency") and yourself (hereafter, the "Minister") in response to my clients' previous designation request, the full scope of the Expansion Phase has not been considered. It is worth noting that Coalspur has also long indicated plans for further expansions to the Expansion Phase as proposed, and additional expansions either on or close to the current Vista site.[1]

[1] Coalspur's plans for further expansions to the Expansion Phase are most recently expressed in its application to the AER to develop an underground mine: "Coalspur controls several coal leases in the area and wishes to understand the potential to recover reserves which cannot be economically surface mined … The underground mine will test various operational and safety methods as well as which equipment is most suitable to operate in the expected conditions. The results of these tests will allow appropriate decisions to be made for any future underground mine development in Coalspur's surrounding coal leases." Coalspur, "Vista Test Underground Mine: Joint Application for Amendments to Approvals under the Environmental Protection and Enhancement Act, Water Act, Public Lands Act,

i. Phase II Open Pit

As set out in greater detail in my clients' original designation request dated May 17, 2019, and in subsequent submissions made on September 10, 2019, Coalspur is intending to construct and operate a Phase II Open Pit which would almost double the production capacity of Phase I operations.

The details of this first proposed component of the Expansion Phase have been previously communicated to the Agency by both Coalspur and my clients. The Agency is also aware of the modifications made to the Phase II Open Pit to reduce its size as communicated by Coalspur to the Agency on August 9, 2019after my clients notified the Agency that the Phase II Open Pit expansion alone may have been sufficient to trigger an impact assessment.

As originally outlined by Coalspur to the CEA Agency, the Expansion Phase was set to only include the additional Phase II Open Pit operations, directly westward of the existing Phase I pits.

In December 2019, the Agency issued a recommendation to the Minister on my clients' original designation request in its "Analysis Report: Whether to Designate the Coalspur Mine Ltd. Vista Coal Mine Phase II Project in Alberta" (the "Analysis Report").

The Analysis Report addressed whether the Phase II Open Pit proposal would constitute a 50% expansion in the area of mining operations. The Agency compared the Phase I operations to the then described area of the Expansion Phase and determined that the Phase II Open Pit as proposed would "result in an increase in the area of mining operations between 42.7 to 49.4 percent, depending on how future anticipated changes to the Phase I footprint are considered in calculations."[2]

Later correspondence with the Agency revealed that it had not calculated a fixed amount for the area of mining operations for either Phase I or Phase II. Accordingly, the range of potential increases arising from Phase II (42.7 to 49.4%) was dependant on two factors: the potential footprint of Phase I after anticipated changes were made (ranging from 1319.6 ha to 1381.5 ha), and the potential footprint for Phase II (ranging from 590.3 ha to 652.2 ha).[3]

In making its recommendation against the need for an impact assessment, the Agency relied upon, among other things, its finding that the proposed Phase II Open Pit was an increase in the area of mining operations of less than 50%.

On December 20, 2019, based on the Agency's findings in the Analysis Report, the Minister decided that Phase II did not warrant designation for an impact assessment pursuant to s. 9(1) of the *IAA*.

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and Coal Conservation Act" (February 5, 2020), online: https://dds.aer.ca/iar_query/ApplicationAttachments.aspx?AppNumber=1927365 [VTUM Application] at 5. The proponent's intentions to build additional expansions relying on infrastructure from the current Vista site are described in a 2012 annual report: Coalspur, "2012 Annual Report", online: https://www.sedar.com/GetFile.do?lang=EN&docClass=2&issuerNo=00030615&issuerType=03&projectNo=01974618&docId=3212889.

[2] Impact Assessment Agency of Canada, "Analysis Report: Whether to Designate the Coalspur Mine Ltd. Vista Coal Mine Phase II Project in Alberta" (December 2019), online: https://iaac-aeic.gc.ca/050/documents/p80341/133221E.pdf [Analysis Report] at 6.

[3] "Email from CEAA (Shelly Boss) to Fraser Thomson" (30 March 2020), attached as Appendix A.

The following table sets out the figures relied on by the Agency in the Analysis Report in calculating whether the Phase II Open Pit component alone triggered the prescribed threshold amount, as well as a calculation of the remaining additional area of mining operations that would be allowable before the expansion would have been a 50% increase and the project would be a prescribed project under the *Regulations*:

TABLE ONE: REMAINING ALLOWABLE EXPANSION BEYOND PROPOSED PHASE II OPEN PIT FOOTPRINT

	Lower Threshold (42.7%)	*Upper Threshold (49.4%)*
Phase I Footprint	1381.5	1319.6
Phase II Footprint	590.3	652.2
% Increase in Mining Operations	42.7	49.4
Max Allowable Expansion Remaining (ha)	100.45	7.6

Table One indicates that, depending on the Phase I and Phase II footprints adopted, the Phase II expansion was between 7.6 ha and 100.45 ha below the prescribed threshold amount in the *Regulations*.

ii. Phase II Highwall Mining

Coalspur's intentions to conduct highwall mining were stated in documents provided to the CEA Agency regarding Phase II operations. As described by Coalspur to the CEA Agency in 2018:

> Highwall mining is a method used to recover additional coal reserves once the economical surface mining ratio has been reached. The practice involves advancing a continuous miner along with a series of conveying cars into the exposed coal seam in the final highwall, in a series of long narrow parallel holes. During this process all persons operating the machine and loading the coal remain on the surface while the machine remotely follows the coal seam underground.[4]

Highwall mining for Phase II is set to comprise multiple "panels" made up of a series of twenty holes separated by pillars, with larger pillars between each panel. The maximum length for each highwall miner hole is 488m. Highwall mining for Phase II is planned for each seam of the open pit mine: the Val d'Or, McLeod and McPherson seams.

However, despite the significance of this portion of the Expansion Phase, Coalspur did not provide an accounting of the area of operations for highwall mining in their application for Phase II. Coalspur instead stated their belief that the area of mine does not include subsurface operations such as highwall mining:

> The area of mine considered when assessing Phase II include: the physical area needed for the mine pit, drainage conveyances and a topsoil stockpile area … Subsurface areas where

[4] Coalspur, "Vista Coal Project – Phase II Summary; prepared by Coalspur to CEAA" (1 August 2018) [Phase II Summary] at 3, attached as Appendix B.

> the highwall miner panels are proposed were not considered when calculating the area of mine for either Phase I or Phase II. This is because the highwall mining development is designed and developed to have no subsidence or surface disturbance.[5]

iii. Proposed Underground Coal Mine Operations

Following the Agency's determination on the Phase II component of the Expansion Phase, Coalspur submitted additional details regarding the Expansion Phase to provincial regulators. On February 5, 2020, Coalspur applied to the Alberta Energy Regulator ("AER") for amendments to several of their existing permits under the *Environmental Protection and Enhancement Act*, *Water Act*, *Public Lands Act*, and *Coal Conservation Act*.[6] This application was made public through a Public Notice of Application on February 21, 2020 (the "Notice of Application").

The Notice of Application filed with the AER detailed that Coalspur intends to include underground mining as a new component of its Expansion Phase. A technical report produced for Coalspur as early as 2012 noted extensive potential for underground operations north of Phase I and Phase II.[7] The Notice of Application itself seeks the approval of a 1.7 MT, 121.8 ha underground thermal coal mine that would operate at an annual capacity of 635,000 tonnes/year. The underground mine, referred to by Coalspur as the "Vista Test Underground Mine" ("VTUM"), would not only immediately expand the Vista Coal Mine's production capacity, but it would "test various safety and production methods to determine the feasibility of developing additional underground coal mines within the areas Coalspur has leased."[8]

In contrast to highwall mining, which is done mechanically through accessing underground seams through the walls of open pit operations, the VTUM would be an entirely underground operation. In the Notice of Application, Coalspur made it clear that the VTUM is an expansion of the existing mine, in order to rely on amendments to existing permits: "Coalspur is proposing to add the VTUM as an expansion to the Vista Coal Project."[9]

The VTUM is designed to expand the underground operations to tap into the same seams as highwall mining, to access reserves inaccessible through highwall operations. In mapping information provided by Coalspur in their Notice of Application, the VTUM is situated directly north of existing planned highwall mining operations, in order to access the same seam from a different location:

> The VTUM will access reserves which are not economically feasible from Coalspur's surface mining operations and will provide insight to the recoverable tons of the larger V5 reserve to the north and east … Due to technical limitations, the highwall mining operation has a maximum penetration of 500 m past the final highwall limit. The proposed

[5] Phase II Summary, *supra* note 4 at 3.
[6] VTUM Application, *supra* note 1.
[7] Golder Associated Ltd., "Coalspur Mines Limited: Updated Resource Estimate for the Vista Coal Project – Hinton, Alberta, Canada: Technical Report NI 43-101" (12 September 2012) [Golder Report] at 86-87, accessible at: https://www.sedar.com/GetFile.do?lang=EN&docClass=24&issuerNo=00030615&issuerType=03&projectNo=01960227&docId=3191132.
[8] VTUM Application, *supra* note 1 at 5.
[9] VTUM Application, *supra* note 1 at 13.

underground mining operation would enable Coalspur to recover V5 reserves beyond the limitations of the current highwall operation.[10]

The purpose of the VTUM is to expand underground capabilities as part of the Expansion Phase. The 121.8 ha area of the VTUM appears to partially overlap with surface features of the existing Phase I.[11]

iv. New Coalspur application to AER

Shortly before submitting this designation request, my clients became aware of an application submitted by Coalspur to the AER in early April of this year for "the approval of an accelerated progression of the center dump overburden disposal area, and the relocation of the explosive magazine, the ammonium nitrate prill and emulsion bin storage area".[12] The center dump proposal is not expected to affect areas of disturbance, while the relocation of explosive storage facilities is expected to create an area of new disturbance outside of the approved disturbance footprint of 4.17 ha.[13]

Although this new area of disturbance is not included in calculations of the area of the Expansion Phase provided below, my clients submit that any applications by Coalspur to add areas of disturbance to the existing Vista Coal Mine should be considered as part of the area of the Expansion Phase. As expressed in previous correspondence with the Agency, my clients are concerned that the Vista Coal Mine will expand by means of incremental applications that are each inadequate to account for the full effects of the mining expansion, unless they are considered together.[14] Coalspur's track record – this is now the second new disturbance in just over four months since the Minister's decision – indicate that these as well founded concerns grounded in reality.

3. REGULATORY FRAMEWORK

Designated projects under the *IAA* are prescribed by the *Regulations*. If a proposed project meets or exceeds the threshold within the *Regulations*, the project is a prescribed project and presumptively requires an impact assessment.

Given that the Expansion Phase is the expansion of an existing coal mine, the relevant provision is s. 19(a) of the Schedule to the *Regulations*. That section prescribes the following types of projects for impact assessments:

[10] VTUM Application, *supra* note 1 at 35.
[11] VTUM Application, *supra* note 1 at 7.
[12] Alberta Energy Regulator, "Notice of Application: CCA Applications 1928090 and 1928091, EPEA Application 009-00301345, WA Application 006-00311969" (8 April 2020), online: https://www.aer.ca/regulating-development/project-application/notices/application-1928090.html.
[13] Coalspur, "Application to AER for Mine Permit C 2011-5E, Dump Licence C 2018-9, EPEA Approval 00301345-00-06 and Water Act Approval 0031169-00-03" (1 April 2020), available online: https://dds.aer.ca/iar_query/ApplicationAttachments.aspx?AppNumber=1928090 at 5.
[14] "Letter from A McIntosh to A Kessler regarding Application by Coalspur Mines Ltd. to the Alberta Energy Regulator for amendments to licenses granted to the Vista Coal Mine" (19 December 2019), appendices omitted, attached as Appendix C.

> The expansion of an existing [coal mine] … if the expansion would result in an increase in the area of mining operations of 50% or more and the total coal production capacity would be 5 000 t/day or more after the expansion.

My clients submit that for the purpose of determining whether this threshold is met, the Minister and/or the Agency: a) are obligated by the *IAA* to consider the entire area of the Expansion Phase cumulatively and not as artificially segregated by the proponent; and b) must interpret "area of mining operations" to include the area occupied by underground workings as this is the only interpretation that is consistent with the wording of s. 19(a) of the Schedule to the *Regulations*, the intent of Parliament in moving to a project list or thresholds-based approach to environmental assessment and clarification provided by Regulatory Impact Analysis Statements.

a. The Entire Area of Expansion must be Considered

Section 19(a) is focused on the aggregate impact of an expansion and cannot justify project splitting. The provision is focused on an expansion to a coal mine, and in particular the *result* of that expansion on the mine's capacity and size. There is nothing in the provision that could justify only looking at each individual element of a proposed expansion as parsed apart or submitted separately by the proponent. It is focused on the result: the increase in the area of mining operations and production capacity of an expansion. Provided a proposed expansion is to an existing coal mine, this provision requires considering the effect of that expansion on the overall project relative to the threshold amounts. Under the *IAA*, the entire Expansion Phase must therefore be considered together.

b. Area of Mining Operations

Section 19(a) must be interpreted in light of the fact that "area of mining operations" serves as a gauge as to whether the proposed expansion is a major project. Along with a threshold total coal production capacity, the main focus of the provision is on a 50% increase to the area of mining operations. "Area of mining operations" is defined in the *Regulations* as the "area at ground level occupied by any open pit or underground workings, mill complex or storage area for overburden, waste rock, tailings or ore."[15]

The legislative history of this term and its components demonstrates that "area of mining operations" is intended to include the area occupied by underground workings.

i. Purpose of the definition

"Area of mining operations" was first added to the predecessor to the present *Regulations*, the *Regulations Designating Physical Activities*, SOR/2012-147, on October 24, 2013.[16] By switching from a triggers-based approach under the former *CEAA* to the projects list approach under the *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52 ("*CEAA, 2012*"),

[15] *Physical Activities Regulations*, SOR/2019-285 [*Regulations*] at s 1(1).
[16] The definition was previously "area of mine operations", rather than "area of mining operations." However, the content of the definition and designation threshold were the same.

Parliament intended for *CEAA, 2012* (and subsequently the *IAA*) to focus on "major projects" with the greatest potential to cause significant adverse environmental effects.[17]

In order to do so, the *Regulations* (and their predecessor, the *Regulations Designating Physical Activities*) delineated which projects were considered major projects by using threshold amounts that related to the size of a facility, such as production capacity. The use of these threshold amounts was because thresholds serve as indicators of the scale of a project. They are a method of identifying major projects with the greatest potential to cause significant adverse environmental effects.[18] Any interpretation of the definition of the area of mining operations must be consistent with this purpose – the threshold amounts set out in the *Regulations* exist to delineate major projects from non-major projects through the use of indicia such as the size of the facility and its production capacity.

The Regulatory Impact Assessment Statement that accompanied this definition in the *Regulations* explained the use of area-based thresholds. It stated that "entries for all expansions would be adjusted to use a consistent approach that specifies an increase of 50% or more in the size of the *facility* and that the resulting facility must meet or exceed the threshold size for a new facility of that type."[19] (*emphasis added*).

The use of the word "facility" in this explanation in the Regulatory Impact Assessment Statement demonstrates that threshold amounts were to captures the entire mine, whether underground or open pit. The intent of the federal government is clear that any proposed area of mining operations, be they underground or at ground level, is to be calculated at the area they would occupy at ground level.

Accordingly, the definition of area of mining operations must be interpreted as a definition that delineates between major projects and non-listed projects. Each aspect of this definition must be interpreted in accordance with this parliamentary intention.

ii. Underground workings

"Underground workings", a term within the definition of "area of mining operations", constitutes the entire working area of the mine, including all tunnels and excavations. While a "working" is not defined in the *Regulations*, under previous Alberta statutes and regulations, the definition of "mine" was "any working, other than a drill hole made while exploring for coal, from which coal is or could be extracted, whether commercially or otherwise."[20] Apart from exploratory work, all underground workings used for extraction were considered to be mines.

Under more recent legislation in Alberta, there is an updated definition for mines that no longer defines mines solely as "workings", but nonetheless relies on the same principle: "any opening or excavation in, or working of, the surface or subsurface for the purpose of working, recovering, opening up or proving any mineral or mineral-bearing substance, and includes works and

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[17] Canadian Environmental Assessment Agency, "Regulations Designating Physical Activities: Regulatory Impact Analysis Statement" (6 July 2012), online: http://gazette.gc.ca/rp-pr/p2/2012/2012-07-18/html/sor-dors147-eng.html, at Parts 2 and 10.

[18] Canadian Environmental Assessment Agency, "Regulations Amending the Regulations Designating Physical Activities: Regulatory Impact Analysis Statement" (20 April 2013), online: http://www.gazette.gc.ca/rp-pr/p1/2013/2013-04-20/html/reg1-eng.html.

