

Coalspur Mines Phase I Vista Test Underground Mine and Vista Mine Phase II Expansion Projects - Summary of Issues

This document provides a high-level summary of the issues submitted to the Impact Assessment Agency of Canada on the Phase I Vista Test Underground Mine and Vista Mine Phase II Expansion Projects (the Projects) during the comment period on the Initial Project Description submitted by Coalspur Mines (Operations) Ltd. (the proponent). The issues submitted during this comment period generally reflected the concerns raised during the designation request processes. Original submissions are posted on the Canadian Impact Assessment Registry (Reference Number # 80731). The issues highlight information needs to support the Agency's decision on whether an impact assessment is required under section 16 of the *Impact Assessment Act* and— if an assessment is required—to inform the planning phase documents and further assessment. Categories are listed in alphabetical order.

Accidents and Malfunctions
Clarity on the nature and potential for accidents and malfunctions that may occur as a result of the Projects, such as leaks, spills or breach from tailings containment pits, fuel spills and uncontrolled explosions and corresponding adverse effects to air quality, water quality, wildlife and wildlife habitat such as from the accidental release of high concentrations of ammonia, hydrocarbons, and other contaminants to surrounding waters.
Clarity on the design plans, spill prevention, preparedness, response measures, monitoring systems, response capacities, and emergency management and notification plans (including to Indigenous communities) that will be implemented to prevent and respond to accidents and malfunctions, including potential releases from or catastrophic failure of tailings ponds and other water and waste containment areas.
Alternative Means of Carrying Out the Project
Clarity on whether underground mining could be used as an alternative to Phase II open pit mining that could reduce effects on fish and fish habitat, and aquatic species at risk, and whether Phase II open pit work could be delayed until it is determined if the VTUM testing is successful.
Details on the nature of 'alternative tailings management and treatment' or 'alternate reclamation methods' being considered.
Atmospheric Environment
Clarity on potential changes to air quality due to emissions of sulfur oxides, nitrogen oxides, carbon monoxide, volatile organic compounds and other hydrocarbons, particulate matter, metals and polycyclic aromatic compounds; their deposition in surrounding environments; the resulting potential adverse local, regional and cumulative effects to human health, terrestrial and aquatic ecosystems; and the standards to assess potential Project effects to air quality, and planned mitigation measures.
Climate Change and Greenhouse Gas Emissions
Potential for the Projects to contribute to climate change due to greenhouse gas (GHG) emissions from the Projects, removal or disturbance of carbon sinks, including forested areas and peatlands, and through direct removal or indirectly through changes to regional hydrology, and implications regarding whether it may hinder or contribute to the Government of Canada's ability to meet its commitments in respect of climate change.
Concern regarding the incompatibility of thermal coal mining with efforts to limit global temperature rise.
Consideration of the Draft Strategic Assessment of Thermal Coal Mining, and the Strategic Assessment of Climate Change (SACC; 2020), and inclusion of the information requirements on GHG emissions estimates, carbon sinks, and alternative means in SACC Section 4.1.

Clarity on GHG emission reduction strategies for the Projects.
Cumulative Effects
Effects of cumulative loss of land available and appropriate for Indigenous ceremonies and traditional land uses, including quiet enjoyment.
Need for identification of cumulative effects of the Projects in combination with other developments, such as contaminant loadings in downstream environments, and corresponding potential effects to the environment.
Potential cumulative effects of the Projects on traditional ways of life and the practice of Indigenous rights, in a part of Indigenous traditional territory that is already highly impacted, privatized and fragmented.
Potential cumulative effects to important ecosystems (i.e., Eastern Slopes, continental corridor of the Rocky Mountains) and interprovincial river systems including impacts to headwaters, wildlife and species at risk in combination with abundant industrial activity and linear disturbance.
Need for cumulative effects to be addressed within the context of existing levels of land use in the region and regional land use plans, and the potential for further cumulative development pressure.
Economic and Social Conditions
Possibility of international economic benefits of the Projects due to the use and transportation of responsibly mined coal.
Potential effects to socioeconomic factors such as cost of living, housing prices, local economy, emergency services, traffic, noise, barter and sustenance economics/activities.
Potential effects of the Projects on energy-related economic conditions, including royalties, taxation, commodity prices, financial indicators, investment trends and competition.
Concerns about the proponent's hiring strategies and clarity on if Canadians will receive priority employment.
Clarity on economic justification and viability of the Projects, and accuracy of the economic projections taking into consideration benefits for all stakeholders over the long term, and the potential for effects on tourism, water quality, wildlife, and Indigenous communities.
Clarity about long-term economic impacts of the Projects' reclamation, remediation and water treatment costs; taking into consideration selenium and other contaminants potentially entering the waterways.
Inclusion of a market analysis of projected demand for thermal coal that is consistent with global decarbonization and achieving the goals of the Paris Agreement.
Concerns about the financial security of the Projects and the potential economic, environmental, and health impacts on local communities and the province of Alberta, including the company's ability to meet reclamation liability payments and commitments, or their ability to address any emerging environmental issues.
Clarity on what the course of action will be if the underground test mine does not prove to be economically feasible.
Effects of the Environment on the Project
Potential effects of climate change on the Projects that could lead to accidents and malfunctions or changes in baseline conditions, and the need for measures or design features to increase the resilience of the Projects to climate change, such as fish and fish habitat offsetting plans.
Information on the risk of seismic hazards and landslides through a seismic hazard assessment and landslides/slope stability assessments, as it relates to Project activities.

