

# **EAO's Assessment of an Application for Certificate Amendment**

*Fording River Operations – Swift Project  
EA Certificate #M15-02*

*Amendment #2, Greenhills Operations North Waste Spoil*

**Requested by:**  
**Teck Coal Limited**

**August 24, 2017**

*Pursuant to Section 19 of the Environmental Assessment Act, S.B.C. 2002, c.43*

## 1. OVERVIEW OF PROPOSED AMENDMENT

On September 10, 2015, Teck Coal Limited (Teck) was issued Environmental Assessment (EA) Certificate #M15-02 (the Certificate) under the *Environmental Assessment Act* (the Act) for the Fording River Operations Swift Project (the Swift Project). The Swift Project is an open pit coal mine, located in the East Kootenay region of southeastern British Columbia (BC), approximately 20 kilometres (km) northeast of Elkford, BC.

On May 19, 2017, Teck submitted an application to the Ministry of Energy, Mines & Petroleum Resources (EMPR) to amend the *Mines Act* Permit for its Greenhills Operations (GHO) which is located adjacent to the south side of the Swift Project. The proposed GHO *Mines Act* Permit amendment would allow Teck to deposit approximately 31 million bank cubic meters (Mbcm) of waste rock from GHO's North Spoil Project on existing GHO waste rock spoil, a portion of which (28 hectares [ha]) is located within the Swift Project. EMPR identified the need to amend the Swift Project Certificate as well.

On July 5, 2017, Teck submitted an application to the Environmental Assessment Office (EAO) to amend the Swift Project Certificate (the Amendment Application) under Section 19 of the Act. The Amendment Application proposes to modify the Certified Project Description (CPD) to allow Teck to deposit 13 Mbcm (of the total 31 Mbcm) of waste rock from GHO's North Spoil Project, within a 28 ha area of the Swift Project. This previously disturbed area is an existing spoil used for the storage of waste rock from the Swift Project.

## 2. AMENDMENT REVIEW PROCESS

The EAO determined that the Amendment Application was a Typical Amendment based on a material but limited change to the Swift Project.

Following the EAO's review of the Amendment Application for completeness, the Amendment Application was accepted for review on July 12, 2017.

A public comment period was not held. The level of public interest and the likely level of impact of the proposed changes were viewed as low.

The Ktunaxa Nation Council (KNC) was consulted at the deep end of the Haida spectrum and the Shuswap Indian Band (SIB) was consulted at the notification level as described in section 4 on Indigenous Consultation.

An advisory working group (WG) made up of representatives from KNC, the Ministry of Environment & Climate Change Strategy (ENV), Ministry of Forests, Lands, and Natural Resource Operations and Rural Development (FLNR), and Ministry of Energy, Mines and Petroleum Resources (EMPR) reviewed the Amendment Application. The Regional District of East Kootenay and the Districts of Elkford and Sparwood were invited to participate in the review but did not respond.

The Amendment Application was provided to the WG for review on July 12, 2017, with the opportunity to provide comments until July 26, 2017. The EAO received responses from EMPR, ENV, and FLNR confirming they had reviewed the Amendment Application and did not have comments. However, ENV did request further information and clarification from Teck. KNC submitted comments on the Amendment Application, seeking clarification on waste rock volumes, water quality, and reclamation. The EAO required Teck to respond to all WG comments during the course of the review of the Application. The WG comment tracking table is available on the EAO's website.<sup>1</sup>

A draft of the EAO's Assessment Report was provided to WG members on August 4, 2017. The EAO received minor comments on the Assessment Report from KNC on August 18, 2017, which have been addressed in this document. The EAO did not receive any comments or concerns from other WG members.