[19] *Ibid.*

[20] See *The Coal Mines Safety Act*, SA 1974, c 18; *Mines Safety Regulation*, Alta Reg 292/1995;

machinery at or below the surface belonging to or used in connection with the mine."[21] While "any working" is no longer used as the predominant term to define a mine, the definition continues to include all subsurface works and machinery used for recovering minerals.

The use of the term underground workings within the definition of area of mining operations reflects this statutory history – that the workings of a mine constitute the entire system of excavations, tunnels, and subsurface operations. However, unlike the broader term "workings", which can include workings at ground level, the *Physical Activities Regulations* refers only to "underground workings" targeting those components of the mine that are underground and the area of those underground workings.

iii. Area at ground level occupied by

Area of mining operations is calculated as the "area at ground level occupied by any open pit or underground workings, mill complex or storage area for overburden, waste rock, tailings or ore" (*emphasis added*).

There is ambiguity in this provision given that it refers to the "area at ground level" but then specifically requires consideration of the area of underground workings. Underground workings are by their definition not at ground level but are underground. There are therefore two possible interpretations of this part of the definition:

(1) The area of mining operations for underground workings should consider the entire area occupied by the working underground. The purpose of the "area at ground level" wording is to address the difficulties associated with calculating the "area" of underground workings arising from the fact that such workings occupy multiple levels in three dimensional space, and simplifies the calculation of the area of mining operations by limiting the "area" to the space at ground level under which underground operations are to occur (such as the 121.8 ha calculation provided by Coalspur in its VTUM Notice of Application to the AER);[22] or

(2) The only underground operations that should be considered are workings that are in fact not "underground workings" themselves but are complimentary components of "underground workings" associated with those underground workings and which occupy an area at ground level – for example, entrances to underground workings.

As discussed above, the purpose of facility size and production capacity threshold levels in the *Regulations* is to set out the indicia of a major project. Any ambiguity in the interpretation of the "area of mining operations" must be interpreted in a manner that is consistent with this purpose. An interpretation of "area of mining operations" that failed to consider the entire area of underground workings would be inconsistent with this purpose. It would lead to an interpretation incapable of discerning whether a project is major or not – the very purpose of the *Regulations*. The only interpretation consistent with the overall statutory purpose is the first interpretation, which captures underground mining projects in their entirety.

Utilizing the latter interpretation would not only be inconsistent with the over statutory purpose but would lead to absurd results. For example, an underground mine with a massive production

[21] See *Mines and Minerals Act*, RSA 2000, c M-17; *Environmental Protection and Enhancement Act*, RSA 2000, c E-12.

[22] VTUM Application, *supra* note 1 at 5.

capacity and large area of underground workings that would clearly be a major project would be evaluated solely on the area occupied at surface level – an indicia that would not at all correlate to the size of its underground workings nor its potential to cause adverse impacts.

Additionally, an expansion to an underground mine with a small surface footprint would absurdly be caught by the *Regulations*. Assuming the mine meets the production threshold within the *Regulations* of 5 000 tonnes/day, and the footprint solely constituted a few facilities on ground level, a small surface expansion such as the construction of ancillary facilities to the mine would trigger the need for an impact assessment assuming the surface facilities constitute a 50% increase. As with a large mine that expands purely underground, surface footprint would be a poor indicator of the facility's expansion and lead to absurd consequences.

Accordingly, my clients submit that any underground workings related to the Vista Coal Mine must be included within the area of mining operations for the project, and considered by the Agency when determining whether an impact assessment is required for the Expansion Phase under the *Regulations.*

4. ANALYSIS

My clients request that the Minister or the Agency designate the Expansion Phase for an impact assessment. Through its Expansion Phase, Coalspur is intending to significantly expand its existing operations at the Vista Coal Mine. The Expansion Phase constitute an expansion in the area of mining operations over the threshold amount described in s. 19(1) of the Schedule to the *Regulations* and therefore necessitates a designation. Furthermore, the Expansion Phase of the Vista Coal Mine warrants designation under s. 9(1) of the *IAA* given its size and the numerous potential adverse effects within federal jurisdiction that it gives rise to.

a. All Elements of the Expansion Phase Must Be Considered Together

Currently Coalspur has a 2014 provincial regulatory authorization for one component of its Vista Coal Mine (the Phase I operations) and is in the process of seeking approval for the various components of the Expansion Phase – namely the Phase II Open Pit, Phase II Highwall Mining, and the VTUM. The components of the Expansion Phase are clearly temporally and geographically linked expansions of the same existing operation, and must therefore be considered together.

These expansions are clearly linked in time. In Coalspur's original proposal for its Phase II Open Pit and highwall mining operations, it anticipated that operations would begin by July 2021.[23] In its application to the AER for the VTUM, it anticipated that the underground mine would be operational by the end of 2020.[24]

All elements of the Expansion Phase are within close geographic range of the existing Vista Coal Mine operation. The Phase II Open Pit will be located on adjacent land to the west of the existing Phase I operations. The VTUM will be located on the same lease as Phase I operations. All elements of the Expansion Phase will rely on the same infrastructure as Phase I operations such as coal refuse facilities, processing plant, conveyor belts, equipment parking, maintenance areas

[23] Coalspur, "Project Summary Table and Location" (5 May 2019), attached as Appendix D.
[24] VTUM Application, *supra* note 1 at 15.

and other service facilities.[25] The approximately 6.6 MT of coal that will be produced from the Expansion Phase will be shipped out of the facility through the same means as existing shipments.

When the Minister and the Agency made their respective determinations on my clients' original request to designate the Phase II expansion in December 2019, there was no information before them regarding the VTUM. On February 5, 2020, barely a month after the Minister's decision, Coalspur submitted its three volume 1,127 page application to the AER seeking approval of the VTUM.

As the Agency is aware, when it exempted the original Phase I component of the Vista Coal Mine in 2012, it required Coalspur to advise it of any planned expansions:

> [T]he Agency has concluded that a federal environmental assessment under the Act is not required for this Project. The Agency should be notified of any Project changes to confirm that this conclusion still applies to the Project. [26]

Coalspur had an ongoing obligation to inform the Agency of any proposed changes to its Vista Coal Mine during the 90-day period in which the Minister was considering my clients' previous designation request. Yet, based on the correspondence between Coalspur and the Agency from this time period that the Agency provided to my clients, it appears that Coalspur never mentioned its pending VTUM application to the Agency.

As set out above, s. 19(a) of the Schedule to the *Regulations* requires a consideration of the entirety of an expansion to an existing facility. It cannot be interpreted in a manner that allows a project proponent to split off components on a piecemeal basis and submit those expansions when they are clearly linked temporally and geographically to each other and to the existing facility. While it was commenting on a different provision of environmental impact legislation, my clients submit that this type of interpretation is exactly the type of project splitting that the Supreme Court of Canada suggested was impermissible under the Act in *MiningWatch Canada v Canada (Fisheries and Oceans)*.[27] The Agency cannot condone a course of conduct by the proponent that will allow separate elements of the proposed Expansion Phase to proceed simultaneous through regulatory approval without a consideration of the totality of the expansion's size and impacts.

b. The Expansion Phase Exceeds the Threshold Prescribed at s. 19(a) of the Schedule to the *Regulations*

An impact assessment is required under the *IAA* and the *Regulations* if an expansion of an existing coal mine results in a 50% increase in the area of mining operations and a total coal production of 5 000 t/day or more. The production capacity threshold is satisfied by the expansion as the anticipated amount of the Expansion Phase alone is 18,689 t/day.[28] My clients

[25] See VTUM Application, *supra* note 1 at 5; Phase II Summary, *supra* note 4 at 2.
[26] "Letter from CEAA to Coalspur Mines (Brinker) - Assessment not Required" (4 May 2012), attached as Appendix E.
[27] *MiningWatch Canada v Canada (Fisheries and Oceans)*, 2010 SCC 2 at para 40.
[28] The daily production capacity of Phase II is 16,949 t/day as stated in Coalspur, "Coalspur Information Package to CEAA" (9 August 2019), attached as Appendix F at 5. The annual production capacity of VTUM is 635,000 as stated at VTUM Application, *supra* note 1. Assuming a low estimate of 635,500/365 days, the lowest average daily production capacity for the VTUM is 1,740 t/day. The total Expansion Phase daily production capacity is therefore 16,949 + 1,740 = 18,689 t/day.

submit, based on the calculations described below, that the Expansion Phase also exceeds the 50% threshold.

As noted above, when accounting for the area of mining operations occupied by the Phase II Open Pit, the remaining components of the Expansion Phase cannot exceed 7.6 to 100.45 ha without requiring an impact assessment. When accounting for the area of mining operations of the VTUM alone, it is possible that this remaining allowable expansion will be exceeded. When the area of mining operations of both the VTUM and Phase II Highwall Mining are considered, the Expansion Phase exceeds the threshold and requires an impact assessment.

As explained in Section 3 of this letter, both the VTUM and Phase II Highwall Mining must be considered underground workings under the definition of "area of mining operations". The area occupied by both underground workings must be included in the total "area of mining operations" of the Expansion Phase. When the areas of both of these operations are taken into account, it is clear that designation of the Expansion Phase for an impact assessment is necessary.

i. Area of Mining Operations of the VTUM

Coalspur has stated that the area occupied by the VTUM is 121.83 ha.[29] However, it also notes that the VTUM overlaps with surface facilities already defined as part of the area of mining operations. It has not provided a summary of how much area will be occupied by the VTUM and its underground workings that is not already occupied at the surface. While my clients are not in possession of the requisite information to make a conclusive calculation of the total area of new disturbance, it can be estimated from mapping information provided in the Notice of Application for the VTUM that there is approximately 58 ha of the VTUM should be considered as additional area, as this area does not overlap with the area of features already defined as part of the area of mining operations.[30]

The following table considers the impact of the additional 58 ha of mining operations of the VTUM on the remaining allowable expansion, and whether the VTUM would result in the Expansion Phase exceeding the 50% allowable expansion before an impact assessment is required:

TABLE TWO: IMPACT OF VTUM ON AREA OF EXPANSION PHASE

	Lower Threshold (42.7%)	*Upper Threshold (49.4%)*
Phase I Footprint	1381.5	1319.6
Phase II Open Pit Footprint	590.3	652.2
Estimated VTUM Expansion	58	58
% Increase in Area of Mining Operations	46.93	53.82
Max Allowable Expansion Remaining (ha)	42.45	-50.4

[29] VTUM Application, *supra* note 1 at 7.
[30] VTUM Application, *supra* note 1 at 22.

While Table Two relies on an estimate for the size of the VTUM expansion, it suggests that the VTUM would make the Expansion Phase approximately 3.82% or 50 ha larger than the allowable limit, triggering the need for an impact assessment under the *Regulations*.

If Phase II Open Pit footprint only constitutes a 42.7% increase of Phase I, the Expansion Phase, including the VTUM expansion may remain within the allowable limit. However, at the upper threshold of 49.4%, the Expansion Phase will almost certainly push this expanded area over the 50% limit.

While there are grounds to designate the Expansion Phase for an impact assessment on this basis alone, if the Minister or Agency requires more specific accounting of the VTUM expansion, my clients request that the Agency undertake an analysis of the information submitted by Coalspur to the AER and/or seek additional information from Coalspur to inform its recommendation to the Minister on the designation request.

ii. Area of Mining Operations of Phase II Highwall Mining

While the Agency did have limited information regarding Coalspur's highwall mining plans available when it considered my clients' previous designation request, the Agency was not provided with any specific accounting of the area of mining operations of Coalspur's intended highwall mining in the Phase II pit, a key component of the Expansion Phase.

In the project summary for Phase II, the length of each penetration is described: "the maximum mineable length for each highwall miner hole is 488 m."[31] In its VTUM Notice of Application, Coalspur states that its highwall mining operation has "a maximum penetration of 500 m past the final highwall limit."[32]

While Coalspur has not provided any information on the area of highwall mining, a map was provided by Coalspur to the Agency on September 10, 2019, in response to a larger request for information by the Agency. This map illustrates the area occupied by highwall mining operations relative to Phase II. Relying on this map, an estimate as to the area occupied by Coalspur's intended highwall mining in Phase II can be calculated at roughly 157 ha.[33]

As demonstrated in Table Three, when Phase II Highwall Mining is considered together with the Phase II Open Pit and the VTUM, the result would clearly be an increase area of mining operations beyond the 50% allowable limit.

TABLE THREE: IMPACT OF HIGHWALL MINING AND VTUM ON EXPANSION

	Lower Threshold (42.7%)	*Upper Threshold (49.4%)*
Phase I Footprint	1381.5	1319.6
Phase II Footprint	590.3	652.2
Estimated VTUM Expansion	58	58
Estimated Phase II Highwall Mining (ha)	157	157
% Increase in Mining Operations	58.29	65.72
Max Allowable Expansion Remaining (ha)	-114.55	-207.4

[31] Phase II Summary, *supra* note 4 at 3.
[32] VTUM Application, *supra* note 1 at 35.
[33] "Letter from Coalspur to IAA" (10 September 2019), attached as Appendix G.

Table Three demonstrates that, taking into account the Agency's range of estimates for the footprints of Phase I and Phase II, the Expansion Phase will be approximately 114.55 ha to 207.4 ha larger than the allowable limit under the *Regulations* – a 58.29% to 65.72% increase over the original project size.

To summarize, my clients submit that the Expansion Phase must be designated for an impact assessment because it constitutes more than a 50% increase in the area of mining operations. Even at the lower end of the Agency's estimates of the potential footprint of Phase I and the Phase II Open Pit, the 50% threshold is met when the full scope of the expansion is considered. My clients ask that the Minister or the Agency determine that the Expansion Phase is a designated project pursuant to s. 19(a) of the Schedule to the *Regulations*. Should the Minister or Agency require more specific accounting of the size of the VTUM or Phase II Highwall Mining, my clients request that the Agency undertake its own accounting of the information provided by Coalspur and/or seek additional information from Coalspur.

In the event that the Agency or Minister determine that the increase in mining operations does not rise above the prescribed threshold, my clients submit in the alternative that the Expansion Phase must be designated for an impact assessment under s. 9(1), given that the project's size plainly demonstrates that it is a major project of the type targeted by the *Regulations*. As summarized above, Parliament chose prescribed threshold amounts because the size of a project, both in terms of facility size and production capacity, is an indicator of whether a project is a major project. In the event that there is a loophole in the definition of area of mining operations that allows for exclusion of underground mining, it is only consistent with the purpose of the *IAA* to ensure that such operations are captured by other means – namely, a s. 9(1) designation by the Minister.

c. The Expansion Phase Gives Rise to Potential Adverse Impacts

If the Agency or the Minister determine that the Expansion Phase does not exceed the threshold amounts, the fact remains that the Vista Coal Mine, with the Expansion Phase, would be the largest thermal coal mine in Canada. Given the serious potential adverse effects associated with thermal coal mining, the Expansion Phase therefore clearly warrants designation. The serious potential adverse impacts of thermal coal mining have been recognized by the Minister in recently triggering a strategic impact assessment for this activity.[34]

As set out in my clients' May 17, 2019 designation request, their submissions to the Agency on September 10, 2019, the Agency's Analysis Report, and the Minister's Decision of December 20, 2019, the Phase II components of the Expansion Phase have numerous potential adverse effects that warrant designation of the Phase II Open Pit under s. 9(1) of the *IAA*.

The addition of the VTUM raises other potential adverse effects associated with this aspect of this underground mining. As was demonstrated through the environmental assessment of the Donkin Export Coking Coal Project under the *CEAA, 1992*, underground coal mining and associated works can give rise to numerous potential adverse effects. In the context of the existing Vista Coal Mine, these potential impacts are all the more probable when cumulative

[34] Environment and Climate Change Canada, News Release: "Canada launches strategic assessment of thermal coal mining" (20 December 2019), online: https://www.canada.ca/en/environment-climate-change/news/2019/12/canada-launches-strategic-assessment-of-thermal-coal-mining.html.

effects are considered, given that this development is occurring within the footprint of an existing operation that has never undergone a federal environmental or impact assessment.

In the case of the Donkin Export Coking Coal Project, Fisheries and Oceans Canada and Transport Canada required mitigation measures relating to the following areas for that project to proceed:

- Air Quality
- Acoustic environment
- Greenhouse gas emissions
- Surface water resources
- Ground water resources
- Wildlife habitat, including migratory birds
- Wetlands
- Rare species and uncommon communities
- Fish and Fish Habitat
- Change to commercial and recreational fisheries
- Land use, including current use of land and resources for traditional Purposes by the Mi'kmaq, and
- Archaeological and Heritage Resources.[35]

The VTUM is not subject to a provincial environmental assessment, nor is there any indication that *any* federal regulatory authorization is required.

