Environmental Protection Notice: Notice of Filing

Teck Coal Ltd Elkview Operations: Saturated Rock Fill–Phase 2

Application for Permit Amendments under the Provisions of the *Environmental Management Act* and *Mines Act*

Teck Coal Limited (Teck) at 116 Centennial Square, Sparwood, BC, VOB 2G0 has submitted a joint application to the Director of the British Columbia Ministry of Environment and Climate Change Strategy (ENV) and to the Chief Inspector of Mines of the British Columbia Ministry of Energy, Mine and Petroleum Resources (EMPR) to authorize the commissioning and operation of the Teck Elkview Operations Saturated Rock Fill Phase 2 Facility (EVO SRF P2). EVO is a large-scale open pit steelmaking coal mine operation in the Elk Valley. Teck has successfully been operating the Phase 1 EVO SRF water treatment facility since January 2018 and this application is for an expansion to increase the effluent retention pond capacity and discharge of treated water from 10,000 m³ (Phase 1) up to 21,053m³/day (Phase 2), sourcing mine-influenced water from Erickson and Bodie/Gate creeks. The effluent from the EVO SRF will discharge into Erickson Creek, Bodie Creek and Gate Creek, which are all tributaries of Michel Creek, reducing downstream nitrate and selenium concentrations to meet the objectives of the Elk Valley Water Quality Plan (EVWQP).

The EMPR Major Mines Office is leading a joint review of the application submitted to amend the following authorizations:

1. Environmental Management Act Permit # 107517 issued November 19, 2014 and last amended April 4, 2019, which authorizes the discharge of effluent from five coal mine sites in the Elk Valley.

2. Environmental Management Act Permit # 425 issued August 5, 1971 and last amended January 29, 2020, which authorizes the discharge of effluent from Elkview Operations.

3. *Mines Act* C-2 Permit Issued March 11, 1970 and last amended February 24, 2020, which authorizes mining activities at Elkview Operations.

The land upon which the facility is situated and the location where discharge occurs are within private land held by Teck and within the *Mines Act* C-2 Permit boundary in the Elk River Valley, three kilometers east of Sparwood along Highway #3. The land is located on Lot 1, District Lot 4588 and Kootenay District Plan 9330 within the East Kootenay Region.

The proposed maximum rate of effluent discharge from this facility will be 21,053 m³/day. The operating period for the facility will be 24 hours/day and 7 days/week. The water treatment process at the EVO SRF is based upon saturated rock fill technology, which is a biological treatment that utilizes the natural microbial communities present in the saturated zone of mined-out and backfilled pits supplemented with the addition of a carbon source and micro-nutrients. The proposed permit limits for the effluent discharge are as follows:

Parameter	Unit	Discharge Limit
Ammonia	mg/L	1.2
Biological oxygen demand	mg/L	25
pH range	pH units	6.5 to 8.5
Total phosphorus	mg/L	0.10 ¹
Total suspended solids	mg/L	10
Effluent toxicity	% mortality²	≤50%
Nitrate	mg/L	8.0 ³
Selenium	hð\r	411.3

1. Monthly average.

2. The effluent must not cause greater than 50% mortality in 96 h rainbow trout (*Oncorhynchus mykiss*) single concentration toxicity tests (EPS 1/RM/13 2^{nd} edition, December 2000) or greater than 50% mortality in 48 hr *Daphnia magna* single concentration toxicity tests (EPS 1/RM/14 2^{nd} edition, December 2000).

3. Proposed performance metric.

Any person who may be adversely affected by the proposed amendment and wishes to provide relevant information may, within 30 days after the last date of posting, publishing, service or display, send written comments by mail or email to the applicant, with a copy to the Statutory Decision Maker(s) c/o Sam Barnes (Samuel.Barnes@gov.bc.ca), Senior Project Lead, Major Mines Office, Ministry of Energy, Mines and Petroleum Resources, PO Box 9320 Stn Prov Govt, Victoria, BC, V8W 9N3. The identity of any respondents and the contents of anything submitted in relation to this application will become part of the public record.

For more information regarding Teck's operations in the Elk Valley, please contact Teck's Social responsibility office in Sparwood (116 Centennial Street) or leave a message on the toll-free community feedback line at 1.855.806.6854 and your call will be returned.

Dated this 11th day of June, 2020

Teck Social Responsibility Office

Teck

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