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<sup>1</sup> <https://projects.eao.gov.bc.ca/p/fording-river-operations-swift/docs?folder=99>

### 3. SUMMARY OF ISSUES AND EFFECTS

The WG members reviewed the Amendment Application and did not identify any issues or concerns. The information and clarification that ENV requested, and Teck's responses are provided below and in the WG comment tracking table. The conditions in the Certificate are expected to mitigate the incremental adverse effects such that residual adverse effects beyond what were assessed during the EA for the Swift Project and reported in the Elk Valley Water Quality Plan (EVWQP) are not expected and no significant adverse effects are identified for the proposed amendment.

#### *Water Quality*

ENV confirmed that despite the information lacking in the Amendment Application pertaining to short term incremental changes in water quality in the near field receiving environment and proportional waste rock increases in the Swift/Cataract drainage, ENV agrees that the proposed amendment is unlikely to negatively affect the receiving environment beyond what has already been assessed in the EVWQP and the EA. ENV noted that this comment is contingent on: the GHO waste rock proposed to be deposited in the Swift Project already being accounted for in the EVWQP modelling as indicated by Teck; the Fording River Operation South Active Water Treatment Facility being operational on schedule; and water quality predictions not declining as a result of the model update.

In response, Teck stated that the GHO waste rock proposed to be deposited in the Swift Project is considered and included in the EVWQP. Teck also confirmed that if the amendment to the Certificate is approved, the 2017 regional water quality model update will reflect the change in location of the deposition, and any changes in the projections and resulting mitigation requirements would be reflected in that submission. Teck noted that the EVWQP model update would include the updated life of mine plans from all Teck operations in the Elk Valley, as well as refined geochemical source terms and flows. Teck confirmed that the model update will be submitted to EMPR and ENV by October 31, 2017, as specified under Permit 107517. With regards to implementation of the Fording River South Active Water Treatment Facility and interim options for management, Teck stated that it is committed to discuss timing and a path forward with ENV in the third quarter (Q3) of 2017.

ENV noted that the Amendment Application indicates that the 28 ha area proposed for the storage of GHO waste rock is not required for the Swift Project's water management infrastructure, but the EA certificate application for the Swift Project proposed an *Upper Swift Clean Water Collection Pond* in what appears to be this area. ENV requested that Teck confirm that the clean water collection pond is either not needed, or is not within the 28 ha area proposed for the storage of GHO waste rock.

In response, Teck confirmed that the clean water pond is located outside of the 28 ha area proposed for the storage of GHO waste rock and would not be affected.

On August 1, 2017, ENV confirmed that Teck had adequately answered their questions and that they had no further questions.

KNC requested that Teck confirm whether the 31 Mbcm of waste rock<sup>2</sup> would be in addition to the total planned for the Swift Creek and Cataract Creek drainages in the EVWQP, and would result in a net increase over time although it is captured within plans for 2017 and 2018.

In response, Teck confirmed there are no changes to the total amount of waste rock placed over time and the 31 Mbcm is not in addition to the total planned for Swift Creek and Cataract Creek drainages; therefore, it does not represent a net increase in waste rock from what was included in the EVWQP.

KNC also inquired about the scheduled installation of the Fording River Operation South Active Water Treatment Facility by December 31, 2018, and requested that Teck comment on the schedule of the planned facility application and its operation, given the current water quality impacts in Cataract Creek, Swift Creek, and the Fording River, and any implications from treatment delays in relationship to this waste rock planned for the Swift Creek and Cataract Creek drainages.

In response, Teck stated that it is committed to discuss timing and a path forward with KNC with regards to implementation of the Fording River Operation South Active Water Treatment Facility and any interim options for management within Q3 2017.

The EAO, in consultation with WG members and KNC, confirms the issues identified by ENV and KNC would be adequately addressed by the conditions in the Certificate.

#### *Reclamation*

KNC inquired whether it was possible for Teck to reclaim the lower lifts of the GHO North Spoil as they are built.

In response, Teck stated that it would consider reclaiming the lower lifts of the North Spoil as they are built, in the context of operational requirements for reclamation (as outlined in the Five Year Mine Plan and Reclamation Plan), geotechnical stability of the lifts, and other mine plan inputs at that time.

On August 4, 2017, KNC confirmed that they had no further questions.