Further, the additional 635,000 annual tonnes of thermal coal that will be extracted from the VTUM may have impacts on existing federal exemptions to authorization requirements under the *Fisheries Act* and the former *CEAA, 1992*. For example, the Phase I project's cleaning and waste storage facilities were built to handle only the coal mined in Phase I. With the addition of the VTUM, as well as the Phase II Open Pit and Highwall Mining, there are potential additional impacts on areas of federal jurisdiction (such as fish habitat, fish species and fish species at risk) from the supplemental water resources required and water waste generated.

As Coalspur revealed in its correspondence with the AER, the refuse processing facilities located in Phase I, intended to also serve Phase II, have proved insufficient to manage waste produced from Phase I. In an application to the AER dated November 5, 2019, Coalspur indicated that its Coal Preparation Plant was already at capacity given that it had underestimated the amount of refuse that it would generate by a factor of two.[36] Coalspur sought approvals to develop a 3,200,000 million cubic meter settling pond for storing and managing excess coal refuse

[35] IAA Registry, "Donkin Export Coking Coal Project: Decision of Responsible Authorities" (12 July 2013), online: https://iaac-aeic.gc.ca/050/evaluations/document/92386.

[36] "Application by Coalspur Mines Ltd. to the Alberta Energy Regulator for amendments to licenses granted to the Vista Coal Mine" (5 November 2019), online: https://dds.aer.ca/iar_query/ApplicationAttachments.aspx?AppNumber=1925597 at 3.

generated until November 2020 or November 2021.[37] This settling pond does not appear sufficiently large to additionally deal with refuse produced by the VTUM and other aspects of the Expansion Phase, raising questions about how such refuse will be treated and potential adverse impacts that will be associated with waste processing.

In addition to the local impacts of the Expansion Phase, the Expansion Phase will result in significant downstream greenhouse gas ("GHG") emissions. When the various components of the Expansion Phase are considered together, resulting emissions will constitute 14.7 MT CO2e per year, which would be the largest point source in Canada if burned in the country.[38] The coal mined from the VTUM will account for 1.41 MT of CO2e per year – a significant amount of GHGs and more than the annual GHG emissions of entire thermal coal generating stations in Canada, such as Cape Bretons' Point Aconi Generating Station.[39]

There can be no dispute that GHG emissions are a potential significant adverse effect on areas of federal jurisdiction. The *IAA*, and before that *CEAA, 2012*, requires considering changes to the environment that occur extra-provincially or internationally as effects within federal jurisdiction.[40] The Agency has considered GHGs under this definition on various occasions.[41]

It is also clear that GHGs impact the environment in Canada. In *Reference re Greenhouse Gas Pollution Pricing Act*, the Court of Appeal for Ontario recognized that climate change resulting from human-caused GHGs is causing or exacerbating rising sea levels, ocean acidification, species loss and extinction, and threatening the ability of certain First Nations to maintain their traditional way of life or continue to exist as self-determining people.[42] Indeed, Canadian courts are increasingly recognizing the serious adverse effects that GHG emissions cause on areas of federal jurisdiction and hence the importance of properly considering GHG impacts in environmental assessments.[43]

Notably, the effects on federal jurisdiction of GHG emissions are the same regardless of whether these emissions occur as a direct or indirect result of the project being considered. In the Prime Minister's words, "whether a tonne of CO2 is emitted in Hamilton or Hong Kong, the impact on

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[37] *Ibid* at 9.

[38] Calculations for downstream greenhouse gas emissions were done using the ECCC's estimate of emissions per tonne, 2222.1 kg of CO2e per tonne of thermal coal: see Honourable Catherine McKenna, Minister of Environment and Climate Change "Response to Environmental Petition No. 390" (30 June 2016) at 2 [ECCC Estimate]. For this estimate of GHG emissions from the Expansion Phase, the total maximum coal produced (6.635 MT coal /year) multiplied by the ECCC Estimate = 14.7 MT CO2e/year.

[39] Estimate of GHG emissions calculated by multiplying annual coal production capacity of the VTUM (0.635 MT) by the ECCC Estimate of 2222.1 kg CO2e/tonne, *supra* note 38; Environment and Climate Change Canada "Point Aconi Generating Station, Nova Scotia Power Incorporated, Nova Scotia" (last modified 29 October 2018), online: https://indicators-map.canada.ca/App/Detail?id=0110227&GoCTemplateCulture=en-CA.

[40] *IAA*, s 2; *Canadian Environmental Assessment Act, 2012*, SC 2012, c 19, s 52, s 5(1)(b)(2).

[41] Nathalie J Chalifour, "Drawing Lines in the Sand: Parliament's Jurisdiction to Consider Upstream and Downstream Greenhouse Gas (GHG) Emissions in Interprovincial Pipeline Project Reviews" (2018) 23:1 Rev Const Stud 129 at 158; Analysis Report, *supra* note 2 at 17-18.

[42] *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at paras 11-14 [*Ontario Reference*].

[43] *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 SKCA 40 at paras 4, 16-17; *Ontario Reference*, *supra* note 42 at paras 6-17; *Syncrude Canada Ltd. v Canada (Attorney General)*, 2016 FCA 160 at paras 9, 12, 42 and 62; *Pembina Institute for Appropriate Development v. Canada (Attorney General)*, 2008 FC 302 at paras 78-80.

our climate is the same…the atmosphere doesn't care where carbon is emitted."[44] The *IAA* applies so long as that impact on federal jurisdiction arises as a direct or indirect effect of the project. It is for this reason that past decision-makers have seen it well within their jurisdiction to consider downstream GHG emissions in environmental assessments[45] – including when those emissions take place outside of Canada.[46]

Considering the upstream and downstream emissions of the Expansion Phase is further necessary in light of the Government of Canada's commitments in respect of climate change – an important consideration under the Act, which includes legally binding and non-binding instruments.[47] Canada co-founded the Powering Past Coal Alliance, which commits its government members to the rapid global phase-out of unabated coal power and advance the transition to clean energy.[48] The stated purpose of the Vista Coal Mine is to supply fuel to the very type of power plant Canada has committed to phase out. The Agency and Minister must consider whether the Expansion Phase is consistent with such international commitments by conducting an impact assessment.

In its Analysis Report, the Agency concluded that "greenhouse gases are also anticipated from the burning of coal from the Project for electricity generation, which would occur outside of Canada." Yet the issue before the Minister and the Agency is not whether the emissions occur outside of Canada or not, it is whether the project may cause adverse effects within *federal jurisdiction.* And there can be little doubt that GHG emissions arising from the Expansion Phase will do that. Further, despite acknowledging that GHG emissions are anticipated from the burning of the coal from the Project, and the related public concerns related thereto, both the Agency and the Minister stated that any of the adverse effects within federal jurisdiction and related concerns arising from the Project would be appropriately managed through the existing federal and provincial regulatory processes – none of which consider the impact of GHG emissions. This analysis lacks any rationality or justification.

For all of the foregoing reasons, my clients submit that the Agency and Minister must consider the 14.7 MT CO2e of GHG emissions the Expansion Phase will cause in reaching a

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[44] Jason Fekete, "Trudeau to meet with Indian prime minister in hopes of convincing him to reduce country's emissions" (28 November 2015), *National Post*, online: http://news.nationalpost.com/news/canada/trudeau-to-meet-with-indian-prime-minister-in-hopes-of-convincing-him-to-reduce-countrys-emissions."

[45] Minister of Environment, Government of Canada, "Foundation for a Sustainable Northern Future: Report of the Joint Review Panel for the Mackenzie Gas Project Volume 1", (December 2009) at 215 [*Mackenzie Gas Project Report*], online: http://reviewboard.ca/upload/project_document/EIR0405-001_JRP_Report_of_Environmental_Review_Executive_Volume_I.PDF.

[46] See National Energy Board, "Letter to Interested Persons - Lists of Issues and Factors and Scope of the Factors for the Environmental Assessments - Energy East and Eastern Mainline" (23 August 2017), online: https://docs2.cer-rec.gc.ca/ll-eng/llisapi.dll/fetch/2000/90464/90552/2432218/2540913/2543424/3322976/A85619-1_NEB_Letter_to_Interested_Persons_-_List_of_Issues_and_EA_Factors_Document_-_Energy_Est_and_Eastern_Mainline_-_A5T4L9.pdf?nodeid=3320560&vernum=-2.

[47] *IAA*, ss 22(1)(i) and 63(e); Government of Canada, "Policy Context: Considering Environmental Obligations and Commitments in Respect of Climate Change under the Impact Assessment Ac" (last modified 17 January 2020), online: https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/practitioners-guide-impact-assessment-act/considering-environmental-obligations.html.

[48] Environment and Climate Change Canada, News Release: "The Government of Canada welcomes new Powering Past Coal members and announces support for phasing out coal at home and abroad" (13 December 2018), online: https://www.canada.ca/en/environment-climate-change/news/2018/12/the-government-of-canada-welcomes-new-powering-past-coal-members-and-announces-support-for-phasing-out-coal-at-home-and-abroad.html.

determination on this s. 9(1) request and designate the Expansion Phase for an impact assessment, considering all of its potential adverse effects.

5. CONCLUSION

For the reasons set out in this letter, my clients submit the Expansion Phase of the Vista Coal Mine exceeds the 50% allowable increase for expansions to coal mines before they are considered designated projects under s. 19(a) of the Schedule to the *Regulations*.

If only the VTUM and the Phase II Open Pit are considered, then there is a likelihood that the 50% threshold will be surpassed. Should the Minister or the Agency require more certainty, my clients request that the Agency seek further information from Coalspur. If Phase II Highwall Mining is additionally considered alongside the VTUM and the Phase II Open Pit, the expansion is almost certainly larger than 50%.

Additionally, the numerous potential adverse effects resulting from the Expansion Phase warrant designation under s. 9(1) of the *IAA*.

On the basis of the above information, we request that the Minister or the Agency find that the Expansion Phase of the Vista Coal Mine is a designated project pursuant to s. 19(a) of the Schedule to the *Regulations*, or alternatively, that the Minister designate the Expansion Phase for an impact assessment under s. 9(1) of the *IAA*.

Sincerely,

<original signed by>

Anna McIntosh
Barrister & Solicitor

APPENDICES

[A] Appendix A: 2020 03 30 - Email from Shelly Boss to Fraser Thomson

[B] Appendix B: 2018 08 01 - Vista Coal Project - Phase II Summary

[C] Appendix C: 2019 12 19 - Letter from Anna McIntosh to IAA (Kessler) (Appendices omitted)

[D] Appendix D: 2019 05 05 - Provincial EA Project Summary Table and Location

[E] Appendix E: 2012 05 04 - Letter from CEAA to Coalspur Mines (Brinker) - Assessment not Required

[F] Appendix F: 2019 08 09 - Coalspur Information Package to CEAA

[G] Appendix G: 2019 09 10 - Letter from Coalspur to IAA (Pullishy) - Response to Information Requests

Appendix A

Daniel Cheater

From: Boss, Shelly (IAAC/AEIC) <shelly.boss@canada.ca>
Sent: Monday, March 30, 2020 2:05 PM
To: Fraser Thomson
Cc: Anna McIntosh; Betty Gabel
Subject: response RE: Question re Analysis Report

Hello Fraser,

Thank you for your inquiry regarding the Analysis report accompanying the Minister's Decision regarding the designation request for the Vista Coal Mine Phase II Expansion Project.

The *Physical Activities Regulations* (the Regulations) define area of mine operations as, "the area at ground level occupied by any open pit or underground workings, mill complex or storage area for overburden, waste rock, tailings, or ore". The Agency understands the list of components set out in the definition of area of mine operations of the Regulations to be exclusive. Incidental components to a mine (e.g., administration buildings, airstrip, transmission line, surface water ponds) are not included in area of mine calculations.

Based on information provided by the proponent, including their May 30, 2019 correspondence previously provided to you, the Agency calculated a range in increase of area of mine operations based on a Phase I area ranging from 1319.6 ha to 1381.5 ha and Phase II ranging from 590.3 to 652.2 ha.

I trust this is the information you requested.

Regards,

Shelly

Shelly Boss

Project Manager, Prairie and Northern Region
Impact Assessment Agency of Canada / Government of Canada
shelly.boss@canada.ca / Tel: 780-495-2580

Gestionnaire de projets, Région des Prairies et du Nord
Agence d'étude d'impact du Canada / Gouvernement du Canada
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From: Fraser Thomson <fthomson@ecojustice.ca>
Sent: March 12, 2020 1:04 PM
To: Boss, Shelly (IAAC/AEIC) <shelly.boss@canada.ca>
Cc: Anna McIntosh <amcintosh@ecojustice.ca>; Betty Gabel <bgabel@ecojustice.ca>
Subject: Question re Analysis Report

Hi Shelly,

I had a quick follow up question to one of the findings of the Agency's Analysis Report that accompanied Minister Wilkinson's determination on our clients' s. 9(1) request in relation to the Phase II expansion of the Vista Mine.

Specifically at page 6 of the Analysis Report the Agency stated: “Using proponent information, the Agency calculated that the Project would result in an increase in the area of mining operations between 42.7 to 49.4 percent, depending on how future anticipated changes to the Phase I footprint are considered in calculations…”

It sounds like from this that the Agency arrived at a specific size for the Phase II expansion but that there was some variability in the proper Phase I size to use in determining the percentage increase in the area of mining operations.

Are you able to provide us with the specific numbers that you used to arrive at this range?

Specifically was the area of the Phase II expansion that you used 652.2 hectares? Based on page 3 of the Analysis Report it appears that the Agency considered the expansion of the mine pits to be 652.2 hectares (586.2 Ha + 66 Ha) although Coalspur had previously represented that this expansion was to be 633.6 Ha. As you know, my clients had previously made submissions that the size ought to be higher than Coalspur’s suggestion. Can you confirm which size for the Phase II expansion was used in the final calculations?

The increase in area of mining operations was calculated between 42.7 to 49.4 percent, “depending on how future anticipated changes to the Phase I footprint are considered…”. Can you confirm the anticipated area sizes of Phase I used to calculate these percentages?

Thanks
Fraser

Fraser Thomson
Staff Lawyer | Ecojustice
1910-777 Bay Street, PO Box 106, Toronto, ON M5G 2C8
T: 416-368-7533 | 1-800-926-7744 ext. 545
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Appendix B

VISTA COAL PROJECT – PHASE II

Project Summary

Prepared for:

Canadian Environmental Assessment Agency
Canada Place
9700 Jasper Avenue, Suite 1145
Edmonton, AB T5J 4C3

Prepared by:

Navigator Environmental & Technical Services, Inc.
3908 Teays Valley Road
Hurricane, WV, USA 25526

Prepared on behalf of:

Coalspur Mines (Operations) Limited
110 Macleod Ave.
Hinton, AB T7V 1X5
+1(780) 740-2452

August 2018

Project Information

Coalspur Mines (Operations) Limited (Coalspur) is beginning the application process for the second phase of the Vista Coal Project (Phase II). The Project is an expansion of the existing approved coal mine (Phase I) which will result in an increase to the area of mine operations of 47%. Coalspur believes this expansion will not require a federal environmental or social impact assessment such that would be required by Section 17(d) of the *Regulations Designating Physical Activities*. Coalspur provided information to CEAA at a meeting on August 27, 2018 and this document intends to provide additional information to CEAA for this determination to be made.

Phase II is proposed to be a westward continuation of the existing Vista Coal Project (Phase I). Phase II will be an open pit surface coal mine in the Val d'Or, McLeod and McPherson seams as well as highwall mining proposed in each seam. A brief description of the production methods proposed with Phase II area are as follows:

- Topsoil is removed and stockpiled in the designated area and will be returned to the mined areas as part of the reclamation process
- Rock overlying the surface-mineable coal is removed and hauled to permanent disposal areas within the mined-out pits by blasting, dozers, excavators, and trucks
- Coal is loaded from the mine pit into trucks and hauled to the raw coal handling facilities
- In the final cut of each pit, a continuous miner tunnels into the coal seam exposed in the highwall (highwall mining) to extract additional coal without any additional surface disturbance. The coal is conveyed into the mined-out pit and handled as raw coal.
- Raw coal is transferred to the coal processing plant to remove impurities – rock and finer sand/clays
- Cleaned and marketable coal is produced by the coal processing plant
- Rock and sand/clays removed from the raw coal at the coal processing plant are separated and transferred to the coal refuse disposal areas
- Cleaned coal is sent to the rail loadout facility where it will be loaded into train cars
- Train cars will transport the coal to one of the marine ports on the west coast of Canada
- Coal will be shipped via ocean-going vessels to foreign markets

Coal handling facilities for Phase 2 would rely on Phase I infrastructure – processing plant, conveyor belts, refuse production facilities, equipment parking, maintenance areas and a clean coal loadout facility which will provide access to ports on the west coast of BC. The coal mined is suited for thermal electric generation with primary markets being the Asian Pacific Rim. All coal produced at the mine will be exported. The Phase II area will have an operating life of fourteen years with an annual production rate averaging 4.6Mt (million clean tonnes).

