



Indian and Northern
Affairs Canada

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October 13, 2006

By fax 250-427-8451 and Mail

Bruce Donald
Reclamation Manager
Teck Cominco Ltd.
Bag 2000
Kimberly, BC V1A 3E1

Nunavut Water
Board

OCT 16 2006

Public Registry

Dear Mr. Donald:

RE: Polaris Mine – 2006 Site Inspection

Indian and Northern Affairs Canada (INAC) – Land Administration conducted a site inspection of the Polaris Mine on July 26, 2006.

This letter gives an overview of the nine areas visited during the site inspection and some recommendations on issues that INAC would like to see Teck Cominco Ltd address in the future during the reclamation and monitoring phase.

1. Garrow Lake Dam

The creek channel through the breach in the dam was flowing at the time of the inspection to a depth of about 30 cm. The breach cut slopes as well as the upstream and downstream slopes of the remaining dam embankment are all stable and show no signs of erosion. The area downstream of the dam on the right bank (facing downstream) is poorly drained and has been covered with rip rap to reduce erosion and sedimentation into Garrow Creek. This was an issue in previous years, shortly after dam decommissioning. The diversion ditch on the west side of the dam has been lined with rip rap to limit erosion.

INAC is satisfied and has no further concerns with this area.

2. Wave Break Structure Area

The wave break structure was previously breached back to the original Garrow Creek bed level at the outlet of Garrow Lake. In the past year, wind-driven ice

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pans on Garrow Lake have bulldozed the lakebed sediment back into a low barrier across Garrow Creek at the outlet of Garrow Lake. The gravel sized shale particles making up the beach material have formed a natural, but pervious, barrier about 30 cm high and about 1 metre wide. About 15 cm to 30 cm of head difference exists across the barrier. The barrier is stable under current flow conditions but could be naturally breached under high flow conditions. The only apparent consequence of this barrier being present across the creek is an increase in the duration of the flow period from Garrow Lake. It would appear that the lake has a natural outlet regulation mechanism that would mitigate the potential for erosion in the creek channel that could otherwise result in lowering of the lake water levels.

INAC is satisfied and has no further concerns with this area.

3. Frustration Lake Jetty and Road

Previous inspection noted some concerns with erosion of the natural slopes adjacent to the access road to Frustration Lake, specifically the portion leading down to Frustration Lake. Concentration of overland runoff has resulted in deep erosion of the road bed foundation and adjacent slopes in several areas. Teck Cominco Ltd have now armoured the drainage channels with rip rap and constructed a series of low sand and gravel runoff deflection berms across the road to mitigate the erosion problems that had developed.

Now that the runoff has re-established its own drainage channel network across the road alignment, Teck Cominco Ltd will have to monitor to check that the channels remain stable with the armouring that was placed and that no new erosion develops.

The Frustration Lake jetty has undergone some slumping along the north side. Teck Cominco Ltd noted that in the spring, the lake outlet was blocked by ice and water levels rose above the surface of the jetty structure.

The slow erosion and slumping of the jetty was predicted in the A & R plan and was deemed by regulators to be an acceptable alternative to removing the structure completely.

INAC is satisfied and has no further concerns in this area.

4. New Quarry Area

Since the last inspection trip by INAC in 2004, Teck Cominco Ltd has mitigated two major areas of erosion that had developed along the edge of the New Quarry. Gullies had developed as a result of concentrated flow from overland runoff cutting into the crest of the slope along the southwest end of the

quarry. Teck Cominco Ltd constructed a swale in each of these areas and armoured the channels with rip rap to reduce erosion

No new areas of erosion have since developed, however INAC recommends that these areas be monitored to ensure that they remain stable.

5. Operational Landfill

Teck Cominco Ltd has replaced the four thermistors in the Operational Landfill cover with four new thermistors with data loggers. At the time of the inspection the thermistors were not operational. Teck Cominco Ltd stated that the thermistors will be hooked up in August by Gartner Lee Ltd and will begin reading twice a day. The previous thermistors had to be read manually and were read only once or twice a year, providing limited data. During the installation of the new thermistors in July, Teck Cominco Ltd noted that the depth to the frozen zone in the holes was about 0.8m. The design cover thickness on the landfill is 1.8 m.

The cover appeared in good shape with no signs of cracking or erosion. The slopes above the landfill also appear to be in good condition, with no signs of erosion or instability.

INAC recommends that the thermistor data needs to be provided over several years to confirm the performance of the landfill liner and to demonstrate that the waste materials have become encapsulated by the permafrost.

6. Fuel Tank Farm Slopes and Adjacent Area

This year, the oversteepened slopes noted in the 2004 inspection were flattened by bulldozing the crests and filling along the toe to blend in with the adjacent slopes. There is no sign of erosion or instability in the adjacent slopes and it is expected that this area will have no further concerns. In the long term, gullies may develop along the reclaimed slopes, however, these will be no different than natural gullies developing on similar slopes in other areas and should not be considered a trigger for more reclamation unless the portal backfill plugs are threatened.

INAC is satisfied and has no further concerns in this area.

7. Shoreline Area

The immediate shoreline area is being naturally re-shaped by ice and water action. Several areas appear to have become depressed in relation to the adjacent shoreline profile, possibly as a result of buried ice melting out of the beach sediments. Ice rafts have pushed up gravel ridges in other areas and locally steepened the shoreline slope at the water line.

The backfilled portal areas in the slopes adjacent to the shoreline are in good condition, with no sign of slumping, erosion or instability.

