

**In the matter of the
Environmental Assessment Act
S.B.C. 2002, c. 43
(Act)**

and

**In the matter of an
Application
for an
Environmental Assessment Certificate
(Application)**

by

**Teck Coal Limited
(Proponent)**

for the

**Fording River Operations Swift Project
(Project)**

Reasons for Ministers' Decision

On September 10, 2015 pursuant to Section 17(3)(c) of the *Act*, we, the Minister of Environment and the Minister of Energy and Mines (Ministers), issued an Environmental Assessment Certificate for the Project. This document sets out the reasons for that decision.

1 NATURE AND SCOPE OF THE DECISION

Section 17(3) of the *Act* sets out the parameters for our decision. We considered the Environmental Assessment Office's (EAO) assessment and recommendations, including whether the Province had met its duty to consult and, as appropriate, accommodate Aboriginal groups with respect to potential impacts of the Project on Aboriginal Interests.¹ We considered other matters we thought relevant to the public interest in making our decision on the Application.

2 MINISTERS' CONSIDERATIONS

2.1 EAO's Assessment

Teck Coal Limited (Proponent) applied for an Environmental Assessment Certificate (Certificate) for the Swift Project, an extension of the existing Fording River Operations (FRO) coal mine. The Project would use the majority of mine infrastructure in place at FRO, and construct additional pits, waste rock spoils and water management infrastructure. EAO, with advice from an advisory Working Group, reviewed the Proponent's Application, summarized its findings in the Assessment Report and provided detailed findings in the supporting Technical Report. Throughout the environmental assessment (EA), EAO worked closely with provincial ministries and agencies, federal departments, local governments and Ktunaxa Nation Council (KNC) to identify issues and seek ways to address these issues.

EAO proposed 19 EA Certificate conditions and described Project design aspects in the proposed Certified Project Description. EAO advised it was satisfied that proposed conditions and Project design would prevent or reduce potential negative environmental, social, economic, heritage or health impacts of the Project such that no significant adverse effects are expected. We concur with this finding.

EAO advised that it was satisfied that the Crown's duty to appropriately consult and accommodate Aboriginal groups had been discharged for the Project. We concur with this finding.

2.2 Recommendations of the Executive Director

EAO's Executive Director considered the Assessment Report and proposed conditions and design requirements. He recommended that an EA Certificate be issued for the Project.

¹ Asserted or established Aboriginal rights including title.

2.3 Key Strategic and Regulatory Considerations

Regional Water Quality Planning

In November 2014, the Minister of Environment approved the Proponent's Elk Valley Water Quality Plan (EVWQP), an area-based plan that will stabilize and reverse water quality concentrations of selenium and other contaminants in the Elk Valley watershed, including the Canadian portion of Lake Koochanusa. The objectives of the EVWQP are to ensure the protection of aquatic ecosystem health, management of bioaccumulation of constituents in the receiving environment, protection of human health and protection of groundwater, while at the same time allowing for continued sustainable mining in the Elk Valley. The Project is the first to initiate review of an EA Certificate Application with the approved EVWQP in effect.

Regulatory Context and Strategic Initiatives

In November 2014, the Ministry of Environment (MOE) issued a Valley-Wide Permit to the Proponent under the *Environmental Management Act* (EMA) to enable implementation of the EVWQP by authorizing and managing contaminants levels from mining activity in the Elk Valley. The Valley-Wide Permit sets out performance objectives, compliance points, discharge limits, monitoring programs and timelines. It also contains a number of conditions that MOE considered essential for the full and effective implementation of the EVWQP.

Also in November 2014, the Ministry of Energy and Mines (MEM) issued an amendment to the FRO *Mines Act* permit, to require the implementation of the EVWQP. The permit includes extensive adaptive management and research and development requirements.

The Proponent submitted the EA Certificate Application to EAO after the EVWQP was approved. The EVWQP and supporting permitting requirements were integrated into the EA, specifically the watershed-based approach to managing water quality effects.

In addition to the permitting requirements noted above, the Ministry of Forests, Lands and Natural Resource Management (FLNR) leads two regional strategic initiatives relevant to this EA, one related to regional fish habitat management planning, and the other related to cumulative effects management for the Elk Valley.

