

March 27<sup>th</sup>, 2018  
Ministry of Environment and Climate Change Strategy  
Environmental Protection Division  
2080-A Labieux Rd  
Nanaimo B.C., V9T 6J9  
Phone: 250 751-3100

Dear Andrea Doll,

Quinsam Coal Corporation (QCC) is proposing to submit a mitigation plan to reduce the risk of Total Suspended Solids (TSS) occurring at the Settling Pond #4 discharge. The outline for this plan is detailed below.

### **Discharge from Settling Pond 4 (SP4):**

With respect to the recent permit amendment application QCC proposes that additional evaluation of monitoring data and development of water management measures be undertaken to address the non-compliance issues associated with the SP4 discharge rather than preparing a Permit Amendment Application for discharge from this site.

On March 22<sup>nd</sup>, 2018 QCC and Lorax initiated an evaluation to confirm that the flow monitoring instrumentation is installed and calibrated correctly and examined the discharge rating curve for the SP4 water management structure. A salt dilution test was performed, and a staff gauge was installed in the settling pond. Further information will be required to confirm the quantity of water discharging from the decant riser is accurate. Data compilation will include a series of salt dilution tests performed under different flow conditions. A staff gauge will be installed in the downstream wetland for further reference. With this information, the need for additional water management measures will be evaluated to reduce flow to SP4, if necessary, to ensure that the average annual discharge rate is maintained at 0.08 m<sup>3</sup>/d.

**Total Suspended Solids at SP4** - A silt curtain will be installed during August 2018 when the water level is lowest in the wetland leading into SP4. QCC and Lorax will also prepare a TSS management plan that can be implemented during times when high levels of suspended solids are expected to be discharged from site. The below figure displays the TSS at Settling Pond 4 (WD) since 2011 as depicted in the figure TSS exceedances do not occur downstream at WC and the number of TSS exceedances are not a frequent occurrence at Settling Pond #4. The elevated TSS that occurred in 2016-17 were a result of extreme storm events occurring at the mine site. Since 2010 only 18 TSS results were greater than 25mg/L with 13 of them occurring in 2016-2017 monitoring year. There were no TSS exceedances in 2017-2018 monitoring year.

QCC intends on performing some “cleanup” activities upstream and will evaluate/audit entire north water management system during high precipitation events to determine the main sources of TSS introduced into SP4. Changes to the system/maintenance will be suggested after findings from these investigations. This may take another year of monitoring to initiate the upstream evaluation; however, best management practices will be in place prior to fall of 2018.

A TSS management plan will be submitted once the evaluation of the system has been completed and discharge rates have been confirmed.

Best Regards,

**Kathleen Russell BSc.**  
Environmental Coordinator



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# TOTAL SUSPENDED SOLIDS SETTLING POND 4 & WC