INAC is satisfied and has no further concerns in this area.

8. Little Red Dog Quarry (LRDQ) Landfill

Teck Cominco Ltd has installed four new thermistors with data loggers in the steel casings that penetrate the full depth of the landfill. The casings were cut down to ground level as the steel pipes were acting as thermosyphons. The thermosyphon effect locally decreases the temperature around the hole. As a result, the temperatures being read by the thermistors would not be representative of the actual ambient ground temperatures in the body of the landfill. A fifth casing was not used as it was considered a spare in case one of the others became blocked or inoperative. The thermistor data will be required over a period of several years to confirm the performance of the landfill liner and demonstrate that the waste material has become encapsulated by the permafrost.

The cover looks good, with no sign of cracking or material displacement. Teck Cominco Ltd has been picking up miscellaneous pieces of debris, garbage and litter from around the site as part of the ongoing clean-up of the site. A pile of this material was placed on top of the liner in the quarry and it is intended to be buried in the landfill at a later date. Some pieces of scrap steel were noted around the pit perimeter and should also be collected and buried.

Some meltwater was seeping from the liner through the bedrock notch area. Teck Cominco Ltd committed to taking samples of this water for analysis and providing the data to INAC.

9. Subsidence Area

Teck Cominco Ltd has completed another round of GPS survey measurements at 5m centres within the subsidence area. This information will be used in conjunction with previous measurements to assess the rate and magnitude of any subsidence that is occurring.

Evidence of ongoing subsidence movements was noted by the presence of a series of continuous open cracks in the rock fill cover over the subsidence zone. Also, Teck Cominco Ltd noted that the pond located in the centre of the subsidence zone had deepened slightly from previous visits. The assessment of the subsidence zone is still being done by Golder Associates, although Teck Cominco Ltd provided no date for their report. The latest survey data will be reviewed as part of this ongoing assessment.

This area remains a concern for long term stability of the site. The future monitoring requirements will depend on the conclusions developed as a result of the subsidence assessment being carried out by Golder Associates. Also the latest survey data and analysis should be provided to INAC for our review.

Here is a summary of the current status of the outstanding on-site reclamation related items noted in the 2004 inspection:

Outstanding Item from 2004 Inspection	Status Based on 2006 Inspection
• Flatten slope below bench where incinerator building was located.	• Area was flattened and re-contoured. No further concerns.
• Flatten slope below bench where tank farm was located.	• As above.
• Flatten slope of backfill used to close Exploration Portal.	• Slope looks stable, no further action required. Visually monitor.
• Blade down crest of slope above Main Portal.	• Not specifically inspected, but overall slope looks stable. Visual monitoring should continue.
• Remove reinforcing steel and scrap metal and debris for safety and aesthetic reasons.	• A substantial amount of material has been collected and stockpiled in LRDO Landfill. Continue monitoring and collecting debris.
• Remove soil piles on upstream side of Garrow Lake Dam as they thaw and drain.	• Soil piles have thawed and drained, but are no longer a concern. May be left in place.
• Report on subsidence zone by Golder.	• Still outstanding- monitoring continues.
• Report on analysis of rusty coloured sediments in Garrow Lake.	• Analysis results received in 2005. Trace metals concentrations were below site specific risk criteria. No outstanding concerns.
• Install thermistors and data loggers in Operational Landfill and LRDO Landfill	• Will be completed in 2006. Performance of cover and waste encapsulation by permafrost will be monitored.
• Monitor outflow from Garrow Lake through wave break structure to assess if channel is being eroded and remediate if necessary.	• Natural barrier forms seasonally due to ice thrusting. No outstanding concerns for excessive channel scour as there is a natural "healing" mechanism.
• Monitor marine foreshore to assess stability of re-instated beach area.	• After two years, beach area looks stabilized, with no areas of concern.

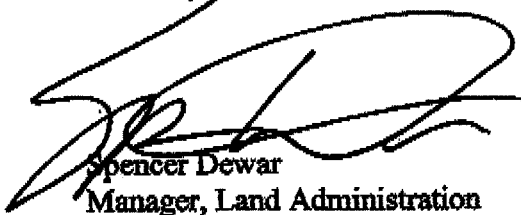
The following reports or documentation were noted to be outstanding based on the 2004 and 2006 inspections and review of the 2004 and 2005 quarterly and annual reports:

- Report on subsidence zone assessment by Golder Associates.
- As-built drawings for marine dock and adjacent shoreline reclamation.
- As-built drawings for Garrow Lake Dam decommissioning.
- As-built drawings for portal closure seals.
- Remaining close-out reports for metals and hydrocarbon contaminated areas.
- As-built drawings for LRDQ and Operational Landfill.
- As-built drawings showing the locations where metals contaminated soils were placed in LRDQ Landfill.
- A report discussing the residual metals contaminated soils in the footprint of the Concentrate Storage area.
- Reporting on the Garrow Lake erosion monitoring and dock and marine foreshore monitoring.
- EBA report on 2004 annual geotechnical inspection, as well as 2005 and 2006 annual inspections.

INAC recommends that Teck Cominco Ltd provide this information as it will be required in order to have complete assessment of the potential outstanding liabilities associated with the Polaris mine site.

If you have any questions or concerns please feel free to contact me at (867) 975-4280. We look forward to your response on this matter.

Sincerely,



Spencer Dewar
Manager, Land Administration

cc RMO - Baffin
District Manager
Nunavut Water Board