During the EA, EAO worked closely with the provincial agencies to ensure that the assessment appropriately considered the direction, regulatory requirements, and management objectives of the above-noted permits and initiatives.

2.4 Key Project-specific Considerations

EAO examined whether the Project would have adverse environmental, economic, social, heritage and health effects, as detailed in the EAO Assessment Report and Technical Report. The key issues in the EA were potential Project effects to water quality and aquatic health, and the direct and cumulative effects to fisheries and the terrestrial environment.

Potential effects to water quality and aquatic health

Water quality was a critical aspect of this EA because elevated concentrations of contaminants can impair growth and development of sensitive aquatic species. We understand that EAO required that the Proponent's EA Certificate Application had to reflect predictions, commitments and requirements of the EVWQP, because that work that had already undergone a rigorous science-based review. EAO also considered the EVWQP as satisfying the requirements for a cumulative effects assessment of water quality and aquatic health. We agree with this approach.

The EA evaluated the Project's effects on water quality and aquatic health, with a focus on impacts that could occur to sensitive aquatic species in the upper Fording River prior to construction of the two active water treatment facilities at FRO that are required by the EVWQP. We are aware that concentrations of selenium, nitrate and sulphate are elevated due to past mining practices and are predicted to continue rising over the next three years, even without the Swift Project. EAO identified that commencement of the Project would incrementally add contaminant loadings to the aquatic environment. Concentrations of selenium and nitrate are predicted to decrease in the upper Fording River starting in 2018 when the first of two required active water treatment plants is operational. The EA determined that the water quality effects in the period prior to EVWQP implementation could result in low-to-moderate decreases in reproduction and development of the most sensitive species of benthic invertebrates in localized areas, although the overall invertebrate populations (a food source for fish and birds) would remain sustainable. Prior to EVWQP implementation, nitrate and selenium levels could potentially contribute to some decrease in reproduction and early life stage development of Westslope Cutthroat Trout (WCT). By 2022, when the second active water treatment facility is operational at FRO, water quality concentrations are predicted to fall below levels where effects to WCT reproduction and survival would occur. We note that there are extensive EMA permitting requirements, applicable to this Project as well, for monitoring sensitive aquatic species prior to and after EVWQP implementation.

We agreed with EAO's conclusion that the EA Certificate conditions, in conjunction with substantial subsequent EMA permitting requirements, will effectively address and adaptively manage the Project's effects on water quality and aquatic health such that significant adverse effects will not occur.

Potential effects to Westslope Cutthroat Trout habitat and population

EAO identified residual adverse effects to habitat for Westslope Cutthroat Trout (WCT), the only fish species present in the upper Fording River. Development of the Project, and the EVWQP requirement to treat water affected by past and proposed mining practices, necessitate that portions of a small lake and eight small tributaries that provide habitat for

fish be removed/buried or dewatered in order to direct mining-affected water through the active water treatment facilities before returning the treated water to the Fording River.

Under the federal *Fisheries Act*, serious harm to fish habitat must be accounted for and an offsetting plan approved prior to the Project being granted federal authorization to proceed. The EA determined the residual adverse effects to fish habitat would not be significant as the Proponent must satisfy federal offsetting requirements. We understand that the Project-specific fish habitat offsetting plans are actively under development through a collaborative process between EAO, the Proponent, FLNR and KNC / Canadian Columbia River Inter-Tribal Fishery Commission, with input from Fisheries and Oceans Canada.

In recognition of concerns about cumulative effects of the loss of fish habitat, we note that the EMA Valley-Wide Permit requires the Proponent to complete a tributary evaluation and management program to evaluate the ecological value of tributaries and undertake measures to protect and restore critical tributary habitat. EAO also proposed a condition requiring the Proponent to prepare a plan responding to the forthcoming (early 2016) recommendations of the Proponent's three-year Upper Fording River Westslope Cutthroat Trout population assessment study.

We concur with EAO's assessment that the EA Certificate conditions, coupled with the water quality and tributary management conditions of the EMA Valley-Wide Permit and the regulatory requirements of the *Fisheries Act* will effectively address effects of the Project on WCT habitat population.