Fish and Fish Habitat
Potential effects to fish and fish habitat, including populations within McPherson Creek and other downstream waterbodies, and related impacts to the rights of Indigenous peoples from changes to water quantity; water quality, including concentrations of heavy metals and other contaminants from coal dust, slag, timber harvesting or the coal mining process and potential exposure of acid-generating rock to air and water; and regional hydrology due to the nature of the Projects' large scale landscape alteration. Include potential effects to fish and fish habitat via effects to water quality at all mining stages from erosion, sedimentation, runoff, deposition of airborne particulates, surface-groundwater interactions, contact water (e.g., wastewater, effluents, runoff, seepage, discharges and spills), and other mine-related releases.
Potential effects, including cumulative effects, to fish and fish habitat, including death of fish by means other than fishing, and potential impacts to aquatic species at risk (e.g. Bull Trout, Athabasca Rainbow Trout), their residences and critical habitat in the vicinity of the Projects.
The proponent requires an Application for Authorization under the <i>Fisheries Act</i> for the Projects. Information related to effects to fish required by Fisheries and Oceans Canada, detailed in their May 2021 submission during the public comment period on the Initial Project Description, should be addressed in the response to this summary of issues.
Clarity on the specific locations Athabasca Rainbow Trout have been captured in relation to Phase II, the fish habitat that will be impacted, assessment of potential for death of fish, and methods to avoid and mitigate impacts to fish and fish habitat, and any proposed offsetting program or plan.
Need to address the potential for the Projects to jeopardize the survival and recovery of Athabasca Rainbow Trout via an assessment based on recovery strategies, action plans, and recovery potential assessments and modelling.
Need to consider effects of the current mine on water quality and quantity relative to pre-mining conditions, on fish populations and fish habitat, including aquatic species at risk and their critical habitat.
Potential for population level effects to fish, including aquatic species at risk, from the discharge of selenium.
Potential effects to fish and fish habitat from the VTUM due to groundwater dewatering, flow increases due to water discharge required to dewater the VTUM, and any associated water quality changes.
Potential effects to fisheries access and use of fish species harvested by Indigenous peoples (such as whitefish, northern pike, walleye, arctic grayling, trout, suckers, jackfish) and fish that are culturally significant to Indigenous peoples (such as Rainbow Trout and Bull Trout) that occur in close proximity to and downstream of the Projects, including McPherson Creek.
Follow-up and Monitoring Programs
Need for details regarding the proponent's proposed Environmental Protection Plan(s) for the Projects and follow-up and monitoring measures proposed to verify the accuracy of predictions related to potential effects and to ensure that mitigation measures are effective.
Information on monitoring plans, including local Indigenous monitors prior to and during construction, operation, decommissioning, and reclamation of the Projects to conduct sampling and monitor Project effects, particularly related to water.
Clarity on plans and timelines to reclaim wetlands for medicine and habitat.
Need for timely reclamation and revegetation to equivalent pre-disturbance land capability, including engagement with Indigenous peoples on the proposed reclamation plan. The need for effective closure plans related to surface and groundwater was highlighted.
Clarity on effects of underground mining on the timely progression of reclamation in Phase I.

