Hi Kimberley

As indicated, the GNWT had not completed IR Response 1.2.61

This is now completed and attached. Please forward it to the parties to the EA.

Thank you

Gavin More

Information Request Response
Paramount Cameron Hills Extension
Environmental Assessment (EA 03-005)

IR Number: **1.2.61**

Source: **KTFN**

To: **Government of the Northwest Territories**

DAR Section: N/A

Terms of Reference Section: N/A - Review Board IR 1.1.28

Preamble

Paramount provides its view of the requirements of the GNWT handbook on constructing winter roads.

Request
Please provide the MVEIRB with the following information:

a) GNWT's evaluation of Paramount's response to IR 1.1.28

1) Firstly - The GNWTs document "Environmental Guidelines For The Construction, Maintenance and Closure of Winter Roads In The Northwest Territories" provides guidelines that were prepared for use by Deptartmental personnel for the construction and maintenance of GNWT Winter Roads. These guidelines were compiled and prepared through a review of how DoT historically constructed winter roads along with discussions with other jurisdictions that also construct winter roads to access remote areas, while following applicable Land Use Guidelines of the day. These are guidelines only and given specific snow, soils or field conditions, may require adjustments in order to protect the environment and provide a public winter road. As noted in Paramount's response; these are guidelines only, and should not be interpreted as minimum requirements.

2) The guidelines call for a 10 cm layer of compacted snow over ice-rich soils for winter road construction. DoT recognizes that it is sometimes difficult to compact large thicknesses of granular/sugary/or dry snow. This can be achieved, however, by compacting lesser or different thicknesses of the loose dry snow until the 10 cm is achieved. However, 10 cm of loose snow should be the minimum that one would start with and additional snow could be pulled from the windrow and placed and compacted on the roadway until the desired thickness is achieved. As noted in the third paragraph on page 22, "Generally, winter road

construction should get under way when there is a minimum of 20 cm of snow. Tramping is effective even if there is only 5 to 10 cm." Therefore, Paramount's suggestion of removing almost all the current snow cover in order to accelerate the compaction process and frost penetration has merit and is somewhat consistent with the document.

There are no minimum requirements in the document for a minimum blade height of 15 cm when windrowing slash. However, the use of blade or mushroom shoes are recommended in all cases where snow or other debris are being bladed / windrowed alongside the roadway.

Another recommendation would be that Paramount adjust their minimum 4 cm thickness of "undisturbed snow cover" (loose snow) to 5 cm.

Also, serious consideration should be given to a 2 to 4 day snow setting period after initial compacting and shaping of the roadway prior to normal operations (travel, grading or dragging) the road.

DoT agrees that blade/mushroom shoes are only required during the initial construction of the winter road as a means of minimizing disturbance to the original ground cover. Once the snow road has being compacted, all future grading and dragging operations can be completed without the use of blade/mushroom shoes.

In summary, the Department's document "Environmental Guidelines For The Construction, Maintenance and Closure of Winter Roads In The Northwest Territories" in its current form, still serves as an excellent guide for the construction and maintenance of our winter roads. However, it must be recognized that it does not address every possible scenario, snow, soils, field or ground cover condition, and adjustments may be required to construct the winter road while minimizing negative impact on the original ground cover.