

Environmental Protection Operations Directorate
Prairie & Northern Region
9250 49 Street
Edmonton, AB T6B 1K5



ECCC File: 4194-10-3/6324
CIAR Reference: 80731

June 8, 2020

Via email: Shelly.Boss@canada.ca

Shelly Boss
Impact Assessment Agency of Canada
Canada Place
Edmonton, AB T5J 4C3

Dear Shelly Boss:

RE: Request for Federal Expert Advice - Designation Request for Proposed Expansion Activities of the Vista Coal Mine Project under the *Impact Assessment Act*

Environment and Climate Change Canada (ECCC) has reviewed the information provided by the Impact Assessment Agency (the Agency) regarding the proposed Vista Coal Mine Phase II Expansion Project and Underground Test Mine Project, which are proposed by Coalspur Mines (Operations) Limited (the Proponent).

ECCC previously provided advice to the Agency regarding the Designation Request for **Coalspur Mines Limited's proposed Vista Coal Mine Phase II Project**. Therefore, the recommendations we provided on September 20, 2019 may be considered by the Agency along with the comments provided in this letter, in addition to the information in the attached Federal Authority Advice Record. Unless specifically stated otherwise, the advice provided herein pertains to the Underground Test Mine Project ('the Project').

ECCC's advice has been prepared to inform the Agency's recommendation to the Minister regarding designation of the Project pursuant to subsection 9(1) of the *Impact Assessment Act* (IAA). Specifically, ECCC has considered the following in preparing our advice:

- whether ECCC has a potential power, duty or function to exercise for the Project,
- relevant updates regarding potential power, duty or functions for the Phase II Expansion since we last provided information to the Agency on the related previous designation request,
- potential environmental effects within federal jurisdiction,
- potential effects and impacts and any associated regulatory mechanism through which these may be addressed.

Please note that Canada announced the launch of a strategic assessment to provide guidance on how future new thermal coalmine projects will be assessed under the *Impact Assessment Act* on December 20, 2019. More information is available at <https://www.canada.ca/en/environment-climate-change/news/2019/12/canada-launches-strategic-assessment-of-thermal-coal-mining.html>.

ECCC has identified specialist or expert information that may be relevant to the Minister's decision below. Once the scope of the Project(s) and the assessment process are established



by the Agency, this list may change as additional activities or components could come into scope. Our expert advice is based on ECCC's mandate in the context of the *Species at Risk Act* (SARA), the *Migratory Birds Convention Act*, and the *Canadian Environmental Protection Act 1999* (CEPA).

Species at Risk

The information ECCC reviewed related to the Underground Test Mine refers to observations of some Species at Risk (SAR) in the area, including limited information on the general habitat types within the Project area that may be affected by cumulative effects. For example, the Proponent notes that little brown myotis are commonly abundant in the Project study area, but information regarding surveys for hibernacula or mitigation measures to address potential effects to this species were not included. Ranges of other SAR overlap the Project area for both the Underground Test Mine and Phase II Expansion projects, which have a similar footprint (see Table 1). The Proponent must consider the presence of suitable habitat for these species, and the need to avoid potential effects to these species. Hibernacula of little brown myotis and northern myotis, which are critical habitat, have been mapped and identified in the Hinton area, near Cadomin. In addition, the Underground Test Mine Project may disturb residences, dens, and hibernacula outside of the mine footprint due to blasting and vibration associated with underground mining activities.

Table 1: Species at Risk (SAR) Ranges that overlap with project areas for Coalspur Mines (Operations) Ltd.'s proposed Vista Phase II Expansion and Underground Test Mine Projects.

Common Name	SARA Status
Barn Swallow	Threatened
Common Nighthawk	Threatened
Evening Grosbeak	Special Concern
Grizzly Bear	Special Concern
Gypsy Cuckoo Bumble Bee	Endangered
Horned Grebe	Special Concern
Little Brown Myotis	Endangered
Nine-spotted Lady Beetle	*Endangered (COSEWIC)
Northern Myotis	Endangered
Olive-sided Flycatcher	Threatened
Rusty Blackbird	Special Concern
Short-eared Owl	Special Concern
Transverse Lady Beetle	*Special Concern (COSEWIC)
Western Grebe	Special Concern
Western Toad	Special Concern
Wolverine	Special Concern
Yellow Rail	Special Concern