Human Health and Well-Being
Potential effects of the Projects on mental and physical health of residents and visitors, including enjoyment of recreational activities.
Clarity on the locations of all potential human receptors in the local and regional study area, including residences and sensitive receptors, the distance of these receptors from key Project components and activities, and potential effects to human health at these receptor locations from changes to air quality, water quality, noise levels, and visual disruptions.
Potential effects and cumulative effects to human health and well-being due to increased noise levels from Project activities such as machinery use, blasting, drilling activities, and increased traffic, including timing of activities and proposed mitigation and monitoring plans.
Inclusion of a human health risk assessment in the impact statement.
Indigenous Consultation and Engagement
Need for continued consultation with Indigenous groups to strengthen relationships and build partnerships through the regulatory process including the post-decision phase.
Need to work with Indigenous peoples in a way that supports free, prior, and informed consent.
Need for proper consultation and engagement to be carried out in a timely, effective, responsive, transparent, accessible, predictable, fair, flexible, and respectful manner throughout the impact assessment process, including supporting the capacity of Indigenous groups to participate.
Recommend the establishment of an Indigenous Advisory Group for the Projects made up of representatives from all impacted Indigenous groups, including to provide and implement mitigation measures.
Need for consultation and engagement to be tailored and appropriate for each unique Indigenous group and their consultation and cultural protocols.
Opportunity for all Indigenous groups that are identified by the Crown as potentially affected to discuss potential benefits of the Projects, such as financial support, employment, education and training.
Need for Project-specific consultation and engagement activities to be undertaken; past consultation for the existing Vista Mine should not be used as a substitute for Project-specific consultation and engagement.
Indigenous Knowledge
Potential for impacts from the Projects on the intergenerational transfer of Indigenous knowledge and skills, including the potential extinction of local medicinal plants. Recommend documentation of photos of plant specimens and their usage and harvest methods to enable reforestation after the Projects' life and during reclamation.
Need for Nation-specific Indigenous worldviews and knowledge in the Project Description and Impact Statement.
Indigenous Peoples' Current Use of Lands and Resources for Traditional Purposes
Potential effects to the current use of lands and resources for traditional purposes, and the rights and cultural and spiritual practices of Indigenous peoples, including their connection to the land, through loss or degradation of undisturbed lands within the Projects' footprint, including the Projects' contribution to the cumulative loss of undisturbed lands in the region; access limitations to the Projects' footprint; the Projects' contribution to competing land uses in the region; removal of timber and forests; avoidance of areas or resources due to real or perceived contamination, sensory disturbance, or the presence of workers; and effects to fish, wildlife, and plant species of cultural importance.
Clarity on the nature of potential effects (quality, abundance, and location/access) and Proponent's proposed approach to mitigate effects to culturally-significant and medicinal plant species, including from dust deposition, soil, water, or air contamination, and land clearing.

Include what avoidance measures, timing constraints, and environmental stewardship and best management practices will be employed, and opportunities for Indigenous elders and land users to harvest culturally important and medicinal plant species prior to site clearing.
Potential impacts to Indigenous peoples' health and the current use of the land for traditional purposes and the practice of rights, such as fishing, hunting and harvesting medicinal plants and duck eggs, from the accidental or expected release of environmental contaminants and/or deleterious substances to the environments including soil, water, and air.
Potential effects to wildlife movement and subsequently hunting by Indigenous peoples due to an increase in traffic and noise resulting from the Projects.
Description of the traditional land uses occurring on the proposed Projects' footprint, including culture camps, ceremonial grounds.
Need to establish measures to mitigate potential effects to Indigenous peoples' culturally important plant species and medicinal plants including limiting soil stripping to the extent possible to limit disturbance to plant roots; limiting the use of chemical application, including herbicides; retaining riparian vegetation where possible to limit the loss of aquatic and semi-aquatic plants; and utilizing native plant species during reclamation.
Indigenous Peoples' Health and Well-being
Potential effects to wildlife health and the quality of country foods through uptake and bioaccumulation of selenium and other contaminants released from the Projects, and subsequent effects to Indigenous peoples' health through consumption and use of these resources.
Potential Project and cumulative impacts to Indigenous peoples' mental and physical health, well-being, through loss of connection and solace in the land due to dramatic environmental change.
Potential impacts to the health of Indigenous peoples through consumption or use of drinking water, country foods, and medicinal plants exposed to contaminants from the Projects in water, air, or soil. Include consideration of impacts to food security and the associated impacts to health and well-being.
Need for specific and disaggregated information on social and health indicators for Indigenous communities to understand potential effects of the Projects on Indigenous peoples and their rights.
Indigenous Peoples' Rights
Potential impacts to rights of Indigenous peoples due to effects to fur-bearing species.
Need to consider criteria and information beyond Traditional Land Use studies in the assessment of impacts to the rights of Indigenous peoples, including the availability of lands and resources for the exercise of rights; the use of thresholds or criteria that describe levels or conditions relating to an Indigenous community's ability to meaningfully exercise their rights; and the need for consultation and engagement with Indigenous communities to understand their views regarding potential Project impacts to their rights.
Consideration of all biophysical effects that have linkages to the meaningful practice of Indigenous rights.
Indigenous Peoples' Social and Economic Conditions
Clarity on the number and proportion of direct or indirect employment and contract opportunities that will be generated by the Projects and available to Indigenous peoples and businesses.
Clarity on the anticipated economic benefits of the Projects for Indigenous peoples, including whether revenue sharing agreements or other agreements with additional Indigenous communities will be pursued should the Projects be allowed to proceed.
Need to ensure the availability of adequate and affordable housing or lodging for Indigenous employees of the Projects.