At its western boundary the Phase 2 development is approximately 3.5 km east of Hinton extending 12 km east, towards the McLeod River. The site is located 280 km west of Edmonton and 360 km

northwest of Calgary. Phase II is in portions of Section 9-16, Township 51, Range 24, W5M and portions of Section 7 and 18, Township 51, Range 23, W5M.

Area of Mine

Phase I - The area of mine considered when assessing the existing Phase I boundaries includes: the physical area needed for mine pit, drainage conveyances, an external rock dump, an external coal refuse dump, multiple topsoil stockpile areas, a powerline, coal and refuse beltlines, coal processing plant, main access road, large vehicle maintenance area and various buildings and structures needed to support these facilities.

Phase II – The area of mine considered when assessing Phase II include: the physical area needed for the mine pit, drainage conveyances and a topsoil stockpile area.

A 100 m buffer was applied to the top of the highwall for both Phase I and Phase II. This buffer covers additional unplanned and/or indirect disturbance which may occur – tree blowdown, noise, land use restrictions, etc. When considering the areas described above and applying the buffer, the area of mine for Phase I totals 2318 ha and for Phase II, 1090 ha.

Area of Mine Operations

	Phase I	Phase II	% Addition
Area of Mine (ha)	2318	1090	47%

Subsurface areas where the highwall miner panels are proposed were not considered when calculating the area of mine for either Phase I or Phase II. This is because the highwall mining development is designed and developed to have no subsidence or surface disturbance. Further detail is provided below.

Highwall Mining

Highwall mining is a method used to recover additional coal reserves once the economical surface mining ratio has been reached. The practice involves advancing a continuous miner along with a series of conveying cars into the exposed coal seam in the final highwall, in a series of long narrow parallel holes. During this process all persons operating the machine and loading the coal remain on the surface while the machine remotely follows the coal seam underground. Due to equipment limitations, the maximum mineable length for each highwall miner hole is 488 m. The highwall mining being proposed in Phase II (and in Phase 1) will complete a series of twenty parallel holes in the final highwall of each panel. A section of coal is left between each mined hole ranging from 7.5 to 12 m. This remaining coal is known as the web pillar. At the end of the series of twenty holes and 20 web pillars, a larger mineable area is skipped ranging from 20 to 39 m (barrier pillar) before moving to the next panel to begin the series again. The webbing and the pillars are designed based on the engineering properties of the coal seam and the overburden.

The web pillars and barrier pillars serve two purposes: support the highwall so the mining can proceed safely after the removal of coal as well as prevent any subsidence or surface disturbance. Subsidence is a lateral or vertical ground movement caused by a failure initiated at the mine level. While some types of underground mining anticipate and design for the effects of subsidence, highwall mining does not. Subsidence is typically associated with reserve extraction ratios greater than 50% as seen in some forms of deep mining. The planned highwall mining has an extraction ratio of approximately 20% to 30%. All web and barrier pillars remain in place once mining is complete.

There will be no subsidence from the activities proposed in Phase II and thus the reason why the surface areas beneath the proposed highwall miner panels are not being included in the area of mine calculations, except for those areas where surface disturbance above the highwall mining has already occurred.

Appendix C

VANCOUVER CALGARY TORONTO OTTAWA HALIFAX

ecojustice

Anna McIntosh
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File No: 00741

December 19, 2019

Sent via E-mail: anna.kessler@canada.ca

Impact Assessment Agency of Canada
Prairie and Northern Region
Canada Place
Suite 1145, 9700 Jasper Avenue
Edmonton, AB T5J 4C3

Attention: Anna Kessler
Team Lead, Prairie and Northern Region

Dear Ms. Kessler:

Re: Application by Coalspur Mines Ltd. to the Alberta Energy Regulator for amendments to licenses granted to the Vista Coal Mine (November 5, 2019)

Dear Ms. Kessler,

I am writing on behalf of Keepers of the Water, Keepers of the Athabasca and the West Athabasca Bioregional Society to draw attention to an application submitted by Coalspur Mines Ltd. to the Alberta Energy Regulator (the "AER") on November 5, 2019 for amendments to licenses granted to the Vista Coal Mine (the "Application"). This Application raises issues that we believe are relevant to the Minister's upcoming determination regarding designation of Vista Coal Mine – Phase II ("Phase II") for an environmental assessment under s. 9(1) of the *Impact Assessment Act*.

Coalspur's Application seeks the amendments necessary to create a 3,200,000 million cubic meter settling pond for storing and managing coal refuse.[1] The Application indicates that the McPherson Settling Pond is needed because the quantity of refuse that would be generated by the Coal Preparation Plant was underestimated by one half. While current approvals require Coalspur to use the Filter Press Plant to treat refuse, it appears that this plant is now at capacity due to the unexpected amount that must be treated.[2]

[1] Application by Coalspur Mines Ltd. to the Alberta Energy Regulator for amendments to licenses granted to the Vista Coal Mine dated November 5, 2019, pp. 3-4 [Application].
[2] *Ibid*, p. 3.

As stated in the Application:

> Coalspur has experienced an increased volume in the material being generated from the underflow in the first thickener cell. Originally this volume was designed to be 10-15% of the overall volume of material being processed. Since the start-up of our Preparation Plant we have seen the actual volume being generated from the underflow at 20-30% of the overall volume. This increase has caused the mine to fully utilize the capabilities of the Filter Press Plant to process this material.[3]

While it is unclear based on the information provided, it appears that the McPherson Settling Pond may only store and manage refuse from the Vista Coal Mine – Phase I ("Phase I"). The Application provides two scenarios for filling the settling pond. Under the first scenario, where thickener underflow from only the B Side of the Preparation Plant is directed to the McPherson Settling Pond, the pond would be filled in November 2021. Under the second scenario, where underflow from both A and B sides of the Preparation Plant are sent to the McPherson Settling Pond, that date would advance to November 2020.[4] According to the updated project description provided by Navigator to the AER on June 18, 2019 ("Project Description of June 18, 2019"), Phase II is expected to start operation in April 2022.[5] This is well after the McPherson Settling Pond has reached capacity under either scenario. There does not appear to be any mention of how Coalspur intends to address the issues of excess refuse if and when Phase II becomes operational.

The Application raises the question of how and whether Phase I infrastructure will handle the substantial increase in refuse that will result from the development of Phase II, especially in light of the apparent underestimates of the waste material generated in the processing of coal at the Vista site. In its submissions to the Agency, Coalspur has indicated that Phase II will rely on the refuse processing facilities in Phase I. For example, in its information package to the Agency dated August 9, 2019, Coalspur states:

> Coal handling facilities for the entire operation are already in place and are part of the Phase I footprint which includes: a coal process plant, raw coal conveyor belts, coal reject facilities, primary access corridor, equipment parking, equipment maintenance areas, clean coal conveyors and a coal loadout facility.[6]

Similarly, the Project Description of June 18, 2019 states: "Coal refuse will be generated and stored at adjacent facility". The project description also indicates that coal refuse "will be placed in existing coal refuse pile on adjacent operation".[7] This latter statement suggests that Phase II refuse will be processed through the Filter Press Plant rather than subject to dewatering and storage in a settling pond.

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[3] *Ibid*.
[4] *Ibid*, p. 9.
[5] Project Summary Table – Phase II sent by Will Fraser to Camille Almeida at the Alberta Energy Regulator by letter dated June 18, 2019, p. 1 [Project Description of June 18, 2019].
[6] Information Package sent by Andrew Hutchison to Shelly Boss at the Canadian Environmental Assessment Agency by letter dated August 9, 2019, p. 2 [Information Package].
[7] Project Description of June 18, 2019, p. 2.

In light of the information provided in Coalspur's Application, it is not clear how the Phase I waste management facilities, already overburdened with excess refuse from Phase I, will be able to accommodate Phase II refuse. Coalspur has submitted to the Agency that production capacity for Phase II is expected to average 4.2 Mtpa,[8] but could reach as high as 15.0 Mtpa in some years.[9] Given that the Filter Press Plant is already unable to accommodate refuse materials generated by Phase I and a settling pond of 3,200,000 million cubic meters is needed to manage 1-2 years of excess refuse, there is no guarantee that the existing processing facilities at Phase I will be adequate to service Phase II, and indeed every indication that additional facilities will be necessary. While it is unclear exactly when Coalspur became aware of this discrepancy, it doesn't appear from any of the materials provided to the Agency that this significant increase in actual waste generated has been accounted for in its proposals for Phase II.

It is also likely that if additional waste management facilities are necessary to handle waste generated by only Phase I operations, that additional facilities above and beyond those now needed for Phase I operations would be required to handle the previously unanticipated additional waste generated by Phase II operations.

If Coalspur intends to rely on additional facilities such as settling ponds to process refuse materials from Phase II, then it is important for the Agency to clarify whether such structures have been accounted for in the Area of Mining Operations as submitted to the Agency and to provide whether such facilities may cause adverse effects.

We request that the Agency determine whether the information contained in Coalspur's Application affects the Agency's determination that the Phase II expansion was not a designated project under the Regulations, or alternatively, consider the information in the Application in its recommendation to the Minister regarding whether to designate Phase II for an environmental assessment under s. 9(1). The Agency may also want to establish whether it can reasonably expect Coalspur to apply for amendments to its Phase II project, to account for the treatment of coal refuse that likely cannot be processed by the existing infrastructure in Phase I, and whether those now foreseeable amendments will increase the area of mining operations above the threshold amounts in the Regulations.

We further note that the Canadian Environmental Assessment Agency's determination of May 4, 2012 that Phase I would not be subject to an environmental assessment stated that "[t]he Agency should be notified of any Project changes to confirm that this conclusion still applies to the Project."[10] The Application, if approved by the AER, will lead to the creation of a 3,200,000 million cubic meter settling pond near McPherson Creek, which is a fish bearing body of water. We would expect that such a material change to the project would have been brought to the attention of the Agency, and would ask that should Coalspur have informed the Agency of any details related to its Application, such information be provided to my clients.

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[8] Information Package, p. 3.

[9] "Environmental Assessment - Coalspur Mine (Operations) Ltd. Vista Coal Mine Phase II Project" (updated July 11, 2019), Alberta Government, available online: <https://open.alberta.ca/publications/environmental-assessment-coalspur-mine-operations-ltd-vista-coal-mine-phase-ii-project>.

[10] Letter from Michelle Camilleri at the Canadian Environmental Assessment Agency to Curtis Brinker re Coalspur Mines Ltd. Vista Coal Mine Project dated May 4, 2012.

We have received a letter from Minister Wilkinson indicating that he expects to provide a decision on the designation request by December 20, 2019. However, given the significance of the alteration in the potential impacts of the project as detailed in this letter, it is imperative that this pertinent information be considered by the Agency and the Minister in lawfully considering the pending designation request. We therefore request a 30 day extension of this deadline to enable the Agency and Minister to consider this issue.

Thank you for your continued attention to our submissions relating to our designation request.

Sincerely,
<original signed by>

Anna McIntosh
Barrister & Solicitor

Encls.
c. The Honourable Jonathan Wilkinson
Minister of Environment and Climate Change
Via email: jonathan.wilkinson@parl.gc.ca

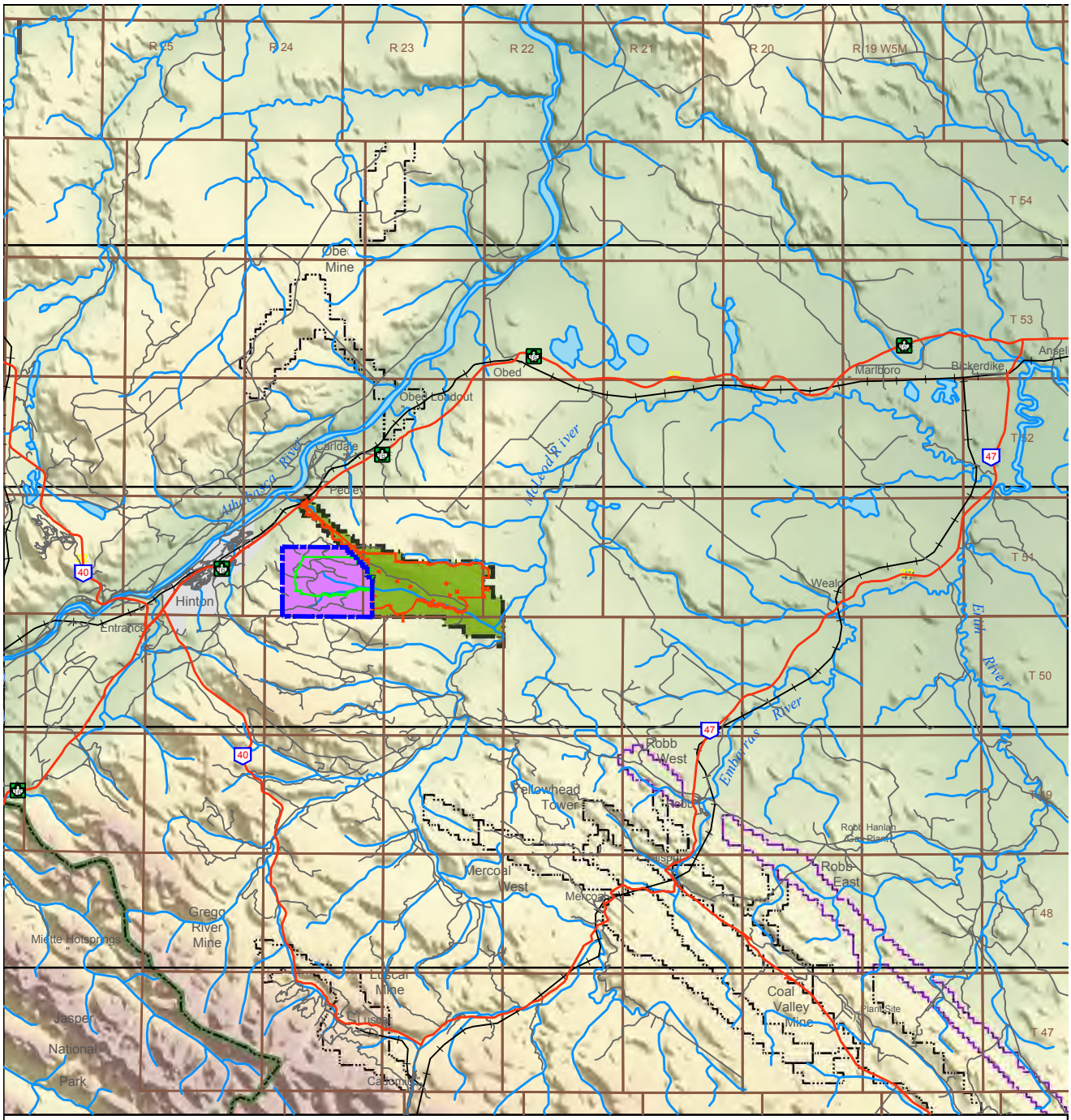
Clients

Project Summary Table – Phase II			
Proponent Name:	Coalspur Mines Ltd.	Date:	10/22/2018
Project Name:	Vista Project – Phase II	Company Contact Name and Information:	Amanda Buchanan Environmental Coordinator 780-718-0866
Name of Company that will hold Approval:	Coalspur Mines (Operations) Ltd.	Company Website:	N/A
Type of Project (e.g., in-situ, mine, quarry, upgrader, etc.):	Surface Coal Mine	New Project, Expansion, Additional Phase or Modification:	Expansion
Projected Construction Start (Month/Year):	March 2021	Projected Operation Start (Month/Year):	July 2021
Life of Project (# years, YYYY – YYYY):	14 years; 2021-2035	Project Location (Legal Land Description and Longitude/Latitude) and Municipality:	Portions of Sections 9-16, Twp 51, Rge 24, W5M; Portions of Sections 7 and 18, Twp 51, Rge 23, W5m
Total Project Area (ha):	1,090 ha – Physical surface disturbance; 1,677 ha - Mineral Surface Lease	Private, Federal or Provincial Land:	Provincial
Nearest Residence(s) (km):	3.7 km	Types of Activity (major project processes, components including capacity/size, if available):	Surface Coal Mine with highwall mining, processing and shipping facilities are located on adjacent operation
Feedstocks and design feed rates (maximum daily, annual)	N/A	Products and design production rates (maximum daily, annual)	Coal; 4.6Mt annual, 12,700 daily
Byproducts and wastes (specify types, rates and storage capacities)	Coal refuse facilities located on adjacent operation; rock overburden generated from mining to be placed primarily within mined out pits but also on the adjacent operation as well as a centre dump within the mine pit between different coal seam pits. Overburden produced estimated to be 260 million bank cubic meters	Product storage facilities and capacities	Coal stockpile areas for both raw and cleaned coal will be located on adjacent operations

