## **Environmental Protection Notice–Notice of Filing**

Teck Coal Ltd Fording River Operations Eagle 4 Saturated Rock Fill-Phase 1

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 Energy, Mines and Low Carbon Innovation (EMLI) to authorize the commissioning and operation of the Teck Fording River Operations (FRO) Eagle 4 Saturated Rock Fill Phase 1 (E4 SRF Phase 1). FRO is a large-scale open pit steelmaking coal mine operation in the Elk Valley. The purpose of E4 SRF Phase 1 is to demonstrate the SRF technology at this location and the primary objective for Phase 1 is to quantify nitrate and selenium removal rates and investigate the potential treatment capacity of the E4 SRF facility. The E4 SRF Phase 1 will reduce selenium and nitrate loads in mine-influenced water from the Eagle 4 Pit located in the Clode Creek catchment at an estimated flow rate of up to 9,500 cubic meters per day (m³/d), with treated effluent returned to the Clode Creek Catchment. Phase 1 is anticipated to be operational for approximately 1 year prior to the next phase of treatment being operational.

The EMLI 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 March 11, 2021, which authorizes the discharge of effluent from five coal mine sites in the Elk Valley.
- 2. Mines Act C-3 Permit Issued January 20, 1970 and last amended March 31, 2020, which authorizes mining activities at Fording River Operations.

The land upon which the facility is situated and the location where discharge occurs are within FRO's *Mines Act* C-3 Permit boundary in the Fording River Valley, 20 km northeast of Elkford on Crown coal leases 389282, 389275, 389285, 389311 held by Teck. The lease land in this area comprises District Lots 6700, 6701, 6709 and 6710 within the Kootenay District.

The typical flow from this facility will be 9,500 m<sup>3</sup>/day. The operating period for the facility will be 24 hours/day and 7 days/week. The water treatment process at the E4 SRF Phase 1 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	Location
Ammonia	mg/L	7.0	E4_BPO <sup>3</sup>
pH Range	pH Units	6.5 – 9.0	E4_BPO
Effluent Toxicity <sup>1</sup>	% mortality	50	FR_CC1
Antiscalant <sup>2</sup>	mg/L	25	FR_CC1

E4\_BPO = Outlet of the E4 Effluent Retention Pond (Buffer Pond), FR\_CC1 = E102481 Clode Creek downstream of Clode Settling Ponds decant

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

<sup>2</sup>Based on a two-minute time weighted average.

<sup>3</sup>Reflects the 'Upper Bound' predicted effluent concentrations and projected to be non-acutely toxic at FR\_CC1, which is the point of discharge to the receiving environment.

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 Low Carbon Innovation, 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 or leave a message on the toll-free community feedback line at 1.855.806.6854 and your call will be returned.

Dated this 10th day of June, 2021.

Teck Social Responsibility Office 116 Centennial Square Sparwood, BC, VOB 2G0

Contact person: Rory O'Connor Email address: Feedbackteckcoal@teck.com Phone: 1.855.806.6854