

Meadowbank Type A Water License Application Reviews

Last updated Friday, Nov. 5, 2007

NIRB			Comment	Document Reference and Comments
Condition #	Commitment #	NWB Section #		
8			compliant	(D317) 2006 gw program completed (new wells, gw re-sampled); (D499) pit inflow water re-evaluated for higher mining rate of 8,500 TPD using same depth-TDS profile; (D516) Gw quality inputs into Portage and Goose Island pits based on average of gw quality for 2003, 2004 and 2005.
9			compliant	Similar to NIRB Commitment 48
10			non-compliant	This document contained only GENERAL information regarding potential systems as previously referenced in the FEIS. No recommended system is provided. Further we understand that a third (different) system has been purchased. Pre-screening of effluent, emergency storage/handling or sludge treatment is addressed.
11			compliant	
12				Type B Licence
13			non-compliant	Cannot Find.
			compliant	(D450, D515 and D516) Proposed water leaving Portage and Vault Attenuation Ponds will meet MMER at point-of-discharge and achieve Nunavut DW guidelines and "approach" CCME FAL at 30m radius from diffusers in Third Portage and Wally Lakes.
14			compliant	(D450) Goose Island and Vault lake dikes breach proposed when pit water quality meets discharge criteria (as per Condition #13); (D516) Proposed waters in Portage and Goose Pits will meet MMER and most of [Nunavut] DW criteria.
15			compliant	Operational ARD/ML Sampling and testing Plan section 1.0.
16				
17			non-compliant	Expert analysis complete but need final report not draft.
18			compliant	Mine Waste and Water Management section 6.3, 6.4.
19			compliant/non-compliant	A 2m cover over tailings is in compliance with reference from Preliminary
				Closure & Reclamation Plan section 12.1 and Operation ARD/ML
				Sampling and Testing Plan section 1.0. Non-compliant on NWB and NIRB request for results on re-evaluation - Cannot Find.
20				
21			N/A	
22				Not included in MMC submission table.
23				Not included in MMC submission table.
24			non-compliant	Report addresses conceptual approach. More design detail needed:
				The operation of the landfill as a continuous fill as wind will disturb fill materials.
				Operation should address daily cover (cell development/operation).
				The report dismisses leachate development. Leachate monitoring must be addressed.
				Final cover closure depths need to evaluate effects of global warming evaluations.
				Other WM practices (recycling, diversion) need to be addressed.
				The operations document could be more operation specific. Training requirements identified.
				Landfarm document is non committal on a system. Hydrocarbon contaminated soils must be treated before used or disposed of in the landfill. A definitive approach to

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				addressing spills and treatment method & area is needed.
25			compliant/non-compliant	Landfill approach appears compliant for wildlife. On-site waste mangement controls unknown.
				Consultation with HTO, EC, INAC unknown
26			non-compliant	(NIRB) Not included in MMC submission table. (EF) Cannot Find on the Spill Contingency Plan section 3.3 (MMC's Initial Action Plan)
				Ensure Safety - Indentify and Contain - "Clean Up" (should be added here) - Report
				This should also confirm landfarm design. No HCC material to landfill.
27			compliant	Hazardous Materials Management Plan section 3.
30				Not included in MMC Submission Table
31			N/A	Not included in MMC Submission Table. Separate Water License
35				Not included in MMC Submission Table, Type B Licence.
37			need Type B WLA	(NIRB) Marine requirement. (EF) pending receipt of Type B WLA
38			need Type B WLA	(NIRB) Marine requirement. (EF) pending receipt of Type B WLA
39			need Type B WLA	(NIRB) Marine requirement. (EF) pending receipt of Type B WLA
42			need Type B WLA	(NIRB) Marine requirement. (EF) pending receipt of Type B WLA
44			need Type B WLA	(NIRB) Marine requirement. (EF) pending receipt of Type B WLA
45			compliant	
48*				
49*				
50				
59				
72				
75			non-compliant	(NIRB) Marine requirement. (EF) Cannot Find
77			non-compliant	(NIRB) Marine requirement. (EF) Cannot Find
78			non-compliant	Need to make "Preliminary" into Final. Report should have current site plan, final impact plan map, and final reclamation plan map. Cannot find request for information on NWB requirements.
79			non-compliant	Can only find very general statements on items 1 to 4. Include these items in the Final Closure and Reclamation Plan.
80				Not included in MMC Submission Table.
82			compliant	(NIRB) Marine requirement. (EF) Generally covered in Spill Contingency Plan but could be more specific
85				Not included in MMC Sumbission Table; Specifically Item d)
	1		compliant	(D499) Pit water model re-run for higher mining rate of 8,500 TPD - shows pit water TDS may be 3x higher if gw TDS 3x higher; if hydraulic conductivities of Second Portage and Bay Zone Faults are 3x higher, pit water TDS may be 40% higher than base case.
	2		compliant	(D317) 2006 gw program completed (new wells, gw re-sampled).
	4		compliant	
	5		compliant	Fault Testing and Monitoring Plan