Nearest First Nation Reserve(s) and Métis Settlements (name and km):	Alexis Cardinal River 73 km SW; O'Chiese 161 km SE, AWN 123 km NW; Ermineskin Cree 278 km	Project Products:	Thermal Bituminous Coal
Power Source (if on site power generation describe quantity (MW) and facilities):	Existing power infrastructure from Phase I mine	Method of Product Transport (e.g., pipeline, rail, truck, etc.):	Rail
Average Production Capacity per Year (specify units):	4.6 million metric tonnes	Infrastructure Requirements (e.g., roads, pipelines, water intake, storage, tankage, etc.):	Topsoil stockpile storage areas, various haul roads internal to mine pit, drainage diversion ditches and sediment control structures
Location of End Market:	International Markets, Primarily Asia	Expected Types of Air Emissions (e.g., SO_2, NO_X, CO_2, etc.):	CO2, NO2, SO2, PM 2.5, CO, VOCs, PAH, Trace Metal Conc, fugitive methane and Ozone
Project By-Products:	Coal Refuse	Types of Solid Wastes Generated:	Overburden Rock; Coal refuse will be generated and stored at adjacent facility
Expected Types of Water Effluent Releases (note the water bodies the effluent will be released to):	All effluent will be released into settling ponds and physically or chemically treated before being released to McPherson Creek or tributaries contributing to McPherson	Nearest Waterway/Waterbody (name and km):	McPherson Creek and un-named tributaries of McPherson within the proposed disposition 0.1 km south of mine pit
Waste Disposition / Disposal (i.e., Disposal Well, Salt Caverns, Landfill, or Third-Party):	Overburden Rock – In previously mined pits. Coal Refuse – will be placed in existing coal refuse pile on adjacent operation	EPEA Approval Required (Y/N/Unknown):	Yes
Watercourse Crossings (type of crossing, any Class A to C waterbodies):	None anticipated	*Water Act* License Required (Y/N/Unknown. If yes, purpose, source and estimated volumes):	Y – Plant water, losses to fines storage, evaporation from pond surfaces, augmentation to fish bearing stream flow during low-flow periods. Volumes unknown at this time.
Regulatory Board(s) (AER/AEP/NRCB/AUC):	AER	Waterbodies Required (Y/N/Unknown/NA. If yes, # and ha):	Unknown
Water Act Approval Required (Y/N/Unknown. If yes, purpose):	Yes – disturbing ground, altering flow, direction of flow of surface and groundwater in association with mining of Phase II	Will any of the components or activities associated with the project affect fish and/or fish habitat? (Y/N):	Yes

Identify applicable sections of *Designated Physical Activities Regulation* pursuant to the *Canadian Environmental Assessment Act*, 2012	Area of mine operations; Phase II will be an expansion of an existing coal mine	Nearest Water Well (km) (Domestic and Commercial):	Domestic –3.7 km Commercial – Coalspur 0.6 km
Are any works or undertakings proposed to take place in, on, over, under, through or across a navigable water? (Y/N):	No	Access Improvements to Provincial Highway:	No. Access improvements were completed as part of the existing surface mine.
Nearest Provincial Highway (# and distance):	Yellowhead Highway 16 – 4.3 km	Total Area to be Disturbed (ha):	1,090 ha
Traffic Impact Assessment Required (Yes/No/Unknown):	Unknown if update is necessary from original assessment	Post-reclamation Land Use(s):	Managed spruce-lodgepole forest
Identify Existing Land and Water Use(s), Resource Management, or Conservation Plans Within or Near the Project site:	Coal Branch Sub-Regional Integrated Resource Management Plan, West Yellowhead Corridor Regional Integrated Decision, Alberta Grizzly Bear Recovery Plan, Athab Trout Recovery Plan, West Fraser's FMA	Reclamation Start and End (YYYY - YYYY):	Reclamation will be concurrent with mining; 2021 -2035
Decommissioning Start and End (YYYY-YYYY):	2035 – current estimate	Historic Resources Impact Assessment Required (Y/N/Unknown):	Yes
Unique Environmental or Social Considerations (Describe or None):	wildlife, fish and fish habitat, vegetation, soils, wetlands, hydrology and surface water quality, benthic invertebrate, algae, concretion, air, noise, socioeconomic, human health	Estimated Operation Persons-Years of Employment:	375 – 14 years +
Estimated Construction Person-Years of Employment:	Operation and construction personnel will be interchangeable	Method of Transport of Employees to Site (Construction and Operation):	Employee personal vehicles; vans used to transport laborers up to site
Construction or Operation Camp Required (Y/N/Unknown. If yes, on-site or off-site):	No	Is any part of the project on or next to federal lands?	No

Will the project involve the manufacture and storage of explosives (Y/N):	Yes	Aboriginal Groups Involved in Stakeholder Engagement:	Aseniwuche Winewak Nation, Kehewin Cree Nation, O'Chiese Nation – per ACO
Date Stakeholder Engagement Started (Public/Aboriginal):	September 2018	Public Groups involved in Stakeholder Engagement:	Major groups include: Town of Hinton, Town of Edson, Yellowhead County and several others



Legend

- Existing Mine Permit
- Existing Mine Permit - Vista Phase 1
- Existing MSL - Vista Phase 1
- Proposed Mine Permit - Vista Phase 2
- Proposed MSL - Vista Phase 2
- Streams
- Waterbodies
- Major Roadways
- Roadways

0 5 10 20
Kilometres

Coalspur

Vista Coal Project Phase 2

TITLE:

Regional Project Location

DRAWN: DB	FIGURE:
CHECKED:	
DATE: 2018 JUN	
PROJECT:	

Rail Siding
Loadout
CN Main Line
Clean Coal Storage Dome
Clean Coal Belt
Communications Tower
Plant Area
Main Office
Fresh Water Pond
Old 22 Road
HARGWEN ROAD
MAIN ACCESS ROAD
EDSON
TRAIL
16
McPHERSON ROAD
LOWER McPHERSON ROAD
Km 22
Km 21
Km 20
Km 19.5
Km 14.5
CALYPSO POND
Phase II Pit
South Pit
North Pit
Magazines
ANE/ANP
North Refuse Dump
North Refuse Dump Expansion Area
Centre Dump
South Dump
Subcrop Dump
ROM Dump
Vista Mine Substation
Alta-Link 138 kV
ROBB ROAD
MARL CREEK
SANDSTONE
HUNT
CORRAL
PERCOTTE
QUIGLEY
McLEOD
Legend
Permit Boundary (Ph-1)
MSL Boundary (Ph-1)
Permit Boundary (Ph-2)
MSL Boundary (Ph-2)
Stream
100m Buffer
Drainage Structure
Power Lines
Approved Mine Pit
Spoil Dump
Plant Area
Freshwater Ponds
Phase II Mine Pit
Soil Stockpile
Valdor HWM Extents
McPherson\McLeod HWM Extents
BIGHORN MINING
ALBERTA, CANADA
Vista Mine
Overview Map
Phase I and Phase II Areas
REVISIONS
DATE: 10-18-18
PROJ NO: \\Vista\Phase II\
DWN BY:
TECH:
CHK BY:
DWG NAME: Phase II 10-18-18.dwg
FIELD BOOK:
PS: 1:1
DWG SCALE: 1cm = 200m
CONTOUR INTERVAL: 1 m
SHEET: 1 OF 1

Appendix E

Canadian Environmental Assessment Agency

CDI Building
#425, 10115 – 100A Street
Edmonton AB T5J 2W2

Agence canadienne d'évaluation environnementale

Edifice CDI
#425, 10115 – 100A Rue
Edmonton (Alberta) T5J 2W2

Phone: (780) 495-2580 | Fax: (780) 495-2876
E-mail: Michelle.Camilleri@ceaa-acee.gc.ca

CEAA File Number: 04680

May 4, 2012

Curtis Brinker
Manager Environment and Regulatory Affairs
Coalspur Mines (Hinton Operations Ltd.)
114 Jasper Street, PO Box 6146
Hinton, Alberta T7V 1X5

Dear Mr. Brinker:

Re: Coalspur Mines Ltd. Vista Coal Mine Project

In response to the Canadian Environmental Assessment Agency's (the Agency) letter, which identified additional federal information requirements for the proposed Vista Coal Mine Project (the Project) dated December 5th, 2011, Coalspur Mines Ltd (Coalspur) provided supplemental information relating to rail infrastructure, fish and fish habitat, species at risk and navigation.

The Canadian Transportation Agency has completed their review of Coalspur's supplemental information and concluded, based on the information provided, that they will not have a section 5 responsibility under the *Canadian Environmental Assessment Act* (the Act) for the Project.

Transport Canada has completed their review of Coalspur's supplemental information and concluded that all of the watercourse crossings, as described by Coalspur, are covered by the Minor Works and Waters (*Navigable Water Protection Act*) Order and do not require *Navigable Water Protection Act* approval. If the watercourse crossings as described in the supplemental information are not feasible, new or updated watercourse crossing information will need to be provided for review by Transport Canada.

Based on the Project information provided by Coalspur to date, the Canadian Transportation Agency and Transport Canada's conclusions and the letter to Coalspur from Fisheries and Oceans Canada, dated May 3, 2012 (enclosed), the Agency has concluded that a federal environmental assessment under the Act is not required for this Project. The Agency should be notified of any Project changes to confirm that this conclusion still applies to the Project.

Environment Canada and Fisheries and Oceans Canada will continue to participate in the provincial environmental assessment process under Appendix 3 of the *Canada-Alberta Agreement on Environmental Assessment Cooperation*.

If you should have any questions please contact the undersigned by telephone at 780-495-2580 or by e-mail at michelle.camilleri@ceaa-acee.gc.ca.

Yours truly,

<original signed by>

Michelle Camilleri
Canadian Environmental Assessment Agency

cc: Stephanie Jerred (Fisheries and Oceans Canada)
Holly Poklitar (Transport Canada)
Luc Fortin (Canadian Transportation Agency)
Krista Flood (Environment Canada)
Amie Baker (Natural Resources Canada)
Nicole Morin (Health Canada)
Julie Pare-Lepine (Major Resources Management Office)
Margot Trembath (Alberta Environment and Water)
Dane McCoy (Millennium EMS Solutions)

Appendix F

August 9, 2019

Shelly Boss
Project Manager, Prairie and Northern Region
Canadian Environmental Assessment Agency
Canada Place
9700 Jasper Ave, Suite 1145
Edmonton, AB T5J 4C3

RE: Coalspur Mines Ltd./Phase II Vista Coal Mine Project

Dear Ms. Boss,

Please find attached the information package in response to the requested additional information in the letter dated July 15, 2019. We believe that the enclosed addresses all the identified topics and satisfies this request.

Coalspur would welcome the opportunity to meet and review this response with you and your team prior to the final recommendation to further discuss any questions that may come up. Please feel free to reach out to the undersigned to discuss the information package and, if warranted, to arrange a time and location to meet.

Regards,
[original signed by]

Andrew Hutchison, EP
Director of Environment
Coalspur
T: 780 817 8198
E: ahutchison@bighornmining.com

Prepared for:

Canadian Environmental Assessment Agency
Canada Place
9700 Jasper Avenue, Suite 1145
Edmonton, AB T5J 4C3

Prepared by:

Coalspur Mines (Operations) Limited
Hinton, AB T7V 1X5
+1(780) 740-2452

Preface

The Canadian Environmental Assessment Agency (CEAA) has received letters from concerned organizations in regard to the proposed Phase II development of the Vista Mine by Coalspur Mines (Operations) Ltd. These letters have raised concerns about the environmental and social effects if the project is approved and moves forward. In raising these concerns, the parties have focused on the lack of mitigating measures presented in the Terms of Reference. The Terms of Reference, however, are not the tool for communicating the mitigating measures but to provide guidance from the Alberta Energy Regulator to a project proponent the baseline data that is to be collected. Coalspur initiated baseline data collection in the spring of 2018. Certain subjects require multiple years of observation to collect thorough information to better develop the mitigating measures in the full Environmental Impact Assessment. Coalspur current timeline is to submit the EIA in Q1 2020 to the AER for review. The EIA to be submitted will include the baseline data, analysis of such, and mitigating strategies to minimize the environmental effects of the Phase II project and will effectively address all of the concerns raised to CEAA by concerned parties.

General Information

Coalspur Mines (Operations) Ltd. (Coalspur) is the holder of various regulatory approvals allowing for a coal surface mine named the Vista Coal Mine (Phase I) near the town of Hinton in western Alberta. Coalspur is seeking new and amended regulatory approvals associated with the Vista Mine to enable it to proceed with a westward expansion of surface mining referred to as Phase II of the Vista Mine (Phase II/the Project). The expansion will operate in the same coal seams using the same mining methods as the current mine, essentially duplicating the current existing operations. Phase II will use the existing infrastructure for coal transport, processing, coal reject disposal and transport to market. A further description of the mine plan is provided under the Project Description.

This Project Summary has been prepared on behalf of Coalspur and is being submitted to the Canadian Environmental Assessment Agency (CEAA). The following document provides the pertinent project information as requested in various communications with CEAA and most recently outlined in a letter dated July 15, 2019.

Principal contact for Coalspur

Andrew Hutchison – Director of Environment

ahutchison@bighornmining.com

Business: 780-740-2452

Evaluation of the Phase II reserve began in the early 1980s as part of Manalta Coal's McLeod Coal River Project when the Phase I was initially permitted through the Energy Resources Conservation Board (ERCB). These approvals required the completion of an Environmental Impact Assessment (EIA) and public hearing. Manalta, however, chose not to proceed with the development of the site due to the market conditions for coal at that time. The Manalta approvals were transferred to Coalspur in 2011 after which regulatory agencies required a new modern EIA and to update the

existing permits to current standards. As part of the Phase I EIA, the expansion of the mine into Phase II was contemplated as part of the various cumulative effects assessments.

Coalspur formally began the process of pursuing Phase II with the submittal of the Project Description to the AER on 10/22/2018 and after meeting to discuss the Project with them in August. An update to this document was provided to the AER on 6/12/2019 to alert them of refinements to the plan which have been made during the iterative process of the mine design and various engagement activities. Coalspur received a response from AER on 10/26/2018 advising that Phase II is a mandatory activity pursuant to Schedule 1 (g) of the *Environmental Assessment (Mandatory and Exempted Activities) Regulation*. Coalspur is required, pursuant to section 44(1)(a) of the *Alberta Environmental Protection and Enhancement Act* (*EPEA*), to prepare and submit an environmental impact assessment (EIA) report for the Project to meet these provincial requirements for a project of this type. Baseline information is still being compiled and reviewed at this time; however the approved Terms of Reference provide an overview of the information to be collected for which Coalspur will be responsible to develop mitigation measures for.

Additionally, the Government of Alberta's Guidelines on Consultation with First Nations on Land Natural Resource Management also applies to the Project. Coalspur was required, through the Aboriginal Consultation Office (ACO), to submit a First Nations Plan on how it will meet this requirement. This plan was submitted to ACO on 2/21/19 and was approved by ACO on 2/26/2019.

Project Information

The objective of Phase II is to economically recover the coal reserve within the designated boundaries and ship a low sulfur coal product to international markets for electrical generation. The continued operation of the Vista Mine will continue to be an economic stimulus to the Municipality of Hinton and neighouring communities particularly in a time where the job market in this community is shrinking (other coal mines, downturn in oil/gas industry).

As previously described, Phase II of the Vista Mine is a westward expansion of the existing Vista Mine (Phase I). It will be an open-pit surface coal mine in the Val d'Or, McLeod and McPherson seams with highwall mining in each of these primary seams. Coal handling facilities for the entire operation are already in place and are part of the Phase I footprint which includes: a coal process plant, raw coal conveyor belts, coal reject facilities, primary access corridor, equipment parking, equipment maintenance areas, clean coal conveyors and a coal loadout facility.

As per the schedule under *Regulations Designating Physical Activities*, Phase II falls under Section 17(d) for the expansion of an existing coal mine. Through previous communications, CEAA has indicated the Project as proposed is not a designated project under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) as it does not meet the thresholds set out under Section 17(d). A description of the physical works of Phase II and how it compares to the existing footprint on Phase I has been previously provided in an update to CEAA on 5-30-2019. The Phase II mine operations will be limited to the mine pit, drainage control structures and an extension of the refuse storage facilities. Much of the overall site infrastructure is already in place on Phase I and will remain in place during the operation of Phase II.

A description of the activities to be performed in relation to Phase II include:

- Merchantable timber is harvested within the disturbance boundary as per existing agreements with FMA holder;
- Removal of topsoil in the designated area will be stockpiled for subsequent reclamation or direct placed when possible;
- Rock overlying the targeted coal is drilled, blasted, excavated and then hauled to in-pit or ex-pit waste rock disposal locations;
- Coal is loaded from the mine pit into trucks and hauled to the raw coal handling facilities on the Phase I site;
- In the final cut of each pit, a continuous miner will tunnel into the seam exposed in the highwall (highwall mining). This method recovers additional coal without any further surface disturbance. This coal is then combined with the rest of the raw coal and trucked to the appropriate handling facilities;
- Raw coal is belted to the coal processing plant where impurities are removed from the final product (rock/sand/clays);
- Clean coal is belted to the loadout are where it is loaded on trains for transport to BC ports; and,
- Impurities removed during the cleaning process are transferred to the coal reject disposal areas.

