

Jay Project Environmental Assessment - EA1314-10

DDMI Presentation – Water
September 16, 2015

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DDMI Issue - Water

- The Diavik Mine is downstream of the Jay Project. As such changes to water quality from the Jay Project will also result in changes to water quality in Lac de Gras at the Diavik mine site.
- Lac de Gras water quality at the Diavik mine site is currently a key regulatory and community measure of DDMI's operational environmental performance and is expected to be equally important measure of closure performance.
- The Proponent has assessed water quality impacts to Diavik during operations (i.e. before 2023) but not during closure (2023-2030). .

Evidence - Water

Table 1. Predicted under-ice chloride concentration (mg/L) at LDG-P1.

Year	Without Jay	With Jay
2019-2023	3.8	3.8
2024-2029	3.2	5.7
2030-2033	1.9	6.5
2034-2060	1.3	4.6

Source: DDC Appendix B – Modelling Compendium. April 7, 2015

Conclusion

- The use of Lac de Gras for waste assimilation is predicted to increase with development of the Jay Project.
- By comparison without the Jay Project the use of Lac de Gras for waste assimilation would be expected to decrease after 2023.
- Diavik's closure performance was expected to be evaluated during a period of recovering water quality from 2023 to 2030.
- With the proposed Jay Project water quality would instead degrade over the same period.
- It is not unreasonable to expect that DDMI would face increased pressures in regard to demonstrating closure performance. These pressures could adversely affect the scope of operations and/or closure activities and the relinquishment of financial security.

Recommendations

DDMI recommends:

1. That the MVEIRB confirm, through this Environmental Assessment process, DDMI's position that the Jay Project is likely to cause adverse effects to DDMI as the operator of the Diavik Mine.
2. That the MVEIRB require that the Proponent engage with DDMI to develop mutually acceptable monitoring and mitigation to effectively eliminate these effects to DDMI.
3. That the MVEIRB specify that that monitoring and mitigation, specific to effect on Diavik, be included within the regulatory phase.

Recommendations continued

4. That the Proponent commit to advancing these monitoring and mitigation measures, with any necessary revisions, for review and acceptance by the Land and Water Board.
5. That the Proponent commit to advancing these monitoring and mitigation measures, with any necessary revisions, for review and acceptance by the Parties to the Environmental Agreement.
6. That the Government of the Northwest Territories commit to fully recognize the impact of the Jay Project as monitored and mitigated by the Proponent, on Diavik's closure performance when evaluating relinquishment of DDML's closure security.