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	43		pending geochemical review	completeness pending geochemical review by EBA
	44		compliant	Operational ARD/ML Sampling and testing Plan
	46		compliant	Operational ARD/ML Sampling and testing Plan
	48		compliant	(D467) Water treatment plans for attenuation ponds predicated on water not requiring significant treatment other than pH adjustment; treatment contingencies are provided.
	49		compliant	(D467) In-situ treatment descriptions provided at conceptual level and assume that existing treatment technologies are viable for the proposed project.
	50		compliant	(D499) Pit water salinity model re-run for higher mining rate of 8,500 TPD using same (2003 and 2004) depth-TDS profile.
	60		compliant	Operational ARD/ML Sampling and testing Plan
	61		compliant	(D420)
	62		compliant	
	63		compliant	
	64		compliant/non-compliant	Draft Document Only. Proponent has deferred MMC's internal reviewer's key issues.
	65		compliant	
	86		compliant	Mine Waste and Water Management section 5.2, 5.3, Figure 5.1
	6		non-compliant	Cannot Find.
	29		need Type B WLA	pending receipt of Type B WLA
	33		need Type B WLA	pending receipt of Type B WLA
	36		need Type B WLA	pending receipt of Type B WLA
	38		need Type B WLA	pending receipt of Type B WLA
	41		need Type B WLA	pending receipt of Type B WLA
	42		need Type B WLA	pending receipt of Type B WLA
		3.1(i)	compliant	Work Plan to collect data to assess permeability is in place, Fault Testing and
				Monitoring Plan
		3.1(iii)	non-compliant	(D317) 2006 gw program completed; no 2007 program.
		3.1(iv)	compliant	(D499) Pit water model re-run for higher mining rate of 8,500 TPD - shows pit water TDS may be 3x higher if gw TDS 3x higher; if hydraulic conductivities of Second Portage and Bay Zone Faults are 3x higher, pit water TDS may be 40% higher than base case.
		3.1(v)	compliant	(D499) Pit water model re-run for higher mining rate of 8,500 TPD - shows pit water TDS may be 3x higher if gw TDS 3x higher. (D467) Water treatment plans predicated on water not requiring significant treatment; implied assumption that mitigation measures for "disposing of pit water of poor quality" not needed.
		3.1(viii)	compliant	(D467) Water treatment for tailings reclaim water and tailings slurry are provided; water treatment contingencies provided for attenuation pond and mine contact waters; treatment efficiencies not described; pH adjustments are provided.
		3.1(x)	non-compliant	additional detail required

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				(D515) Proposed water leaving Portage and Vault Attenuation Ponds will meet MMER at point-of-discharge; CORMIX modelling "suggests" diffusers will dilute attenuation water to Nunavut DW guidelines and close to CCME FAL at 30m radius from diffusers.
		3.1 (xi)	compliant/non-compliant	Requirements were for the preparation of details on the outlet configuration, discharge characteristics, plume behavior and bathymetric information at two selected diffuser sites at Third Portage Lake and one site at Wally Lake. EBA did not find mention of potential cumulative impacts based on an extended life of the mine at respective locations. Also, a monitoring program to confirm mine effluent and dilution chemistry results should also be prepared prior to the final design and implementation program.
		3.1 (xii)	compliant	modelling completed
		3.1 (xiii)	compliant	bathymetric survey completed
		3.2 (i)	non-compliant	Cannot Find
		3.2 (ii)	need Type B WLA	pending receipt of Type B WLA
		3.2 (iii)	need Type B WLA	pending receipt of Type B WLA
		3.2 (iv)	non-compliant	Cannot Find
		3.2 (v)	non-compliant	Cannot Find
		3.2 (vi)	non-compliant	Cannot Find