Need to consider potential impacts to the rights of Indigenous peoples when assessing the potential social and economic benefits of the Projects to Indigenous peoples; anticipated Project benefits cannot be determined in isolation of consideration of potential adverse effects.
Indigenous Peoples' Spiritual, Physical, and Cultural Heritage
Potential impacts to physical and cultural heritage and structures, sites, and things of historical, archaeological, paleontological, or architectural significance to Indigenous communities, including cultural and ceremonial sites, through land disturbance associated with construction and operation of the Projects.
Need for a Cultural Impact Assessment(s) and thorough assessment of potential impacts to the rights of Indigenous peoples to understand potential impacts of the Projects to Indigenous peoples' culture and way of life, with understanding that each Indigenous group is unique.
Potential impacts to Indigenous peoples through the loss of heritage, culture, and identity, and the ability to ensure cultural continuity through intergenerational knowledge transfer due to effects of the Projects to wildlife and wildlife habitat and plant species of cultural significance.
Need to preserve and protect any historical resources of importance to Indigenous communities discovered within the Projects footprint, notify Indigenous groups of any chance finds, and return these resources to Indigenous communities.
Importance of identification of known and potential gravesites and other sites of physical or cultural importance that could be impacted by the Projects
Need to acknowledge the interconnected nature of effects to Indigenous peoples and their rights; each assessment of effects conducted as part of the impact assessment process (e.g., effects to Indigenous health, social conditions, physical and cultural heritage, etc.) cannot be done in isolation and must be considered when assessing impacts to rights.
Information on recent and upcoming logging within the Projects' footprint, including impacts to cultural sites and moss lands.
Migratory Birds and their Habitat
Potential effects to migratory birds, including habitat alteration, increased mortality, effects to health through exposure to deleterious substances, sensory disturbance, habitat fragmentation and movement obstruction.
Potential effects of the Projects and cumulative effects to migratory birds from sensory disturbance (i.e., noise, vibrations, light) and the presence of workers, such as avoidance of habitats adjacent to the Projects and disorientation or attraction to the Projects area, resulting in injury or death.
Clarity on which species of migratory birds listed in the <i>Species at Risk Act</i> may be impacted by the Projects. Concerns about the potential effects to species of cultural significance to Indigenous peoples, including waterfowl and eagles.
Further description of the bird species expected to be most affected and the proposed avoidance, mitigation and offset measures. Include potential for more severe effects to migratory birds that are also species at risk, species where habitat is sensitive to disturbance (e.g., wetlands), or where there is already a high degree of cumulative effects to habitat or individuals.
Navigable Waters
Clarity on construction methodology including water body crossings, watercourse crossing locations, riparian ownership, usage of water, existing infrastructure, water intake timing and volumes of water withdrawals to determine requirement to exercise a power or duty or functions under the <i>Canadian Navigable Waters Act</i> .