Potential effects to wildlife and terrestrial ecosystems

EAO identified that the Project would have residual adverse effects on old growth and mature forest, riparian ecosystems, and wetlands within the mine footprint and local study area. The EA determined that the loss of these ecosystems, although proportionally not large, would have measurable and long-term effects on the available habitat for wildlife and vegetation at a local to regional scale, when considered in the context of past industrial development-related losses in the Elk Valley. EAO concluded that the Project would not result in a significant effect to the resilience of these ecosystems or to wildlife and vegetation populations.

EAO proposed conditions requiring management plans for wildlife, invasive species, reclamation and biodiversity. We note that the Proponent has also initiated a corporate Biodiversity Program, to identify risks to biodiversity from their operations in the Elk Valley and to implement measures to avoid, minimize or offset losses. Because of the importance of the Proponent's Biodiversity Program in determining site-specific mine reclamation planning and potential biodiversity off-setting measures for impacts that cannot be fully mitigated, the EA Certificate conditions include the requirement for the Proponent to create

a Technical Advisory Group to provide scientific, technical and Aboriginal cultural input on biodiversity mitigation strategies and actions.

We are satisfied that the EA Certificate conditions, other regulatory requirements particularly under the *Mines Act*, and the Proponent's continued participation in the provincial Cumulative Effects Management Framework will effectively manage the Project's wildlife, vegetation and biodiversity impacts.

Coordinated approach to issue resolution

With regard to the key issues in the EA, we acknowledge substantial efforts were made by EAO, MOE, MEM, FLRN, and KNC to ensure that the potential impacts to important species and values were clarified and appropriately addressed through the EA or identified as priorities to be addressed in subsequent permitting. In addition to Project-specific EA Certificate conditions, EAO strove to coordinate with and strengthen existing regional initiatives and cumulative effects management programs. With regard to the Certificate conditions proposed to us, we note that EAO, MOE, MEM and FLNR will take a collaborative approach to the approval and implementation of management plans that are required to avoid and mitigate any adverse effects. We also note that many of the management plans explicitly identify the incorporation of traditional knowledge provided by KNC. We believe the approach taken in the EA demonstrates effective and efficient regulatory processes.

Aboriginal Consultation

EAO consulted deeply with KNC during the EA. KNC was highly engaged, working with EAO to clarify and address potential impacts from the Project on Aboriginal Interests and, as appropriate, recommend measures to mitigate or accommodate those effects. We are aware that many of the legally-binding conditions were informed by EAO's consultation with, and consideration of comments from, KNC.

British Columbia and KNC are parties to consultation agreements and economic development agreements that provide frameworks for community engagement and revenue sharing. We also understand that the Proponent and KNC are in negotiations towards a potential Impact and Management Benefit Agreement encompassing the Proponent's five Elk Valley coal mining operations, subject to a decision by Ktunaxa leadership.

2.5 Provincial and Community Benefits

EAO's Assessment Report identifies that the Project would provide local, regional, and provincial benefits. The Proponent provided estimates that the Project's initial capital cost for construction would be \$88.5 million, ninety percent of that in BC, and it would provide about \$40 million per year in total provincial tax revenue. The Project would also continue to sustain the workforce of approximately 1,000 people at FRO, when the currently-

permitted coal resources are depleted. Through the Elk Valley Property Tax Sharing Agreement, the Project, in conjunction with the Proponent's other operations in the Elk Valley, would continue to contribute important economic and social benefits for local and regional communities.

3 CONCLUSION

After consideration of EAO's assessment findings, the Certified Project Description and recommended conditions of the proposed EA Certificate, and the Recommendations of the Executive Director, and having regard to our responsibilities under the Act, we have issued an EA Certificate for the Project. The EA Certificate includes legally enforceable conditions and specifies the Project design parameters. These give us confidence to conclude that the Project will be constructed, operated and decommissioned in a way that no significant adverse effects are likely to occur. We note that the Project will be subject to applicable permits and authorizations before the Project can proceed.



Honourable Mary Polak
Minister of Environment



Honourable Bill Bennett
Minister of Energy and Mines

Signed this 10th day of September, 2015