COMMENT – T-62

Source: Canadian Environmental Assessment Agency

Summary of Comment
It is noted in MNR’s comment (MNR-64) that the EIS lacks information regarding the draining of Mitta Lake. Providing details of planning and logistics of the draining of Mitta Lake is necessary for the EA.

Proposed Action
Provide conceptual details of the planning and logistics of the draining of Mitta Lake.

Reference to EIS
Throughout EIS

Response
The Hammond Reef orebody is located directly beneath Mitta Lake and therefore draining of Mitta Lake is required for the Project. This activity will include both water management and fish management. Detailed planning and logistics for this activity has not been undertaken to date; but will be finalized with Aboriginal input prior to the Construction Phase of the Project. A preliminary outline of the planning considerations for the draining of Mitta Lake is provided below. The draining of Mitta Lake will be carried out to meet federal and provincial requirements as related to the DFO fish relocation guidelines and MOE water discharge permits.

Water will be used as part of mine commissioning/operation where possible. Planning will also provide for a timely pump out of the lake to meet project scheduling requirements. A conceptual design of the water transfer option will be developed and shared with Aboriginal groups and Project stakeholders. Use of piping, pumping and the PPCP infrastructure that is required for other mine operations will be relied on as much as possible. Some additional water transfer infrastructure may be required to drain Mitta Lake such as additional transfer pumps and piping. Water will be pumped to the PPCP and allowed to settle until the TSS is suitable for discharge to the Marmion Reservoir. Detailed calculations to estimate pumping/drawdown time will be undertaken based on the available pipeline/pump capacity.

Lake sediment collection and disposal methods will be identified. Removal of sediment and shallow overburden may be required as part of the pre-treatment preparation of the open pit. Sediment will be disposed of in the overburden stockpile.

The fish salvaged from Mitta Lake will be relocated in consideration of the overall No Net Loss Plan developed for the Project. The DFO fish relocation guideline document outlines the need for post relocation monitoring, which will be considered and included as an aspect of the aquatic monitoring program for the Project.

Alternative locations for fish relocation will be examined through an assessment of logistics. The NNLP considers stocking of four fishless headwater lakes/ponds as part of the offset projects. Sawbill Bay will also be considered as an alternative location. Discussion with local bait fishers will take place to determine interest in using some of the fish within Mitta Lake as a baitfish source for sale to the public.

Timing of the draining of Mitta Lake will be scheduled based on fish sensitivity. The sensitivity of fish species present in the lake will be reviewed including the preferred time of year, the potential for crowding of fish and the
effects of predation of fish by other species. Water intake screening guidelines will be developed to identify the appropriate screen size and intake velocity. Based on the sensitivity of the fish, a staged drawdown for the lake will likely be the most feasible approach. The first phase will include a rapid drawdown of the lake to create smaller pools; then the small pools will be drawn down more slowly allowing for fish capture.

Methods of fish capture will be described including planned sampling, handling, transport and release. Depending on the identified site of relocation, fish may be transported from Mitta Lake to their new location by ATV or helicopter. Acclimation needs will be considered and a protocol for fish handling and treatment will be developed. DFO guidelines on research interests will be considered.

Some mortality of fish is expected and plans for disposal of dead fish will be developed in consideration of potential wildlife issues. Disposal methods and locations will be identified and predation by birds and wildlife will be avoided. Discussions with Aboriginal groups utilizing the RSA committees and the Métis consultation committee will ensure appropriate cultural and spiritual protocols are followed.