**species has been assessed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) but is not presently listed in Schedule 1 of the Species at Risk Act.*

Wildlife

There is limited information in the Project Description concerning the effects of the Underground Test Mine Project on wildlife, which are described as changes to habitat quantity and quality in the mine area, and changes to the final landscape at closure. Project-specific surveys for species at risk are not included, and no wildlife habitat mapping or wildlife monitoring information is available. ECCC therefore cannot assess the additional effects on habitat quality and quantity related to the Underground Test Mine. The description of potential Project effects on wildlife is also incomplete. The following environmental effects were not clearly or fully identified or discussed in the information available (note that this list is not necessarily exhaustive):

- Effects of the Project on key wildlife habitat for migratory birds and SAR as a result of sensory disturbance from blasting and underground mining;
- Effects of the Project on wildlife habitat including increases in mine footprint, and revisions to reclamation sequencing and final landscape at closure; loss/alteration of 0.83 hectares of fen wetland; and potential subsidence risk from underground mining;
- Effects of the Project on wildlife movement, through either sensory disturbance (noise, vibration) during underground working and physical blockage of wildlife movements in adjacent habitats and the result of changes in reclamation landscape at closure;
- Effects of the Project on wildlife mortality, through exposure to deleterious substances in waste management areas or spills from deleterious substances reaching waters or areas frequented by wildlife, through air emissions and secondary receptors such as contaminated vegetation; or through collisions with vehicles or infrastructure, or through other project activities (e.g., clearing, digging, etc.)
- Effects of the Project on wildlife health related to larger coal stockpiles, including direct or indirect exposure to air emissions, particulate deposition on secondary receptors such as vegetation and water that are consumed by migratory birds, SAR or other wildlife or changes to water quality in project water management components (ponds) and receiving waterbodies
- Effects of the Project on local and regional wildlife populations (e.g., population size and trend), through combined effects of the Project on wildlife habitat, wildlife mortality, wildlife movement and wildlife health;
- Effects of the Project on all federally listed species at risk that are likely to occur in the local and regional study areas, based on field studies, species distribution, and habitat availability;
- Effects of the project on all COSEWIC (Committee on the Status of Endangered Wildlife in Canada) listed species that are likely to occur in the local and regional study areas, and that may be listed under the *Species at Risk Act* in the near future;
- Effects of the Project on critical habitat for SAR, if any;
- Effects of the Project on traditional use of wildlife species by Indigenous people.

Migratory Birds

Although the Proponent has asserted that the scope of habitat effects will be relatively small in comparison to the overall mine footprint (10ha), project-specific surveys for migratory birds, including migratory birds that are species at risk, are not included, and no wildlife habitat mapping or wildlife monitoring information is available. ECCC therefore cannot assess the additional effects on migratory birds including species at risk from the Project.

Air Quality

ECCC previously advised that the Phase II Expansion Project could approximately double the emissions of greenhouse gases (GHGs), NO₂, PM_{2.5}, dust, and other Criteria Air Contaminants, relative to the already approved mine activities. Additional activities specific to the operation of the Underground Test Mine Project may also result in additional GHG emissions, such as fugitive methane, which is associated with underground mining.

The draft Strategic Assessment of Climate Change (SACC) provides interim guidance related to climate change throughout the impact assessment process. The draft SACC outlines information that the proponent should provide during the impact assessment process on GHG emissions, GHG mitigation measures, and climate change resilience; the circumstances in which an upstream GHG assessment will be required; and when additional information such as a determination of the best available technology/best environmental practice will be required.

Further information can be found in the draft Strategic Assessment of Climate Change (SACC) <https://www.canada.ca/en/services/environment/conservation/assessments/environmental-reviews/get-involved/draft-strategic-assessment-climate-change.html#toc32>

Water Quality

Potential effects of the proposed Project may include changes to surface water quality including:

- Effects to surface water quantity and quality resulting from may occur as the result of the interaction between groundwater-surface water due to underground mining and dewatering,
- Additional water management and volumes of effluent discharge, potentially contributing to increased contaminant loadings to the receiving environment,
 - Increased runoff and seepage from increased size of coal stockpiles and waste rock dumps,
 - Any increases in discharges and releases (including seepage, leachate, and spills) of wastewater, contact water, process water, effluent, surface runoff and storage pond contents,
 - Erosion and sedimentation (associated with construction activities, water crossings, roads, and diversion ditches),
 - Increased nitrogen releases associated with the use of nitrogen-based explosives.

