

Environmental Protection Notice—Notice of Filing

Teck Coal Ltd Fording River Operations: Active Water Treatment Facility—South

Application for Permit Amendments under the Provisions of the British Columbia's *Environmental Management Act and Mines Act*.

Teck Coal Limited (Teck) at 116 Centennial Square, Sparwood, BC, V0B 2G0, has submitted a joint application to the Director of the British Columbia Ministry of Environment and Climate Change Strategy and to the Chief Inspector of Mines of the British Columbia Ministry of Energy, Mine and Petroleum Resources to authorise the commissioning and operation of the Teck Coal Ltd Fording River Operations: Active Water Treatment Facility-South (FRO AWTF-S). The facility forms an important component for meeting Teck Coal Ltd's commitments under the Elk Valley Water Quality Plan and will reduce nitrate and selenium concentrations in the mine-affected waters from Swift, Cataract and Kilmarnock Creeks.

The Major Mines Office of the Ministry of Energy, Mines, and Petroleum Resources 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 authorises the discharge of effluent from five coal mine sites in the Elk Valley.
2. *Environmental Management Act* Permit #1501 issued April 20, 1972 and last amended Sept 28, 2016 which authorises discharges to air from a coal processing plant and related mining facilities located in the Fording Valley.
3. *Mines Act* C-3 Permit issued January 20, 1970 and last amended December 18, 2019 which authorises mining activities.

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 Valley, 20 km north northeast of Elkford on Crown coal leases 389282 and 389310, held by Teck Coal Ltd. The lease land in this area comprises District Lot (DL) 4588, DL 6687 and W1/2 DL 6687, DL 6688, DL 6637 and R/W Plan 8566 within the Kootenay District.

The proposed maximum rate of effluent discharged from this facility will be 24,000 m³/day. The operating period for the facility will be 24 hours/day and 7 days/week. The water treatment process at the FRO AWTF-S is a Fluidized Bed Reactor (FBR) FBR-FBR-Ferric mix and degas tank-Ballasted Sand Clarifier (BSC)—Moving Bed Biofilm Reactor (MBBR—Continuous Backwash Sand Filter (CBSF)—Advanced Oxidation Process (AOP) flowsheet. The proposed permit limits for the effluent discharge are as follows:

Parameter	Unit	Loading rate
Ammonia	mg/L	1.0
Biological oxygen demand	mg/L	45.0
pH range	pH units	6.5-8.5
Total phosphorus	mg/L	0.1 ¹
Total suspended solids	mg/L	10
Effluent toxicity (prior to discharge)	% mortality	≤50 ²
Nitrate	mg/L	3.0 ³
Total selenium	µg/L	37^{1,3}

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 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).

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 to the applicant, with a copy to Sam Barnes, 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 23 day of January 2020

Teck Social Responsibility Office
116 Centennial Square
Sparwood, BC, V0B 2G0