The EAO, in consultation with WG members and KNC, confirms the issue identified by KNC would be adequately addressed by the conditions in the Certificate.

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<sup>2</sup> 31 Mbcm of waste rock is in reference to Teck's application to amend the *Mines Act* Permit for the GHO North Spoil Project, which includes 13 Mbcm of waste rock proposed to be deposited within the Swift Project

## 4. INDIGENOUS CONSULTATION

The Swift Project is located within the areas understood to be the asserted traditional territories of the Ktunaxa Nation, and the Shuswap Indian Band.

### Shuswap Indian Band

During the EA for the Swift Project, the EAO determined that the SIB's asserted Aboriginal rights and title (collectively referred to as Aboriginal Interests) would not be affected by the Swift Project, and consulted the SIB at the notification level. For the Amendment Application, the EAO confirmed the strength of claim assessment, and consulted the SIB at the notification level.

On July 12, 2017, the EAO sent a letter to the SIB to notify the SIB of the Amendment Application, and invited comments on the proposed amendment. The EAO did not receive a response from the SIB.

The SIB will be notified once the EAO has made a decision on the Amendment Application.

### Ktunaxa Nation

The Ktunaxa Nation comprises four member bands: Tobacco Plains Band, St. Mary's Band, Lower Kootenay Band, and Akisq'nuk Band. During the EA for the Swift Project (2011 to 2015), the bands indicated to the EAO that KNC, the governing body of the Nation composed of elected members of each of the communities, would engage on their behalf. During the Swift Project EA and the review of the Amendment Application, the EAO consulted with KNC at the deeper end of the *Haida* spectrum.

EMPR formally referred the *Mines Act* Permit amendment application to KNC following Teck's submission on May 19, 2017, and Teck forwarded the Permit amendment application to KNC on May 26, 2017. Teck submitted the Amendment Application to the EAO on July 5, 2017, and included KNC on the submission. Teck contacted KNC to arrange a meeting to discuss the Amendment Application but did not receive a response from KNC.

The EAO submitted a letter to KNC on July 13, 2017 to notify KNC that the Amendment Application had been accepted for review, and to formally invite KNC to participate in the WG. The EAO received confirmation from KNC on August 4, 2017, that KNC does not have any outstanding concerns with the Amendment Application. A draft of this Assessment Report was provided to KNC for review on August 4, 2017. The EAO received minor comments on the Assessment Report from KNC on August 18, 2017, which have been addressed in this document.

KNC will be notified once the EAO has made a decision on the Amendment Application.

## 5. CONCLUSIONS

The EAO has reviewed:

- The information contained in Teck's Amendment Application;
- The assessment from the EA for the Swift Project of the 28 ha area proposed for the storage of GHO waste rock ;
- ENV's comments on the Amendment Application and Teck's responses to those comments;
- Consultation by the EAO and Teck with members of the WG, including KNC on the Amendment Application; and
- Certificate conditions, which include updating and re-submitting relevant management plans to the EAO.

Based on this review, the EAO is satisfied that:

- The Amendment Application adequately assesses the potential adverse changes to the environmental, economic, social, heritage and health effects of the Swift Project resulting from the deposition of waste rock from GHO's North Spoil Project;
- The conditions in the Certificate are expected to mitigate the incremental adverse effects such that residual adverse effects beyond what were assessed during the Swift Project EA and reported in the EVWQP are not expected and no significant adverse effects are identified for this proposed amendment; and
- Consultation with KNC and the SIB regarding the Amendment Application has been adequately carried out by the Certificate Holder and the EAO, and the provincial Crown has fulfilled its obligations for consultation and accommodation of KNC relating to the issuance of an amendment to EAC #M15-02.

The EAO recommends the Certificate be amended under Section 19 of the Act to allow the requested deposition of 13 Mbcm of waste rock from GHO's North Spoil Project within a 28 ha area of the Swift Project, as shown on Figure 2 (rev.2) of the CPD.