Environmental Emergencies

The proposed Underground Test Mine Project includes underground access roads, a tailings impoundment area dam, a wastewater-holding pond near a natural stream, a wastewater treatment facility, ammonium nitrate pile, emulsion bin storage area and other hazardous waste yards, a raw coal storage and handling area, topsoil stockpile area, mobile equipment and transportation trucks. There is potential for adverse environmental effects from accidents and malfunctions, such as a failure of the dam, spills from the wastewater-holding pond, failure of the water treatment system, coalbed methane releases, coal dust explosions, head wall collapses,

equipment and vehicle accidents, and spills of methanol, diesel fuel, or other explosive materials such as ammonium nitrate/fuel oil mixture.

Conclusion

ECCC is of the view that, when considered in addition to our previous advice related to the Phase II Expansion Project, the activities associated with the Underground Test Mine Project may collectively result in adverse environmental effects as defined under the *Impact Assessment Act*, including potential effects on species at risk, migratory birds, water quality, and air quality.

Should you require further information, please do not hesitate to contact Orlagh O'Sullivan, A/Senior Environmental Assessment Coordinator, at (431) 276-4506 or Orlagh.OSullivan@canada.ca

Sincerely,

<original signed by>

Margaret Fairbairn
A/Regional Director
Environmental Protection and Operations Directorate
Prairie Northern Region

cc: Jody Small, A/Head, EA South, EPOD, ECCC
Orlagh O'Sullivan, A/ Senior EA Coordinator, EA South, EPOD, ECCC
Gayle Hatchard, Senior EA Coordinator, EA South, EPOD, ECCC
Abigayle Blackmore, EA Coordinator, EA South, EPOD, ECCC

ATTACHMENT

Federal Authority Advice Record: Designation Request under IAA

Response due by June 8, 2020

Proposed Expansion Activities of the Vista Coal Mine Project

Department/Agency	Environment and Climate Change Canada
Lead Contact	Orlagh O'Sullivan
Full Address	VIA Rail Station 123 Main Street, Winnipeg, MB R3C 1A3
Email	Orlagh.Osullivan@canada.ca
Telephone	
Alternate Departmental Contact	Jody Small: Jody.Small@canada.ca

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1. Has your department or agency considered whether it has an interest in the Projects; exercised a power or performed a duty or function under any Act of Parliament in relation to the Projects; or taken any course of action (including provision of financial assistance) that would allow the Projects to proceed in whole or in part?

Specify as appropriate.

Based on the limited information provided, ECCC is not able to determine whether we have an interest in the project.

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2. Is it probable that your department or agency may be required to exercise a power or perform a duty or function related to the Projects to enable it to proceed?

If yes, specify that power, duty or function and its legislative source.

ECCC does not expect that it will be required to exercise a power or perform a duty or function related to the Project to enable it to proceed based on the Project Notifications. Once the Agency establishes the scope of the project and of the assessment, ECCC may need to issue permits related to the *Migratory Bird Convention Act* (MBCA) and *Species at Risk Act* (SARA) as additional project activities or components could come into scope.

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3. If your department or agency will exercise a power or perform a duty or function under any Act of Parliament in relation to the Projects, will it involve public and Indigenous consultation?

Specify as appropriate.

Consultation with all affected First Nation and Métis Nation communities may be required, if ECCC is required to issue a SARA permit.

4. Has your department or agency had previous contact or involvement with the proponent or other parties in relation to the Projects?

Provide an overview of the information or advice exchanged.

ECCC has not been involved with the Proponent or other parties that would be relevant to the assessment of this Project. However, ECCC has provided a previous response to the designation request on September 20, 2019. regarding Coalspur Mines Limited's proposed Vista Coal Mine Phase II Project, Alberta.

Margaret Fairbairn

Name of departmental / agency
responder

A/ Regional Director, Environmental
Protection Operations

Title of responder

June 8, 2020

Date