Species at Risk, Terrestrial Wildlife, and their Habitat
Potential effects of the Projects and cumulative effects to wildlife and their habitat, including a reduction in wildlife population density and wildlife health, and hunting rights of Indigenous peoples due to habitat loss and fragmentation, and potential contaminants from the Projects.
Need for measures to mitigate potential effects to species at risk including avoiding Project activities during species-specific timing windows; reducing the Projects' footprints to the extent possible to limit habitat loss; establishing a no-work buffer greater than 100 metres around McPherson Creek; and working with federal and provincial regulators to develop additional mitigation measures, as appropriate.
Potential effects to forest habitats, including land use and reclamation, such as hydrology and wetlands, soil (quality and quantity), biodiversity, species at risk and species with cultural values including the Little Smoky and A La Peche caribou herds.
Clarity on species at risk, beyond birds or fish, that could occur in the Projects Area, information on the locations or occurrences of each species at risk, their use of habitat and critical habitat within the Projects area, and appropriate measures included to avoid or mitigate impacts to them.
Potential for acute or chronic effects to wildlife from interaction with harmful substances that may enter the environment due to the Projects, including effects of increased selenium concentrations on species at risk, ungulate species, fish, and migratory birds.
Vulnerable Population Groups (Gender Based Analysis Plus)
Potential positive and negative impacts of the Projects on diverse groups of people and across the Projects' lifecycle, including clarity on efforts to narrow gender gaps and other disparities, as demonstrated through gender based analysis plus (GBA+) assessment, and means of mitigation including a GBA+ implementation framework.
Collection of disaggregated baseline data and gender analysis, including potential effects by the Projects, on communities potentially affected by the Projects, including information such as social, economic and health impacts, gender and poverty, division of labour, consideration of key indicators, subgroups within the population.
Clarity on the inclusivity of engagement and consultation activities including a description of plans to adequately consult with women or diverse groups in a transparent manner such that it will support the identification of different needs including negotiations and agreements.
Potential effects to employment; access to and use of resources, such as education, information and services; additional detail on plans to implement local employment and policies and planning; and increase training, employment and retention of women and other under-represented groups.
Identify and assess potential issues of gender-based violence as a result of the Projects, such as sexual harassment, violence against women, human trafficking, and means to mitigate and avoid these potential issues.
Clarity on policies to reduce discrimination against Indigenous people identifying as Lesbian, Gay, Bisexual, Transgender, Queer, Questioning, Intersex, Asexual, Two-Spirit, etc. (LGBTQIA2S+) and to support such individuals in accessing and retaining employment, training, and career development.
Need for policies and procedures, including Cultural Awareness Training, to prevent harassment, violence, and discrimination against Indigenous peoples, including Indigenous employees of the Projects, based on sex, gender, race, and religion.
Waste and Waste Management
Clarity on the mine plan for wasterock management including potential constraints such as space availability in the McPherson pit for backfill.
Clarity on the proposed closed loop system associated with the McPherson Tailings cells and the potential for tailings breach and contamination of downstream watercourses, including to

rivers that are of significance to Indigenous peoples, such as McLeod River and Athabasca River.
Quantification is needed for the tailings pond volume associated with Phase II and the VTUM. Concern was noted related to the appropriateness of application of an approach that was not approved by the Alberta Energy Regulator.
Additional detail and proof of concept on potential toxicity associated with proposed end pit lake technology.
More information is needed on the treatment and reclamation of coarse and fine coal refuse.
Water – Groundwater and Surface Water
Potential effects to drinking water sources and effects to human health.
Potential adverse effects to groundwater and surface water quality and flows, groundwater-surface water interaction, and hydrological regimes of watercourses and water bodies due to mining activities at all stages and potential drawdown of the water table and reductions in flow volume. Include cumulative effects and potential for transboundary effects.
Potential impacts to traditional resource use, cultural/spiritual values of Indigenous people, including future generations, from potential effects to water and waterbodies in the region from the Projects, including McPherson Creek and McLeod River.
Clarity required for the source of water for the Projects, the amounts needed, and the end result of recycled water and tailings cells, planned or potential water releases from the 'South Dump', internal run-off, and the 'freshwater pond'.
Clarity on potential for selenium to enter surface or groundwater and corresponding potential effects to the environment, including on transboundary environments, and cumulative effects of selenium on land, water, wildlife, fish, migratory birds, and plants. Clarity on what studies and monitoring and management plans will be implemented.
Other
Need to verify the selection of valued components with Indigenous communities in the Impact Statement, particularly the indicators selected to assess potential impacts to the rights of Indigenous peoples and species of importance to Indigenous peoples.
Clarity on the amount of new linear disturbance (e.g., new access roads) that will be created and on reclamation or decommissioning of existing and future linear disturbance associated with the Projects.