

## Premier Gold Project Schedule for Completing Outstanding Work Arising from Recommendations in DSI Reports

## **Recommendations Prior to 2014 DSI**

2004-02 A log-boom is recommended at the fuse plug spillway entrance to prevent debris from blocking the pipeline inlet.

According to KCB's 2012 Annual Geotechnical Review (Section 7.1), corrective actions to address this recommendation are not necessary if the access road across the Closure Spillway is removed. The access road was removed November 5, 2012.

2004-05 If the Monitoring Pond Dam is to retain water after closure, the structural integrity of the concrete facing should be assessed by a qualified Engineer with expertise in concrete structures.

By March 1<sup>st</sup> 2015, it will be determined whether or not the use of the Monitoring Pond is required post-closure. If so, the integrity of the dam will be assessed during summer/fall 2015.

2010-02 Monitor Cascade Creek bank below the MWTPs in the fall and spring to determine the rate of erosion. *Ongoing*.

2010-05 Evaluate alternative methods of measuring seepage into the Monitoring Pond.

Ongoing. By March 1<sup>st</sup> 2015 it will be determined whether or not use of the Monitoring Pond is required post-closure. The future method of measuring seepage will depend on this decision.

2011-01 Monitoring Pond – Remove rock debris left-over from scaling. For safety reasons the debris will be left in place until the questions regarding the monitoring pond area have been settled.

2011-04 Fuse Plug – Remove the small boulder from the top of the HDPE pipe. Conduct scaling to remove loose rock from the abutments. *Completed July 13, 2013.* 

2011-07 Tailings Beach Cover – Provide Tailings Beach Cover study report to KCB for their information. *Completed in 2013.* 

2011-10 South Diversion – Install additional (above-ground) signage for the new monitoring well, so it can be readily located.

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Boliden believes that this sign will attract unwanted attention due to its vicinity to Granduc Road, and does not intend to install one. The location of the monitoring well can be obtained from documentation available in the site office.

2011-14 CCDC – Plans should be made to replace the large culvert on Lesley Creek. Failure of this culvert would cut-off access to the TSF. *Ongoing*.

2011-16 MWTP – Trees taller than 1.2 m should be removed from the dam. *Completed in 2014.* 

2011-17 MWTP – Place granular filter and appropriately-sized riprap at the downstream end of the discharge spillway to prevent further undermining of the flume.

Completed August 22, 2013.

2011-18 Update the TSF water management plan to address inconsistencies in managing the 200-year event for pre-closure, and IDF event for post-closure. *Letter on Water Management Plan Progress Update from Klohn Crippen Berger will be submitted to the Ministry of Mines by December 1<sup>st</sup>, 2014.* 

2012-01 Continue maintenance be clearing any vegetation and rock falls from the diversion ditches, as needed.

*The Upper South Diversion was brushed and cleared on August 22 and 27, 2013. The North Diversion was cleared on August 26 and 27, 2013.* 

2012-02 Remove remaining rock debris from the CCDC. CCDC Area #5 rockfall of August 12, 2012 removed from diversion November 02 and 05, 2012. Most recent rockfall (May 30, 2014) also removed.

2012-03 Survey the CCDC reflective markers at least once a year, and include in the annual review report for the TSF. *Ongoing*.

2012-04 Develop a long-term solution for mitigating the risk of overtopping of the CCDC due to rock falls.

In progress. Letter on Water Management Plan Progress Update from Klohn Crippen Berger will be submitted to the Ministry of Mines by December 1st, 2014.

2012-05 Conduct a geotechnical hazard assessment of the Monitoring Pond area. *Completed 2013.* 

2012-06 Monitor the long-term durability of the Closure Spillway by periodically inspecting for signs of bedrock degradation. *Ongoing*.



2012-07 Undertake survey of movement points in spring, summer and fall in 2013, in order to reduce the influence of survey error and identify trends in survey point migration.

Completed in 2013.

2012-08 Monitoring of standpipe piezometer DH00-09 should be performed at least 5 days after rainfall to minimize the potential for erroneous readings. If levels in the nearby piezometer DH00-08 fall below El. 318.5, or rise above El. 320.5 m the results should be reviewed by a qualified geotechnical engineer. *Ongoing.* 

2012-09 Update the OMS manual. *Completed in 2014.* 

2013-01 Fuse Plug – Remove [new] boulder from the top of the HDPE pipe. *Completed in 2014.* 

2013-02 Identify a fixed point, marked by two intersecting lines, on all monitoring points to increase surveyor consistency. *Completed in 2014.* 

2013-03 Determine whether use of the Monitoring Pond is required post-closure or whether it should be decommissioned.

*Done by March 1<sup>st</sup> 2015. This task will involve discussions between Boliden, MEM, and MOE.* 

2013-04 Lower the upper culvert through the CCDC to below the road crest elevation, or address the issue during the CCDC capacity upgrade. *Upper North Diversion to CCDC culvert rebedded about 1 meter lower June 04, 2014 during May 30/14 rock fall clean up.* 

2013-05 Conduct a detailed survey of the existing tailings beach. *As-built survey will be conducted when construction is completed.* 

2013-06 Conduct a detailed survey of the Closure Spillway. *As-built survey will be conducted when upgrade is completed.* 

2013-06 [sic] Repair the CCDC emergency swale in Granduc Road. This may also be addressed as part of the CCDC upgrade. *Will be addressed as part of the CCDC upgrade. The CCDC emergency swale was surveyed June 12, 2014.* 



## **Recommendations in 2014 DSI Report**

2014-01 Remove vegetation from the Main Tailings Dam, East Access Dam, tailings beach, fuse plug and fuse plug spillway.

Completed at the Main Tailings Dam, East Access Dam on September 25 and 26, 2014 after the site visit for the 2014 dam safety inspection, according to information received from Boliden on October 10, 2014. No vegetation removal at the fuse plug and the fuse plug spillway. This will be done by August 2015.

2014-02 Fill in puddles forming on the East Access Dam crest and compact to a level driving surface.

Will be done by July 2015.

2014-03 Identify suitable measures to allow access to Monitoring Pond Dam to resume seepage monitoring. *Will be done by March 2015.* 

2014-04 Document source of exposed tailings on downstream slope of Main Dam. *Will be done by July 2015.* 

2014-05 Survey the upper culvert through the CCDC to compare with the road crest elevation. *Will be done by July 2015.* 

2014-06 Review the condition of the TSF piezometers, the tip locations, and the measurement procedures to evaluate the accuracy of the readings and help determine if any of the piezometers might be damaged or malfunctioning. *Will be done by July 2015.* 

2014-07 Repair non-operational outlet controls at Monitoring Pond Dam. By March 1st 2015, it will be determined whether or not the use of the Monitoring Pond is required post-closure. If so, the outlet controls will be repaired by September 2015.

2014-08 Review MWTP Lower Dam hazard classification *Will be done by April 2015.*