The production capacity for Phase II is expected to average 4.2 million clean tonnes over a ten-year period with a maximum of 6 million clean tonnes per year (16,949 t/day). As Coalspur has previously communicated to CEAA, it has further evaluated the initial proposal for the Phase II mine and have lowered the expected combined production capabilities of Phase I and Phase II to an average of 9.4 MT/year as compared to what had previously been projected.

It should be noted since its inception Coalspur has actively managed the Vista Coal Mine to produce a mine plan which maximizes efficiency while reducing impacts to land, water and other environmental values. Values which have been communicated to Coalspur through previous consultation activities throughout the life of the project. Coalspur has sought and received revisions to approvals held for the Vista Project Phase I multiple times since AER approved the project on February 27, 2014. Major changes to the Vista Project Phase I from 2014 to now include:

- Reduction of the physical land disturbance from 2698 ha to 1581 ha;
- Elimination of a 318 ha End Pit Lake and 297 ha Settling pond;
- Reduced Water Use from 3.1 million m^3 to approximately 2.3 million m^3;
- Reduced sizes of mining pits and external dumps;
- Increased in-pit proportion of Total Waste from 55% to 90%;
- Decreased mine life from 20 years to 14 years;
- Execution of concurrent reclamation with active mining instead of the end of mining; and,
- Overall the mining footprint has been reduced by 41% while only reducing 25% of the coal tons produced.

Project Schedule – Construction, Operation Decommissioning

The Integrated Application is planned to be submitted to the AER Q1 of 2020. It is expected that the review, Supplemental Information Request (SIR), and approval process will take 12 months, with Coalspur receiving the required new and amended approvals in Q2 2021. Construction of the mine would begin shortly after receipt of the approvals starting with the development of sediment control followed immediately by the removal and stockpiling of soil. The operational life of Phase II is expected to be 10 years with average production of 4.2 million tonnes of clean coal per year. Reclamation will follow mining as close as possible during operations to minimize the mining footprint, minimize the temporal effect of mining, and to streamline the reclamation and decommissioning phase of the Project. It is expected that reclamation and decommissioning will be completed 5 years after last coal with an additional 5 years planned for monitoring activities.

Project Location

The Project is located east of the Town of Hinton, 285 km west of Edmonton in the province of Alberta. This area has a long history of coal mining. This is advantageous as strategies for mitigating environmental effect have been vetted during this history and Coalspur is able to utilize proven technologies and practices from the beginning of mining. Phase II is essentially a mirror image of Phase I, with near identical ecosites. The practices implemented in Phase I for monitoring and mitigation will be utilized through the life of Phase II.

First Nations Considerations

Current use of lands and resources for traditional purposes

Indigenous Groups, communities and their ancestors have made use of the Foothills area of Alberta for over 10,000 years. As an extension of the ongoing work with Indigenous partners and communities Coalspur's Phase II Project ("the Project') has undertaken an engagement and assessment of impacts specific to the Project and each community. The engagement strategy was launched in 2019 and will continue until the identified groups have had an opportunity to participate, express concerns and review mitigation plans for the Project.

Coalspur recognizes that different Indigenous groups and communities have different customs and practices regarding land and resource use, Traditional Knowledge (TK) and views on industrial development. We recognize that industrial development and the needs of the community will both influence how a community uses the land, and accesses traditional resources and culturally significant heritage sites.

Each Indigenous group and community's use of the land and resources are assessed independently from one another. Independent assessment ensures an equal opportunity to describe historical and current use of the land as it pertains to the Phase II expansion (the 'Planned Development') and assesses potential impacts and concerns. Questions and concerns are collected and documented on a community and individual basis taking into account the setting and context of each discussion. Information collected on impact to land use is assessed and ranked in context to the Project and regional setting to determine if a meaningful mitigation plan can be successfully implemented. Proposed mitigation plans are then shared with the individual and community to determine if the mitigation will address their needs.

The location of the Project, duration and land use will have varying levels of impact depending on the communities use of the land. To ensure meaningful engagement and assessment of impact, we work closely with Indigenous Groups and communities to ensure they understand the extent of the Planned Development and can speak to the Planned Development. This process begins with the distribution and sharing of Project-specific information. The scope of the Planned Development, location and methodologies are shared and discussed with First Nation and Indigenous groups as follows:

- Project-specific information is distributed in paper and digital forms; mailed and hand delivered to communities;
- We complete a series of follow up conversations to ensure information has been accessed, shared and distributed within the community;
- Provide alternative information sources, maps and details upon request;
- Provide opportunities to hold an "open house" within the community to discuss and provide additional information; and,
- Provide invitations to public open houses to discuss the Planned Development with other communities, stakeholders and the proponent in an open forum setting.

Once the information has been shared, we set engagement opportunities and meetings both on site and in the community to review, ask questions and discuss Project-specific elements that could impact:

- Land use;
- Access to resources;
- Access to and protection of culturally significant areas;
- Concerns and mitigation ideas; and,
- End land use planning and reclamation
- Socio – Economic Impact

Structures, sites or things of historical, archaeological, paleontological, or architectural significance

Fundamental to the engagement process is the collection of Traditional Land Use Knowledge and completion of TEK studies. This information along with the engagement sessions are fundamental and vital to the development of a mitigation plan that addresses/resolves concerns raised. All traditional land use studies will be completed by fall of 2019. TEK studies support the planned development through:

- provide relevant biophysical information, including historical information, that may otherwise have been unavailable;
- help identify potential environmental effects;
- lead to improved project design;
- strengthen mitigation measures;
- contribute to the building of enhanced long-term relationships between proponents, Aboriginal groups, and/or responsible authorities;
- lead to better decisions; and,
- contribute to the building of EA and ATK capacity within Aboriginal communities and build an awareness of, and appreciation for, TK in non-Aboriginal communities.

Different Aboriginal groups have different laws and customs regarding who holds different aspects of a community's TK, with whom and how TK might be shared, and who has authority to pass on the TK. Information collected is reviewed by the community and how this information shared is clearly outlined through formal commitments between the community and proponent. In addition, Coalspur has committed to arranging periodic paleontological sweeps of active excavation faces and dumps throughout the operating life of the Vista Mine.

Physical and Cultural Heritage

Concurrent to the engagement process and TEK studies with Indigenous groups and First Nation community members we conduct a complete regional review of concerns, issues and recommendations communicated by Indigenous Groups, First Nations, Individuals and TK (community) experts regarding *other* regional developments, past and present. This information helps us understand:

- Changes in land use beyond the borders of the proposed development
- Historical and pre-existing concerns or issues with industry
    - Concerns with operating practices and end land use
- Supported mitigation and engagement practices
- Changes in First Nation and Community perspective over time.
    - Land Use / Access
    - Economic Opportunity
    - Participation and Interest in developments
- Collection of identified historic and traditional markers and land use areas

All Community specific information and data is pulled together for analysis and review with completion fall/winter 2019. The analysis of the information gathered will include:

- Pathways for potential impacts of the Planned Development/Project (positive and negative) on the exercise of rights, the nature of rights, regional/historic/cumulative impacts, community thresholds, cultural landscape for present and future generations.
- Assess the severity of impacts to rights and assess the impact to traditional use, recognizing that the criteria for assessing impacts to rights may be different from the criteria used to assess the significance of environmental effects and will vary between Indigenous groups.

Considering each of the pathways identified and the criteria developed for each community we then complete an analysis, discussion, and conclusions on whether the Project will have a low, medium, or high level of impact on the exercise of rights for *each* Indigenous group including:

- Compilation of concerns planned and committed mitigation measures.
    - Points of disagreement / misunderstanding
- Collection methodologies, integration into findings and analysis
- Compilation of completed and future TK studies.

The final report will present and discuss all findings on a community and regional basis; presenting resolutions and mitigation plans including long term reporting and monitoring plans to ensure TK, resource access and Indigenous rights remain at the forefront throughout the mine life.

Environmental Effects

Environmental Setting

The western boundary of Phase I is approximately 10 km east of Hinton, extending 12 km northeast towards the McLeod River. The site is located 280 km west of Edmonton. The proposed Phase II development extends the Vista Project west from Phase I, bringing the edge approximately 3.5 km east of Hinton.

The Vista Project area is in the high country in the foothills, an area known as the Southern Alberta Uplands Physiographic region. It is between the McLeod River to the east and the Athabasca River to the west. The Vista Project area is located on forested, gently rolling or sloped land with small streams and creeks. There are northwest-southeast running ridges. Tributaries of the McLeod River drain the Vista Project area. The most important watercourse in the project area is McPherson Creek.

McPherson Creek and its tributaries run through the middle of the Project area. This creek and its small tributaries drain all the Phase II Project area. The land gains in elevation as one goes north or south from the McPherson Creek valley. There are also several small ponds or shallow lakes among peatlands in the Project area.

In un-logged areas, the forest is dominated by older lodgepole pine, white and black spruce, and aspen forest. Much of the Project area has been logged in the last 40 years. Forests in the logged areas are comprised of young lodgepole pine, spruce, and aspen.

Some oil and gas-related activities are seen throughout the area. This includes gas pipelines and wells. These industries have built several gravel roads, which provide easy public access throughout much of the Project area.

Provincial EIA process

The province of Alberta has a robust regulatory system which, in the case of the Vista Mine, begins with the EIA process. The area of operations has been a long-time coal mining area that the AER has a long history in. This familiarity with coal mining practices, as well as the discrete area of operations, positions the AER to be the most effective agency for the management of the EIA as well as the compliance management throughout the operating life of the Project. Once an EIA has been deemed necessary, the Government of Alberta has a prescribed process to allow companies and government decision-makers to examine what the effects the proposed project may have on the physical health, economic and social environment. The EIA methodology used for the Vista Mine assessment was adopted from several sources and has been used in the environmental evaluation of many resource and industrial projects. The methodology is a pragmatic approach which is familiar to both Alberta and Federal Governmental Review Agencies and allows regulators to make decisions as to whether the Project's plans are acceptable and should be approved.

The initial steps of the EIA process Phase II such as contact with the appropriate agencies, submittal of a Project Description, development of consultation plans and initial contact with the public and First Nations have already occurred. Coalspur is in the process of baseline collection of the multiple environmental disciplines listed below associated with a provincial EIA and as directed in the Terms of Reference. Most of these assessments began in 2018 and will continue throughout 2019. These

assessments will identify potential environmental effects specific to Phase II and the combined operation within the immediate vicinity as well as surrounding areas and assess cumulative effects for each discipline. The baseline information collected will guide Coalspur during the interpretive, predictive, mitigative and evaluative steps of the environmental assessment process. Mitigation will be provided to reduce, eliminate or offset any effects predicted by the EIA by either avoidance through Project design or through proven protection measures to replace or restore any impairments the Project could have to the environment.

The following section focuses on the individual disciplines evaluated for the EIA, the baseline information collected thus far, the expected potential effects the activity may have and plans to mitigate potential adverse effects predicted. As the specific process of data collection and information gathering through consultation is ongoing, many of the final assessments have still to be determined and the following is only a prediction until the full EIA document can be completed.

Air Quality

An air quality impact assessment will be part of the EIA process, which will include modeling conducted in accordance with Alberta's most recent Air Quality Model Guideline. Emissions from mining activities, including windblown emissions, will be included in the model which include blasting, rock and coal handling, hauling activities and further expanded to assess the increased operations as the wash plant, raw and clean coal loading as well as the ongoing operations on Phase I. Potential impacts evaluated include effects to any residences and selected environmental receptors near the project, with emphasis on particulate matter (dust), emissions from diesel engines and dust from coal stockpile areas, which is derived from the equipment, internal and external road systems, volumes of coal to be recovered, mine plan and coal handling plans.

The air assessment completed as part of the Phase I EIA concluded the air quality from Phase I operations would be compliant with effective implementation of the proposed mitigative measures. Coalspur has since revised its original plans through Amendments to its existing approval which has further reduced the expected emissions from the site. The original application included a thermal coal dryer as part of the coal processing plant. Subsequent amendments have removed the dryer which was the most significant source of emissions in the air dispersion models used. Redesign of the mine sequencing and disturbance footprint has also reduced mine fleet haul distances and LOM truck hours which in turn reduces diesel use and emissions.

Coalspur had opted into the Carbon Competitiveness Incentive Regulation, which required reporting of CO2e emissions and had a carbon price based on an allowable emissions per measure of product produced (CO2e/tonne of coal). The Alberta Government is presently developing a new regulation, the Technology Innovation Emissions Reduction program to take the place of CCIR. Initial calculations show that Coalspur will be competing for what would be classified as the Best in Class performer for coal mining throughout the province, indicating that the carbon footprint of the coal mined would be the lowest in Alberta.

Coal provides 30% of global energy needs and generates 38% of the world's electricity with estimates of increasing demand in the near future (IEA report – Coal 2018 – Analysis and forecast to 2023) driven by growth in Asia. Coal has been identified in the plans of 24 nations that signed the Paris Climate Accord. As such, technologies are being developed to minimize the emissions from coal. One option for minimizing emissions is to preferentially burn coal with fewer impurities.

The coal being mined at the Vista mine is destined for export to pacific rim countries and will compete with coal being marketed on the Newcastle world market. Newcastle specifications allows up to a 0.75% Sulphur content, contributing to sulfur dioxide emissions. The coal from the Vista Mine has a Sulphur content of 0.25%. The displacement of the higher Sulphur containing coal represents a material reduction SO2 emissions.

Noise

A noise impact assessment has been initiated accordance with AER's Directive 038 as the part the EIA for Phase II. A model will be created based on the mine location, mine methods, and equipment to predict potential noise impacts from the Project. This assessment will include predictions of noise to residences and communities near the mine, noise impacts on wildlife and noise issues which may affect the health and safety of the onsite workforce. If noise mitigation is required, Coalspur will coordinate with AER and develop a plan to mitigate. Noise from Phase II is expected to be minimized through effective mitigation.

The noise assessment completed in Phase I predicted potential exceedances associated with equipment activity used to develop the North Dump area at theoretical receptors, not actual receptors, located 1.5 km north of the Project. Coalspur has made commitments in their existing EPEA approval to re-evaluate noise based on-site equipment-specific sound level measurements when operations have advanced to a time when the noise model predicted exceedances. Should the noise model from Phase II also predict exceedances of acceptable noise levels, Coalspur would propose an update to this assessment based on realized noise levels. All required mitigative measures would be maintained until an update to the model could confirm or modify the original results.

Hydrogeology

An assessment of how the Project may affect hydrogeology from the combined operations of Phase I and II will be provided as part of the EIA report. This assessment will evaluate potential impacts of mine spoil on groundwater quantity and quality, impacts of dewatering the mine pit on existing groundwater-surface water interactions and impacts on individual aquifers zones identified within the mine footprint and surrounding areas.

A large amount of historical data is available for the site including information from the Manalta Project as well as the Phase I EIA. Data available includes dozens of piezometers installed within different geologic zones to be disturbed as part of the mine pit, collection of water level measurements and water quality within selected piezometers, and completion of single well hydraulic conductivity tests. Additional investigation will occur along the most western boundary of the Project but the majority of data previously collected can be used to summarize the hydrogeology for Phase II. Typical groundwater flow in the area is divided into shallow (surficial) aquifers in which flows mirror the surface topography and deeper aquifer at depths of 150 m or more which typically flow southeast in the general direction of the McLeod River valley.

Hydrology

An evaluation of hydrology of the existing watershed pre and post-mining will be completed for the EIA. The assessment will evaluate potential impacts such as changes to surface runoff based on the mine pit, mine infrastructure and changes to watercourse during mining and after reclamation.

Whereas Phase I operations are located along a drainage divide between the Athabasca River and McPherson Creek of the McLeod River, the activities of Phase II will be entirely within the McPherson watershed which will all drain east to the McLeod River. Baseline data collection consists of short-term site-specific stream flows upstream and downstream of the Project as well as in reference tributaries representative of areas where the mine pit of Phase II will occur. Long-term regional flows and data on small to large watersheds is used to characterize effects of regional climatic data for computing flows and conducting water balances for the Project. Development of water balances will incorporate past and ongoing flow data collected as part of the Phase I EIA.

Surface Water Quality

Baseline surface water quality is being collected and will be assessed in the immediate receiving streams of the combined operations as part of the EIA. Potential impacts to surface water which will be evaluated include discharge of sediments (deleterious substances) associated with the mine disturbances, discharge of naturally occurring metals from newly exposed mine spoils and potential effects of any water treatments which may be needed to meet water discharge limits.

