

RECEIVED*By Manager of Licensing at 11:03 am, Sep 13, 2011*

Author/agency	Date	Report Section	Query/Comment	Response / Section Response reflected in
PKCA MANAGEMENT PLAN				
AANDC			Shear to get back to AANDC re: chronic toxicity (testing) of flocculants	
AANDC			Shear to check peak flow events – ensure water balance includes considerations (i.e. 2006 event) - addressed via SWMP	
PIT DEWATERING ADDENDUM				
AANDC			Shear to reassess Water Quality Dilution modeling after production	
AANDC			Shear to include in mine plan, or AEMP testing for mineralization of pit water	
SITE WATER MANAGEMENT PLAN				
AANDC			design of berms (retention ponds) – conceptual design of ponds will be included in revised SWMP (not in advance of hearings)	
GENERAL MONITORING PLAN				
AANDC			3 rd party geotech. Review required (5 years since construction and change of ownership)	
		P4/Sect4.2/Pgh8/Operational Geotechnical Inspections	Would recommend an annual training program for site staff for the monitoring program.	
AANDC			Shear to include HWTA in future geotech reviews	

AANDC	P4/Sect 3.0/Pgh2/ Data Management	Data Management: Updated GMP will provide more detail on data management and implementation
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AANDC	P10/Sect6.3.1/pgh2/Weekly Seepage Inspection	Suggest field parameters such as conductivity and pH and visual estimate of turbidity also be recorded where visible flow is observed. Seepage flows at Dam: Shear to clarify in plan that if seepage flows are visible, potential mitigation is to collect and divert seepage back to PKCA - this is dependant on the amount of threshold (mitigation is threshold dependant)
AANDC	P10/Sect6.3.1/pgh2/Weekly Seepage Inspection	

PRELIMINARY LANDFILL MANAGEMENT AND DESIGN PLANS

AANDC		Wind dispersion of incinerated material (ash): Shear to develop SOP to address this issue
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AANDC		Sludge management: will be addressed via revised GMP or technical memo by Shear
AANDC		Shear to consider previous comments by intervenors on Tahera plans
AANDC		Shear to address how water licence G 12 of licence is addressed by way of presentation at public hearing.
AANDC		General Comment: The Tahera designs and plans were not approved by the NWB. Previous comments from intervenors may help to guide Shear in the development of their plans.

PRELIMINARY LANDFARM MANAGEMENT AND DESIGN PLANS

AANDC		Shear has sighted landfarm area
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General Comment: The Tahera designs and plans were not approved by the NWB. Previous comments from intervenors may help to guide Shear in the development of their plans.

AANDC

WASTEROCK MANAGEMENT PLAN

AANDC would like assurance that any results from ARD/ML testing be made available prior to the necessity for segregating the rock during mining operations - Shear has conducted analysis, will confirm when results can be released.

AANDC

Seepage Survey Results: Shear conducted survey, to confirm if results can be released Shear to clarify in SWMP that constructino of retention pond A will be contingent on water quality

AANDC

AANDC

Shear to confirm that a geotechnical inspection of waste rock piles was conducted in 2011. Geotechnical inspection not conducted on Waste Rock Piles in 2010. Geotechnical inspection of waste rock piles should be undertaken yearly.

AANDC

Sec. 7.5

AANDC

Shear to clarify what the target layer thickness is of the granitic pad and CPK - to maintain the foundation in a frozen state

AANDC

Sec. 11.3.1

AQUATIC EFFECTS MONITORING PROGRAM

The AEMP should be updated for Operations. Shear to submit prior to, or in conjunction with production

AANDC

Shear to investigate selection of control lake upgradient of site. Athena is presently downgradient, though distal
Monitoring Frequency: Updated AEMP to ensure sampling frequency is consistent throughout report. Consolidate sampling into one table.

Suggest amplification/justification as to why only a few specified places to sample for dioxins and furans were chosen

Shear to provide justification as to why no control sampling locationsd for benthic invertebrates have been chosen

Actual water quality criteria to be met should be included in the Plan (not just reference to guidelines)
The updated plan should include details on actions to be taken if exceedences are observed (i.e. decision tree)

INTERIM CLOSURE AND RECLAMATION PLAN

Licenced requiriement to produce final A&R 60 days after issuance of licence: Final plan should address: how permafrost aggredation impacts the use of waste rock material for reclamation; and, possibility of impacts of potential talik at bottom of open pit after mining, and hydraulic connection to carat lake.

AANDC	P26/Sect7.1/Pgh1	Shear to provide figure in final A&R plan that illustrates the wall of the pit that will remain exposed (i.e., the south side of the pit).
AANDC	P26/Sect7.1/Pgh3	Shear to model long term pit water quality for the projected time the pit will take to fill.
AANDC	P26/Sect7.1/Pgh3	Shear to include contingency measures in updated A&R to facilitate filling of the pit if it is not found to be filling to schedule.
AANDC	P26/Sect 7.1	Shear to consider if inert debris proposed to be deposited at the bottom of the pit will be encased in overburden.
AANDC	P29/Sect7.4.2/pgh4	Reference throughout the plan to organic material should be changed to till
AANDC	P11/Sect 3.2/pgh 1	The mean annual temperature is -11.8°C: It would be helpful if the source of this value was described here. Based on data from what location and over what time period;
AANDC	P12/Sect 3.2/pgh 3	Some additional information should be provided on the derivation of these values. Based on data from what location and over what time period. Note that the mean annual temperature in pgh 1 (-11.8 °C) is inconsistent with the value in this list (-11.1°C).

water accumulation in pit during care and maintenance and potential to cause pit wall instability: Shear to conduct a detailed pitwall inspection after dewatering /a prior to mining.

