KIA Comment 1:

Water Management in the Tailings Containment Area:

The level of inspection proposed by LMI may not be sufficient during the freshet to provide an adequate level of protection of receiving waters.

Recommendation: Inspection of the dams should be carried out on a weekly basis during the freshet (approximately May and June) and more frequently if required by an inspector due to concerns observed at the site.

LMI Response:

The frequency of monitoring is aligned with the recommendations made by the geotechnical engineer.

KIA Comment 2:

Water Management Issues with Sewage Lakes and Fuel Containment:

Issues were identified in 2014, and these will likely be ongoing during care and maintenance. Requirements to better manage these sites should be incorporated into the water licence to minimize risks of uncontrolled releases.

Recommendation: Better management of excess water from freshet should be addressed with the Sewage Lakes and fuel containment areas to minimize the risks from uncontrolled releases to the environment.

LMI Response:

The situation in 2014 occurred as a result of the water licence having expired and the subsequent restrictions imposed by the Inspector and regulators preventing LMI from being able to discharge water from these facilities. LMI does not agree that an expired licence should prevent activities to reduce environment risks.

KIA Comment 3:

Water and Sediment Chemistry in the Receiving Environment:

Although no measurable effects were detected on arctic grayling, data suggests that water and sediment chemistry in Seep Creek may need further assessment in order to gauge concerns for the receiving environment.

Recommendation: Further assessment of the water chemistry in Seep Creek focusing on high concentrations in the summer should be considered as part of the care and maintenance program over and above the current water quality monitoring plan. Additional sampling would focus on maximum concentrations in the stream during the low flow periods and assess whether or not these are at concentrations that could result in effects on the receiving environment. A special study of sediment concentrations, which are not part of the monitoring plan, should also be considered. Any need for additional biological monitoring could be assessed based on these results.

LMI Response:

LMI will review the data and work with the various authorities to determine what studies are merited, the basis and potential benefits of such studies and the extent and timing of same.

KIA Comment 4:

Continued Reclamation of Tailings:

Prior to 2006, restorations activities (i.e., covering the tailings with esker material, as per the water licence) occurred regularly at LMI. Unfortunately, this was not continued in 2006 and beyond.

Recommendation: LMI should continue to cover the tailings with esker material as per the closure plan even during care and maintenance.

LMI Response:

The potential for windblown deposition of tailings outside of the tailings facility has been controlled by the placement of esker sand on the exposed tailings in 2004 and 2005. The area of exposed tailings remaining in Cell 3 (Figure 14 of AANDC's 15 July 2014 Inspection Report) is saturated and/or covered with shallow water and ice throughout the year. LMI has observed no ongoing issue of dust blowing outside of the facility. Observations made in 2014 continue to support this.

The deposition noted in Figure 16 of AANDC's 15 July 2014 Inspection Report originates from the perimeter dam, DAM 4. DAM 4 separates Cell 4 from Ferguson Lake. Cell 4, was never used for tailings storage and acts as a polishing pond for the decant water received from Cell 3. Anomalous arsenic concentrations at the toe of DAM 4 are the result of natural background mineralization in this area as documented during extensive historical grid soil geochemistry sampling at this location.

The deposition as seen in Figure 15 of AANDC's 15 July 2014 Inspection Report predominately originates from the perimeter dam, DAM 6 and from the esker cover on Cell 3. LMI will provide further information in the form of physical and soil chemical characterization data (sieve analysis and analytical test results) to support this statement. Characterization samples will be collected in a 25 m grid pattern at the downstream base of DAM 6. Should LMI utilize on site equipment to conduct the grainsize analysis (ro-tap test sieve shaker) and/or metals analysis (Niton Elemental Analyzer) duplicates of a minimum of 10% of the samples tested will be sent off site for testing at an accredited laboratory.

Based on the results of further study of the windblown tailings below DAM 6 a monitoring plan and the cleanup methodology and schedule will be finalized and submitted to the NWB for review and approval. Options to address the presence of windblown tailings outside of the facility include but are not limited to: excavation and relocation areas with exposed tailings within Cell 3 or Cell 5; cover in place; and development of site specific remedial objectives for the metals of concern based on CCME guidelines.

Upon restarting the milling operation at Lupin tailings the current plan is to deposit tails into Cell 5. There is approximately 155,000 m^2 of Cell 5 available for the deposition of additional tails as of 2014. The 86,000 m^2 area of exposed saturated tails in Cell 3 represents a contingency location for the deposition of tails at the restart of operations, in addition to being a suitable location for the deposition of any tails recovered from outside of the facility during cleanup.

Should the monitoring results show that windblown tails are currently being deposited outside of the facility (which is unlikely) as a result of the exposed saturated tails in Cell 3 additional measures will be implemented to control this source.

Prior to restarting operations LMI will update their operating procedures to incorporate measures to be implemented to control windblown tails from other areas of the tailings facility. The spill contingency plan will also be updated to provide contingency measures that are to be implements should deposition of tails outside the facility be detected during operations.