Although selenium is not anticipated in the runoff from the Vista Mine, as detailed in the Phase I EIA, it continues to be a concern of stakeholders and regulators due to general association with coal mines in the region. Selenium and its potential presence/absence are evaluated in several disciplines such as geology and hydrogeology of the site but it is most associated with mine runoff and is why it will further be discussed below.

Selenium is a naturally occurring element found in the earth's surface and is an essential nutrient for metabolic function in vertebrates, but excessive amounts can be toxic to fish and wildlife when water runoff downstream of activities such as power generation, mining, and agriculture greatly exceeds naturally occurring levels. Selenium enters the water column downstream of mines through leachate generation caused by water which comes into contact the newly exposed waste rock. If selenium is present in the rock, a series of chemical reactions can cause it to be mobilized into the water column where it could eventually discharge into the receiving streams.

The rocks and minerals to be exposed during mining of Phase II will be in the same geologic intervals as in Phase I, known geologically as the Coalspur formation. This zone includes clays, sandstones, shales and other rocky materials between the Val d'Or, McLeod and McPherson coal seam horizons. The geology associated with the coal-bearing strata at Vista is comparable to those mined at the adjacent mines at Obed and Coal Valley, which also mine these same coal seams. This geologic zone is much different chemically and in composition than what is mined further south at Luscar, Cardinal River and in the Elk Valley. Data in receiving streams below the Obed and Coal Valley mines were evaluated in the Phase I EIA and have historically shown to have selenium values downstream of operations comparable to naturally occurring values, with infrequent or occasional increases. Leachate tests were performed on coreholes drilled within both Phase I and Phase II mine pits and determined minimal amounts of selenium present in the materials to be disturbed by mining. As in the Phase I surface water quality baseline assessment, no water samples evaluated have yet

exceeded current regulatory guidelines except within the mainstem of the McLeod River which receives runoff from Cheviot, Luscar and Gregg River mines. Surface water samples collected in the McPherson watershed and tributaries of the Athabasca all result in minimal levels of selenium present in these streams. Selenium concentrations in water currently being released from site are below the levels recommended in the proposed Coal Mining Effluent Regulations.

Despite evidence indicating the unlikeliness of elevated selenium runoff from the mining proposed in Phase II, Coalspur will perform several mitigative actions to minimize loading of constituents water runoff because it is a generally accepted best management practice to do so. A water management plan similar to those approved in Phase I will be made a part of the Phase II proposal and with effective implementation and continued monitoring is expected to be an effective plan to manage runoff from the mining activities.

Fish and Fish Habitat

A detailed impact assessment on fish and fish habitat present will be completed as part of the EIA. The assessment will evaluate potential impacts such as loss of stream habitat from mining activities, potential changes to fish habitat in streams from changes in hydrology, potential changes in physical and chemical water quality or effects of fragmentation on fish movements and breeding locations. There are presently no aquatic species at risk listed under the Species at Risk Act within the McPherson Creek watershed. Athabasca Rainbow Trout and Bull Trout presence have been documented in the drainage, both of which are currently designated as threatened under the Alberta Wildlife Act. Further genetic sampling is ongoing to determine the genetic purity of the fish from fin clips collected from rainbow trout during 2018 fieldwork.

Field investigations conducted in 1981 as part of the Manalta Coal efforts to permit the area found nine fish species within the McPherson Creek drainage. In efforts related to the Phase I EIA and review of the Fish and Wildlife Management Information System (FWMIS) also indicate similar species compositions and distribution. Rainbow trout have been the most numerous species collected in all efforts within McPherson Creek as well as Burbot, Bull Trout, Lake Chub, Longnose Sucker, Pearl Dace, Longnose Dace, Spoonhead Sculpin, Mountain Whitefish, Northern Redbelly Dace, Brook Trout, and White Sucker.

Fieldwork as part of the specific efforts for the Phase II EIA was performed throughout 2018 and will continue into 2019. Work completed thus far includes spring and fall spawning surveys, fish abundance surveys, benthic macroinvertebrate sampling and inventories of the habitat available for fish as various locations. Due to the potential presence of Athabasca Rainbow Trout, a special collection and research licence was granted by Alberta Environment and Parks to allow for fin clips to be collected of certain sized trout species for genetic analysis. The purpose of genetic DNA testing is to determine if the Rainbow Trout found are an isolated population of genetically pure Athabasca Rainbow Trout (potential SARA species) or if they have been hybridized with hatchery Rainbow Trout. Different assessments may be needed to further detail baseline and mitigation strategies based on the results of the genetic testing.

Phase II mining activities will directly impact one fish-bearing tributary within the mine pit footprint. The stream is an unnamed tributary of McPherson Creek in which one Rainbow Trout was captured in 2011 sampling and one in 2018 efforts. No other fish were captured at three other sites within the same stream in either year. There are other unnamed tributaries of McPherson Creek within

the Phase II mine pit however due to sub-marginal habitat conditions such as lack of flow or undefined channels no fish were captured. Coalspur will implement a 100-meter buffer from the mainstem of McPherson Creek from mining activities to mirror the offset in Phase I which is greater than the setback recommendation for western slope cutthroat trout in their specific recovery plan. Additional expected mitigation measures to be implemented include but are not limited to implementation of streamflow augmentation plans to maintain adequate water volume in fish bearing streams, implementation of a surface water management plan and adaptive management based on continuous monitoring within receiving stream.

Coalspur will apply for a separate authorization to the Department of Fisheries and Oceans (DFO) which will quantify project impacts, detail an offsetting plan for these impacts and detail the balance of impact versus benefit of the offsetting plan. A letter of credit, contingency measures, description of activities proposed to offset the impact are included in the application to ensure the effectiveness of the plans proposed. Coalspur has coordinated meetings with DFO (supported by AER fisheries biologists) with regards to plans for Phase II, the potential presence of a soon to be listed SARA species and an understanding of their expectations for an application of this type. Discussions with DFO showed consideration will be focused more on the quality of fisheries habitat and the required compensation if disturbed rather than a focus on a particular species. As a result of the most recent meeting with DFO Coalspur submitted a Request for Review form to start the process required for a Fisheries Act authorization. DFO indicated the baseline assessments used for the provincial EIA are typical of the requirements needed for a Fisheries Act approval and the data can be shared between the applications.

Vegetation and Wetlands

An assessment of the vegetation and wetlands on site will be evaluated as part of the EIA. TK information will be incorporated into the evaluation. The assessment will include potential impacts such as changes in vegetation in the mine footprint pre and post-mining, indirect disturbances from alterations of surface topography, microhabitats, on-site air emissions (such as dust), potential impacts to rare species and the potential introduction of invasive species during reclamation.

Prior fieldwork to establish a baseline survey of vegetation within the Phase II area was previously completed in 2013 but due to the age of the data (over 5 years) and the likeliness of vegetation data always altering (fires, logging, succession, etc.) additional work is being completed to supplement this initial survey effort. Vegetation surveys from the Phase I survey within the mine permit boundary yielded 344 vegetation species of which seven species were listed on the Alberta Rare Plant Tracking and Watch Lists available at the time. Aboriginal groups as part of Coalspur's previous and ongoing consultation efforts also have identified vegetation resources within the Phase I area used by groups in the region. A total of 83 different TEK vegetation species were observed and documented during efforts specific to the Phase I EIA. First Nation consultation specific to Phase II is currently ongoing. Vegetation surveys within the proposed Phase II boundaries are expected to yield similar vegetation communities as what was observed in Phase I. When applicable and agreed upon by the Aboriginal groups TK data will be incorporated into the vegetation assessment.

Wildlife and Wildlife Habitat

An assessment of Wildlife present will also be completed as part of the EIA. In addition to the original Phase I assessment, site-specific wildlife surveys occurred in 2013 and in 2018/19 within the Phase II area. As many as 243 vertebrate wildlife species has the potential to live within areas to be developed from the Vista Coal Mine of which 184 are bird species. The Project occurs within a known grizzly bear range and important game species such as moose, white-tailed deer, and elk. Changes in migration, animal habits and population sizes are considered in the Indigenous assessment of socio-economic impact

The key regulatory issue with respect to wildlife is the potential occurrence and potential effects of the Project on species protected under either provincial or federal legislation. Phase II of the Vista Mine has potential to affect wildlife species by loss of habitat from ground disturbances, potential altered vegetative landscape post-mining, increases in mortality and effects of fragmentation on movement and life patterns. Each issue will be discussed in detail in the EIA along with recommended mitigation strategies to minimize the effects on specific species of concern as well as wildlife in the vicinity of the Project.

Wildlife assessments are completed via various seasonal surveys targeting when species in which certain ambiguous species can be more easily detected. Surveys used to assess the wildlife in the locality of the Project include Winter Field Tracking, Spring Ungulate Pellet Counts, Nocturnal Amphibian Point Counts, Breeding Songbird Point Counts, Owl Call-Playback Surveys, Raptor/Owl/Woodpecker Survey, Bat Misting, and Anabat Surveys, deployment of game cameras, and incidental observations.

From preliminary analysis and incidental observations, wildlife species of federal and/or provincial concern have been observed within the Project area. Five of these species have SARA Schedule 1 designation and another thirteen (not including SARA listed species) are considered provincially 'Sensitive'. These species include:

- SARA-listed bird species – Barn Swallow (detected as part of breeding songbird point count survey-2018), Canada Warbler (detected as part of breeding songbird point count survey – 2013);
- SARA-listed amphibian species – Western Toad (Amphibian Survey – 2013; also previously identified as part of Phase I survey);
- SARA-listed mammals – Little Brown Myotis (mist net survey – 2013); Grizzly Bear (Wildlife Camera – 2018); and,
- Species of provincial concern – Western Toad, Long-toed Salamander, Osprey, Northern Goshawk, Broad-winged Hawk, Barred Owl, Great Grey Owl, Black-backed Woodpecker, Pileated Woodpecker, American Kestrel, Alder Flycatcher, Least Flycatcher, Barn Swallow, Brown Creeper, Common Yellowthroat, Canada Warbler (At-Risk Designation), Western Tanager, Little Brown Myotis (May Be at Risk Designation) and Grizzly Bear (At-Risk Designation).

Some mitigation measures which were proposed and approved in the Phase I EIA and are expected to also provide effective mitigation in the Phase II include but are not limited to: include species-specific vegetation as part of the reclamation for the site, restrict hunting on the MSL for the life of the mine, avoid land clearing during breeding bird and nesting periods (May to August) this also coincides with bat swarming periods, implement toad and salamander capture programs prior to mining and relocate to adjacent breeding ponds, and avoidance of known toad and salamander

breeding ponds where possible. Coalspur has identified the McPherson Creek corridor as an important ecological feature and information gathered from Indigenous groups will be important to mitigation and management of the McPherson Creek corridor. As such, Coalspur has implemented a 100-meter buffer from the watercourse. This will minimize effects on the riparian boundaries of McPherson Creek while also maintaining a sizeable corridor to encourage the movement of wildlife. This buffer is also in excess of the distance suggested in the Cutthroat Trout Recovery Plan for the western slopes of the Rocky Mountains.

Concerns brought by the public have indicated concern for impacts of the Project on migratory bird species. The greatest effect of the Phase II development on migratory birds will be habitat loss. As previously described within this document Coalspur will execute a progressive reclamation plan which will minimize out of pit disposal needs (minimizing the project footprint) and expedite revegetation which promotes the development of habitats required by migratory birds. Reclamation activities, plant and wildlife are key points of interest for Indigenous groups and provides an opportunity to work with local communities to improve end land use. Other key mitigation measures specific to migratory birds include vegetation clearing outside of breeding bird periods and to conduct pre-disturbance nest searches.

Socio-Economics

An assessment of the social-environmental effects describing and estimating the human environment with and without the Project will be completed as part of the EIA. This report will address key socio-economic issues raised by the regulator, regional stakeholders, and Indigenous groups including:

- Effect of Phase II on the Alberta economy, as well as financial contributions to the Provincial (taxes and royalties) and Federal (taxes) governments;
- Employment effects;
- Population effects;
- Effects on industry expansion and population growth on infrastructure levels in the region; and,
- The socio-economic impact of the Project on Indigenous communities will be incorporated into the final impact assessment of the Indigenous groups

This evaluation reviews the Project during both the construction and operating phases and will be combined with information previously estimated in the Phase I socio-economic analysis.

Historic Resources

Evaluation of historic resources to meet the requirements for a Historic Resources Impact Assessment (HRIA) was completed in 2011 by Lifeways of Canada, as part of the original Phase I baseline assessment. The study was specifically designed to cover initial development of the Vista Coal Mine as well as future areas to be developed which Coalspur also had leased at the time (Phase II).

The Vista mine had been subjected to HRIA work in previous provincial applications to mine the site but regulators required additional efforts to bring the studies up to modern standards as part of the Phase I EIA. Evaluation of historic resources on site included surface reconnaissance,

inspections of exposures and shovel prospecting in areas of elevated site potential in accordance with standard HRIA field procedures. The results of this effort yielded the discovery of 38 archaeological sites in the evaluated area. The sites varied in size, age, and significance.

Following the HRIA work, a report was submitted with site-specific mitigation recommendations should sites be within potential zones of impact, a recommendation for the Historical Resources Act clearance for Phase I developments pending any mitigation requirements. A monitoring program was recommended for paleontological resources and has since been incorporated as part of Coalspur's Phase I EPEA approval. In July 2013 the Historic Resources Management Branch (HRMB) issued correspondence to Coalspur providing Historic Resources Act approval for the then proposed disturbance areas in Phase I. HRMB had previously issued a letter to Lifeways that blanket clearance would not be issued for the entire area surveyed but only for the proposed development footprint alone.

In August 2018 a request to HRMB was made for clearance of the Phase II site. The request detailed that Phase II was included in the 2011 HRIA and a large portion was intensively subjected to thorough surface reconnaissance in 2011 via 285 shovel tests. The 2011 HRIA also detailed much of the western portion of Phase II was found to be of decreased potential for historic resources during ground-truthing. In total four sites were found in the Phase II area; all Precontact archaeological sites, of these only one, FiQi-2, is considered significant and worthy of additional investigation. This site is along the southwestern border of Phase I and the southeastern border of Phase II.

In October 2018 HRA approval with conditions was given for the Phase II site. Most notable of the conditions required is the avoidance of site FiQi-2. A plan for avoidance is to be submitted with an HRA application prior to development of the area. It is Coalspur's intention to avoid mining this area by constructing a road around the site with a suitable barrier with details of the construction and maintenance to be included as part of the larger EIA application.

Human Health

A detailed human health risk assessment will be conducted for the EIA compliant with relevant EIA guidelines and methodology provided by Alberta Health. Completion of this assessment requires the results of a number of other baseline assessments such as Air Quality, Socio-Economics, Traditional Land Use and Traditional Ecological Knowledge. Based on the human health assessment previously completed in Phase I and the expected similarities in Phase II, the potential impacts of Phase II to human health include, but may not be limited to: effects on health from increases in air emissions, potential health impacts from changes in water quality or health issues from Project-related noise. The Phase I human health assessment concluded the Vista Mine would not have any detrimental effects based on analysis of the linked assessments.

Appendix G

Coalspur Mines (Operations) Ltd.
Box 6146
Hinton, AB T7V 1X5

September 10, 2019

Barbara Pullishy
Impact Assessment Agency
Prairie and Northern Region
Canada Place
Suite 1145, 9700 Jasper Avenue
Edmonton, Alberta T5J 4C3

Attn: Barbara Pullishy
Regional Director, Prairie & Northern Region

Dear Barbara Pullishy:

Re: Response to Information Requests in respect of the Impact Assessment Act

We are in receipt of your letter dated August 29, 2019, requesting that Coalspur Mines (Operations) Ltd. ("Coalspur") provide the Impact Assessment Agency of Canada (the "Agency") with certain additional information that was identified as being required to understand the potential application of the *Impact Assessment Act* ("IAA") to the Phase II Vista Coal Mine Project ("Project"). This letter constitutes Coalspur's response to the same.

Information Request 1

> The *Physical Activities Regulations*, paragraph 19(a), under the IAA includes the expansion of an existing coal mine that would result in an increase in the area of mine operations of 50% or more and a total coal production capacity of 5000 t/day or more. In order to determine if the Project meets or exceeds the area of mine operations threshold of 50% or more, clarification is required regarding the current approved area of mine operations (Phase I) as well as the area of mine operations for the Project (Phase II), as defined in the Physical Activities Regulations of the IAA.
>
> The Agency has identified potential discrepancies in the information provided to date regarding area of mine operations for Phase I and the Project.
>
> - The letter dated May 30, 2019 from Coalspur's consultant Navigator Environmental & Technical Services, Inc., Coalspur states the area of mine operations for Phase I is 1435.08 ha and the area of mine operations, as per the IAA, for the Project would be 652.2 ha, specifically including the mine pit and north dump extension.