AANDC P15/Sect 4.3.1/pgh4

Shear to Provide clarification on proposed water transfer from Cells A to B to C

AANDC P16/Sect 4.6/pgh3

Shear should discuss and consider availability of overburden for reclamation due to freezeback of material in dump.

AANDC P24/Sect6.1/pgh2

the reclamation plan should address how openings to underground mining works will be dealt with - if underground mining remains in mine plan (update mine plan at such a time as UG works become an option)

AANDC P25/Sect7.0

Updated plan should consider placing boulders at widely spaced intervals on top of perimeter berm to make more visible/distinguishable during snow cover conditions. Placement of perimeter berm should also consider slope stability of upper portion of pit walls during development of set back distances.

AANDC P26/Sect7.1/Pgh1

Final regrading of slopes will be to attain an average slope of approximately 19° by pushing material down onto benches: this practice has had challenges elsewhere - precedent should be checked
Remove bullet

AANDC P27/Sect7.2.2/pgh1
AANDC P27/Sect7.2.2/pgh3

AANDC	P28/Sect7.3.3/pgh2	Carry out appropriate editing
AANDC	P29/Sect7.4.2	General comment: Would be useful to include an illustration of reclamation of PKCA area to convey the various concepts.
AANDC	P29/Sect7.4.3.1/pgh1	Should be C3 denote culvert removal in plan for clarification
AANDC	P34/Sect7.9.1/pgh1	reword as appropriate (re-recontouring)
AANDC	P35/Sect7.9.2/pgh1	wording to be clarified for consistency (re: facility to be used for disposal of demolition debris)
AANDC	P36/Sect7.11.2/pgh1	Non-Salvagable structures: Plan for permitting is to go in pit. Wording should reflect this.
AANDC	P37/Sect7.11.2/ Non-Salvageable Structures	Minimum burial depth of large volume demolition scrap needs to be specified.
AANDC	P37/Sect7.11.2/	F1-F4 hydrocarbon presence: Suggest deleting reference to background – inappropriate for this site.
AANDC	P38/Sect7.12.3/pgh1	
AANDC	P41/Sect11.2/SPRM	reword for clarity (re: consecutive years of monitoring - phase trigger for reclamation)
AANDC	P41/Sect11.2/LPRM	reword to reflect more specific goals of stable reclamation
AANDC	P43/Sect11.4.2.3/pgh1	water quality monitoring frequency: consider revision to report
AANDC	P45/Sect11.5.2.3/pgh1	consider rewording for clarity (transition from annual monitoring frequency to once every five years - appears to abrupt).
EXPLOSIVES MANAGEMENT PLAN MINE PLAN		

AANDC		AANDC looks forward to the results of the geotechnical testing proposed by Shear on the granite rock paired with kimberlite Structural mapping - Shear has a memo on why single benches were chosen - Shear will distribute.
AANDC		
BORROW MANAGEMENT PLAN		
		General Comment: No records were kept by Tahera, but it appears that the borrow management plan was follwed for implementation
AANDC		
		Shear to update plan: will include survey of borrow sites undertaken in 2011
AANDC		
RECLAIM ESTIMATE		
		Shear had a reclaim estimate undertaken by Nuna Logistics. Shear has retained additional services to re-run the reclaim. AANDC and Shear will work together to resolve this issue prior to the Final Hearing
AANDC		
WASTEWATER TREATMENT PLAN		
OMS for PKCA		
AANDC	appendices	Editorial issue (appendices) Shear to update include allowable discharge rates, rather than reference to PKMP Weekly operational geotechnical inspections v.s daily visual inspections (referenced in PKCAMP). Edit for clarity
AANDC	Pg 9, Sec. 2.3, bullet 1.	
AANDC	Pg. 11, Sec. 4.2.2	
AANDC		
QUALITY ASSURANCE/QUALITY CONTROL PLAN		

AANDC

FUEL STORAGE CONTAINMENT FACILITIES

General Comment: should add a reference to plans, that have reference to QA/QC that identifies hierarchy of applicability (i.e., if there are discrepancies between sections of other plans, and the QA/QC plan, the QA/QC plan shall take precedence

AANDC

Sec. 4.5

EMERGENCY PREPAREDNESS PLAN FOR DAM EMERGENCIES

The contractors construction plan should be reviewed by a qualified geotechnical engineer and his/her assessment should be sent to the NWB as an addendum to the Construction Drawings and Specifications

AANDC

General editorial comment: remove reference to specific company and person names. This document should be updated yearly.