- In the letter dated August 9, 2019, Coalspur stated that since 2014 the physical land disturbance to the Vista Project Phase I was reduced from 2698 ha to 1581 ha.

Please provide updated information regarding the area of mine operations for Phase I and the Project (Phase II), including a detailed breakdown of all project components and the areas of project components included within the area of mine operations as per the IAA, following a similar format to the tables in Coalspur's letter of May 30, 2019, which identified areas for the following:

Phase I: Val d'Or Mine Pit (north); McCleod/McPerson Mine Pit (south); north dump, south dump, subcrop dump, centre dump, plant site area, topsoil storage, water management, freshwater pond, shop location, ROM conveyor, aggregate pit, and any other component(s) of the Project that would be considered in the area of mine operations as per the IAA; and

Phase II: Mine Pit, north dump extension, ponds/drainage, and any other component(s) of the Project that would be considered in the area of mine operations as per the IAA.

Response 1

The variance in numbers reported is not a discrepancy, rather it is the result of using different methodologies for calculating area of mine operations. The letter referenced and dated May 30, 2019, stating that the area of mine operations for Phase I is 1435.08 ha and the area of mine operations for the Project would be 652.2 ha, specifically including the mine pit and north dump extension, used a calculation that was based on the definition of mining area in the *Regulations Designating Physical Activities*, which defines "area of mine operations" as the area at ground level occupied by any open pit or underground workings, mill complex or storage area for overburden, waste rock, tailings or ore. Coalspur notes that this definition remains the same under the IAA. The letter referenced and dated August 9, 2019, however, was addressing overall mining disturbance, including an area that had been cleared of vegetation, but never had any soil salvaged and was not used for the development of the plant infrastructure..

Coalspur takes this opportunity to provide the IAA with a minor correction. The letter dated May 30, 2019, attached hereto as Appendix "A", described the area of mine operations for the Project as 633.6 Ha, an overall increase of 44.1%, not 652.2 Ha as the Agency's letter suggests.

With respect to providing updated information regarding the area of mine operations for Phase I and Phase II, Coalspur respectfully submits that the information and calculations presented in the May 30, 2019 letter have not changed from the time of submission. Coalspur's review of the definition of "area of mine operations" indicates that there has been no change in the wording from the *Regulations Designating Physical Activities* to the IAA and, as such, there are no changes necessary in Coalspur's calculations.

On July 15, 2019, the Canadian Environmental Assessment Agency provided Coalspur with a letter stating: "The Agency determined that the Project as proposed is not a designated project under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012) as it does not appear to meet the thresholds set out in the *Regulations Designating Physical Activities* (the Regulations)." Coalspur submits that this remains the case today.

Information Request 2

> Information provided by Coalspur to the Agency in August 2019 and October 2018 included maps identifying the regional location of Phase I and the Project (Phase II). An overview map of the Phase I and the Project (Phase II) areas and facilities as well as the defined mine permit and the mineral surface lease boundaries was also included. Given the potential changes to the areas of mine operations identified in the question above, please provide updated maps.

Response 2

Please see attached to this letter the information requested as Appendix "B".

Information Request 3

> During the meeting between the Agency and Coalspur on July 25, 2019, Coalspur stated that there may be pure-strain Athabasca Rainbow Trout in McPherson Creek. Coalspur indicated that sampling had occurred and that the results from the University of Alberta laboratory were forthcoming. Please provide an updated timeline of the expected results for the DNA samples of the Rainbow Trout.

Response 3

The results of the DNA sampling of rainbow trout were received from the University of Alberta lab on August 22, 2019. All samples, excluding a control sample, tested greater than 99.45% pure. Given this information, Coalspur, in concert with consulting firms, has expanded the scope of the study to account for a *Species at Risk Act* ("SARA") listed species. Early engagement with the Department of Fisheries and Oceans ("DFO") provided guidance on the extent of studies required and options for mitigation of effects of mining on the listed population. Coalspur will continue to work closely with DFO and provincial regulators to ensure the most appropriate and necessary mitigation measures are in place to avoid adverse effects on rainbow trout. Coalspur notes that in addition to these efforts, because rainbow trout are a keystone species, mitigation measures taken to protect the rainbow trout will also be beneficial to the overall ecosystem.

Information Request 4

> During the July 25, 2019 meeting with the Agency, Coalspur stated that it has undertaken public and Indigenous engagement. Coalspur specified that the concerns of the Alberta Wildlife Association had being incorporated into the Provincial EIA's Final Terms of Reference. Two requestors (represented by Ecojustice) were concerned that the Project will exceed the IAA thresholds in terms of increased area of mine operations of 50% or more; potential for adverse environmental effects to the local environment and climate including fish and fish habitat, species at risk and migratory birds; and potential impacts to Aboriginal peoples and to potential and established Aboriginal and treaty rights. One requestor from the public was concerned with environmental effects including the release of toxins into the water.
>
> Additional information is required to understand existing mechanisms for addressing concerns raised by Indigenous groups and the public. Please provide updated information on pubic (including requestors) and Indigenous engagement undertaken to date, including details regarding concerns raised (including those of the requestors identified above) and actions taken and/or planned to address the concerns.

Response 4

Coalspur has been directed to engage with five First Nation communities, four of which we currently have working agreements with and meet regularly. In addition, Coalspur notes that it has agreements with two additional First Nation groups who we have not been directed to engage with, with whom we meet regularly. Coalspur received an information request from a Metis Settlement and has since responded to their information request and met on two occasions.

The communities Coalspur is consulting and engaging with are: Erminskin Cree Nation, including their remote community of Mountain Cree, Whitefish Lake First Nation, O'Chiese First Nation and the Aseniwuche Winewak Nation. Notification of the Project was triggered early Q2 2019 via registered mail and included maps and Project details. Coalspur has a pre-existing relationship with Alexis Nakota Sioux Nation, ("ANSN"). ANSN is completing a two year traditional land use ("TLU") study specific to Phase II. Since March 2018, Coalspur has hosted or attended 31 separate community specific meetings

Q2 and Q3 2019 discussions were community driven and focused on updates to impact benefit agreements ("IBA") and TLU study field work for 2019. As the 2019 TLU study field season is coming to an end and updates to IBAs are nearing completion Coalspur has initiated a Project reminder to the listed communities. Coalspur has requested to meet in community and discuss the Phase II expansion, listen to community concerns, impacts and develop resolutions with communities. The reminder was sent via registered mail September 9, 2019 and will be followed up by emails and calls to the various community contacts.

All comments and concerns received, and the responses thereto, are recorded and submitted to the Alberta Aboriginal Consultation Office ("ACO") as part of the Record of Consultation ("ROC"). Specifically, concerns raised are tracked in the Concerns and Response Table ("CRT"). The process and timelines for resolution of any concerns are published with monthly updates to the ACO. To date, communities have requested additional information and have identified topics of interest, but no concerns have been registered.

When concerns are received, the nature of the concern is evaluated and written response is developed. The written response is provided to the community via registered mail and email with a request to meet in community to discuss their concerns further. This direct engagement by the proponent also seeks the input of community members, elders, and Chief and Council. The community meetings provide a natural opportunity for community members to speak openly and for Elders to communicate in their language with trusted interpreters from the community.

Technical questions received commonly include water, water toxicity, and release to the environment. These questions are common and anticipated by Coalspur. Water, waterways and water quality management questions are responded to in a clear and concise manner, outlining both federal and provincial water quality guidelines. Coalspur's responses also address how water is managed on site, including ponds, mechanical and chemical treatment (if applicable), as well as how samples are collected and corresponding results are reviewed both provincially and federally.

In addition, Coalspur has held numerous community presentations of the Project to local industry groups and environmental non-governmental organizations. Further, Coalspur has held numerous site tours with local communities and First Nation communities. To date, TLU studies with First Nation communities have been partially completed with additional studies planned for September

and October. Concerns raised by First Nation communities will be addressed through the completion of the Environmental Impact Assessment ("EIA") mitigation measures once baseline data collection has been completed. Coalspur is committed to engaging with local communities and First Nation communities to receive valuable feedback and contributions when developing these mitigation plans.

Community outreach was also part of the public comment period for the review and approval of the Province of Alberta review and approval of the Terms of Reference for the Phase II Project. To date, Coalspur has not received concerns directly from any requestors, including the requestors mentioned. Concerns have only been raised to the Alberta Energy Regulator ("AER") and the Agency. Regulatory requirements of the Province of Alberta require that Coalspur address the environmental, socio-economic, human health, and impact to First Nations and treaty rights; which will address all concerns raised by the requestors as well as the regulatory agencies. Upon submission of the integrated application, an additional public comment period is triggered through the AER review process, allowing groups not directly contacted by Coalspur to have further opportunity to participate in the review of the Project. Since March 2018, Coalspur has hosted or attended 22 separate meetings with local community and industry groups, including 2 open houses spanning three days in July 2019. These open houses were attended by 49 people from local communities.

Conclusion

Coalspur reiterates that the Project is not a designated project. In addition, Coalspur has engaged and is continuing to engage with potentially affected First Nation and Metis communities, none of which have made submissions to the Agency. We further note that neither of the parties represented by Ecojustice are legally recognized First Nation communities or Metis organizations. Rather, they are public interest groups. For all the above reasons, and taking into account the robust and comprehensive provincial regulatory regime in place, Coalspur is of the view that the Minister of Environment and Climate Change Canada ("ECCC") should not exercise her discretion to designate the Project.

Yours truly,

<original signed by>

Andrew Hutchison
Director of Environment
Coalspur Mines (Operations) Ltd.

Appendix “A” – May 30, 2019 Letter

NAVIGATOR
ENVIRONMENTAL & TECHNICAL SERVICES, INC.

3908 Teays Valley Road
Hurricane, WV 25526

May 30, 2019

Shelly Boss
Project Manager, Prairie and Northern Region
Canadian Environmental Assessment Agency
Canada Place
9700 Jasper Ave, Suite 1145
Edmonton, AB T5J 4C3

RE: Coalspur Mines Ltd./Phase II Vista Coal Mine Project

Dear Ms. Boss

Further to your emails sent on 5/22, Coalspur presents the following to clarify the current mine footprint for Phase I of the Vista Mine and proposed mine footprint for Phase II.

Since Coalspur's initial conversations with CEAA (the Agency) in 2018 concerning its plans for Phase II of the Vista Mine, Coalspur has received two additional Integrated Amendment approvals which have modified the footprint of the existing coal mine. These changes have subsequently altered Coalspur's plans for Phase II of the site. As the site continues to be developed the need to revise certain aspects of the existing approvals has arisen. These applications were necessary to increase operational efficiencies while creating a mine with production capacities capable of competing in today's markets.

In January 2019, AER approved an amendment application which reduced the footprint of the Vista Mine. In this application, as with previous applications, refinements were made to the overall project which resulted in less material for dumps, a smaller pit shell and a more contemporaneous reclamation plan. The resulting footprint after approval was reduced from 1956 ha to 1520.4 ha as described in the application submittal and during the SIR process. In April 2019, Coalspur received an approval from AER for a modification to an external dump licence. The licence was for a coal rejects dump adjacent to the processing plant and is designated as the North Dump in the tables below. The dump was modified to move the site closer to the plant to reduce the distance from which initial coal rejects must be moved and shortened the construction time of the conveyor which would transport coal rejects to the dump. The changes made in this application altered the size of the North Dump, a few topsoil storage areas as well as some water management structures. These changes further reduced the footprint of the site from 1520.4 ha to 1510.28 ha.

Since it's previous communications with CEAA, Coalspur has further evaluated its initial proposal for Phase II by considering environmental baseline data collected, further reserve evaluations as well as the interests of adjacent stakeholders with facilities along the western border and concluded a reduced Phase II footprint is more appropriate than what has been previously planned.

As directed previously by the Agency, the following tables consider area of mine operations for Phase I and Phase II using the suggested format so that it can be clearly shown which incidental components of the mine are and are not considered in the overall area of mine calculations.

Ancillary facilities, as Coalspur understands them to be, have been omitted when determining the area of mine as defined in *CEAA 2012*. As shown in the table below, Phase I of the Vista Mine Project now comprises a total 1510.28 hectares of which 1435.08 hectares are considered in the area of mine calculations for future expansions. Below is summary of the mine features associated with Phase I.

Phase I - Vista Coal Mine Recent Developments

Mine Feature	Mine Plan Amendment (Feature Disturbance in ha) 1520.4 ha - approved Jan 2019	North Dump Amendment (Feature Disturbance in ha) 1510.28 ha - approved April 2019	
Val d'Or Mine Pit	484.4	484.4	Features considered in CEAA Area of Mine calculations
McCleod/McPherson Mine Pit	311.8	311.8	
Haulroad and Access Roads	10.8	10.8	
North Dump	171.3	176	
South Dump	80.6	80.6	
Subcrop Dump	88.6	88.6	
Centre Dump	126.4	126.4	
Plant Site Area	25.6	25.6	
Topsoil Storage	85.4	70.05	
Water Management	38.2	38.73	
Freshwater Pond	11.8	11.8	
Shop Location	0.8	0.8	
ROM Conveyor	4.8	4.8	
Aggregate Pit	4.7	4.7	
Access Corridor	47.9	47.9	Ancillary areas not considered in CEAA mine footprint calculations.
Train Loadout	1.9	1.9	
Office Area	0.4	0.4	
Coal Domes	0.6	0.6	
Power Line	24.4	24.4	
Total Footprint Considered for Project Expansion	**1445.2**	**1435.08**	

Phase II of the Vista Mine Project will use much of the infrastructure already constructed on Phase I. A breakdown of the Phase II surface disturbance is below. This includes an extension of the North Dump to

account for the additional coal to be processed and a reduction to the South Dump area previously approved on the Phase I site and is currently undisturbed.

Phase II – Vista Coal Project		
Mine Feature	**Surface Disturbance**	All considered in Area of Mine calculations. 633.6 ha
Mine Pit	586.2	
North Dump Extension	66	
Ponds/Drainage	43.3	
Phase I South Dump Reduction Area	-61.9	

The area of mine calculation for the current Phase I area which only includes components defined under the Regulations as "*the area at ground level occupied by an open pit or underground workings, mill complex or storage area for overburden, waste rock, tailings or ore*" is 1435.08 hectares. When considering the same requirements and changes proposed for the Phase II mine application, the footprint calculation is 633.6 hectares. This equates to an overall increase of 44.1% from the current Phase I area of mine.

We appreciate this opportunity to discuss the Phase II project with CEAA during this iterative process. As engagement and environmental baseline collection continues the project may evolve before final submission of the application to AER. The footprint described herein is intended to be an update of the major components as development of the Phase II application continues.

We hope with this letter and supporting figure, CEAA can confirm the proposed Phase II Vista Coal project will not be considered a designated project under CEAA 2012. Phase II of the Vista Coal Project, as currently proposed, is under 50% of the existing mine operation when excluding all incidental components of the Phase I. Should you require any additional information please feel free to contact me. Thank you for your attention in this matter.

Sincerely,
<original signed by>

Will Fisher,
Project Manager
Navigator Environmental & Technical Services, Inc.
On behalf of Coalspur Mines Ltd.

Appendix “B” – Updated Maps

Legend

- Permit Boundary (Phase 1)
- MSL Boundary (Phase 1)
- Permit Boundary (Phase 2)
- MSL Boundary (Phase 2)
- 586.2 ha - Phase 2 Mine Pit
- 43.3 ha - Phase 2 Drainage/Diversions
- 66.0 ha - Phase 2 North Dump Extension
- 61.9 ha - South Dump Reduction

- 633.6 ha - Footprint Change

N

Clean Coal Belt

Communications Tower

Plant Area

Fresh Water Pond

Main Office

CALYPSO POND

Phase 2 North Pit

Phase 2 Center Dump

Phase 2 South Pit

ROM Sizer

ROM Dump

FiQi-2

North Refuse Dump

North Dump Refuse Extension

North Pit

Centre Dump

South Pit

Subcrop Dump

South Dump Reduction Area

McPHERSON CREEK

TWP. 51 TWP. 50

RGE. 24 RGE. 23

Vista Mine Substation

Alta-Link 138 kV

Scale: 1cm = 100m

0 100 200 300 400 500

NAVIGATOR ENVIRONMENTAL & TECHNICAL SERVICES, INC.

PREPARED FOR: Coalspur

Vista Mine

Overview Map
Phase 1 and Phase 2 Areas

REVISIONS	DATE: 5/24/2018	PROJ NO: Coalspur\Vista Phase II\Project Description\Map
	DWN BY: TECH:	CHK BY: DWG NAME: Ph2 Map.dwg
	FIELD BOOK:	PS: 1:1 DWG SCALE: 1cm = 200m
	CONTOUR INTERVAL: 1 m	SHEET: 1 OF 1