



**Mackenzie Valley Land and Water Board**  
**7th Floor - 4910 50th Avenue**  
**P.O. Box 2130**  
**YELLOWKNIFE NT X1A 2P6**  
**Phone (867) 669-0506**  
**FAX (867) 873-6610**

**STAFF REPORT**

<b>Company:</b> Paramount Resources Ltd.	
<b>Location:</b> Cameron Hills NT	<b>Application No.:</b> LUP App - MV2000A0041 WL App - MV2000L1-0009
<b>Date Prepared:</b> Oct 23, Nov 1, 2000	<b>Meeting Date:</b>
<b>Subject:</b> Paramount Resources Ltd. Cameron Hills, Oil and Gas Exploration Project	

**1. Purpose/Report Summary**

Paramount Resources Ltd has applied to the MVLWB for a Type 'A' Land Use Permit(s) and a Type 'B' Water License for the development, construction, and operation of oil and gas exploration facilities in the Cameron Hills Region of the Southern Northwest Territories.

The scope of this project consists of :

- Drilling of 9 new wells located at the following coordinates:  
M 73 -Lat: 60°02' 45.599", Long: 117° 29' 55.608"  
A-04 - Lat: 60° 03' 07.304", Long: 117° 30' 24.092"  
D-74 - Lat: 60° 03' 05.236", Long: 117° 29' 50.334"  
H-04 - Lat: 60° 03' 26.834", Long: 117° 30' 25.113"  
B-05 - Lat: 60° 04' 06.899", Long: 117° 30' 49.646"  
C-74 - Lat: 60° 03' 13.338", Long: 117° 29' 27.145"  
G-03 - Lat: 60° 02' 23.743", Long: 117° 30' 51.584"  
I-73 - Lat: 60° 02' 44.692", Long: 117° 28' 24.475"  
A-46 - Lat: 60° 05' 04.581", Long: 117° 37' 36.463"
- Complete and test 7 existing wells bounded within the following coordinates:  
North - 60 degrees, 20 minutes  
South - 60 degrees, 00 minutes  
East - 117 degrees, 15 minutes  
West - 117 degrees, 50 minutes
- Future potential drilling of up to 10 additional wells.
- Construction and operation of camp(s).

- Construction and operation of winter access, ice bridges and lease sites.

## **2. Background**

- Paramount Resources submitted Land Use Permit and Water License applications to the MVLWB on **August 29, 2000**.
- Applications were accepted on **September 11, 2000**.
- Land Use Permit and Water License applications were sent out for distribution to First Nations and government on **September 12, 2000**.
- Land Use Permit comment deadline was set for **October 13, 2000**.  
Water License comment deadline was set for **October 19, 2000**.

## **3. Comments**

- Comments received are summarized in the attached consultation table.

### **3.1 Consultations/telephone logs**

- Telephone logs are attached for reference.

### **3.2 Potential Environmental and Resource Impacts**

#### **Water**

- Contamination resulting from fuel spills.
- Draw down of water source lake.
- Deleterious material (soil, dirt, etc) introduced into waterbodies.
- Water well withdrawal potentially affecting well integrity.

#### **Soil**

- Contamination resulting from fuel spills.
- Soil compaction .
- Soil gouging.

#### **Vegetation**

- Loss of vegetation in newly cleared areas.
- Compaction of surface vegetation.
- Foreign species introduction from reclamation seed mixes.

#### **Wildlife**

- Disturbance through habitat loss from clearing of access and well sites.
- Disturbance through noise and light from project activities.
- Potential road conflicts with wildlife using access routes as transportation corridors could occur.

#### **Air and Noise**

- Air and noise pollution will occur on access routes and on well sites.

### **3.3 Mitigation Measures/Restoration Plans**

#### **Water**

- Comprehensive Spill and Emergency Response Plan in place.
- Drawdown from source lake will lower lake level 2cm and will be staggered throughout drilling activities. Lake does not contain over wintering fish populations
- Introduction of deleterious materials (soil, dirt, etc) into watercourses will be immediately removed, and a spill and emergency response plan is in place. All stream crossings will be either ice bridges constructed from snow or ice and bridges will also be built for summer quad travel over streams and creeks. Ice bridges will be constructed over the following drainages not frozen to the bottom using only clean snow and ice:
  - Two Cameron River Crossings.
  - Tributary of Cameron River near A-73 Wellsite
- No fueling activities will be allowed within 100 meters of any watercourse crossings.
- Wells used for water withdrawal will be used only as a back up measure and withdrawal will be conducted at a rate to protect the well.

#### **Soil**

- Contamination minimized through bermed fuel tanks, emergency response and spill contingency plans, vehicles checked for fuel and oil leaks, absorbent pads/socks on hand.
- Soil compaction will be minimal through snow compaction on access routes and well sites which will freeze ground and prevent compaction.
- All equipment to be used in project operations will be transported during winter operations.
- Cutter blades on machinery will be equipped with mushroom blades to prevent gouging.

#### **Vegetation**

- New clearing of land will be minimized through using existing corridors and clearings to fullest extent.
- Compaction of surface vegetation reduced by all equipment transport/movements during winter frozen conditions.
- Foreign species introduction kept to low levels by only using seed mixes on areas susceptible to erosion, other areas will utilize natural regeneration with ongoing monitoring to assess regeneration.

#### **Wildlife**

- Maximum use of existing campsites, corridors, seismic lines and winter access routes will minimize the damage to undisturbed habitats.
- wildlife effects minimal since noise will be temporary, localized and confined to access routes and wellsites.

- disturbances from activities will be confined to project sites and access routes and will avoid sensitive areas (waterbodies, steep slopes) keeping species displacement to a minimum.
- these will be mitigated by low speeds and driver training to respond and allowing wildlife to pass on access routes.

#### **Air and Noise**

- All equipment will conform to Federal and Territorial emissions standards.

#### **3.4 Traditional Environmental Knowledge**

- Advice from aboriginal groups within project area.
- Paramount had invited aboriginal groups to participate in TK studies for project area.
- Helicopter flights over area with aboriginal representatives from Kakisa, Hay River Dene.

#### **3.5 Attachments**

- Phone logs, consultation table.

### **4. Review comments**

#### **4.1 Attachments**

### **5. Conclusion**

This development, while large in scope and area, consists of standard land use practices and methods. Projected impacts from activities relating to oil and gas exploration activities consist of fixed impact sources that are localized in nature. Existing corridors and cleared areas will be utilized to the greatest extent possible, minimizing the extent of new disturbance and clearing of vegetation. Mitigation measures proposed for projected impacts adequately address environmental impacts related to project activities.

Extensive public consultation was carried out for first nations and government. First Nations and government groups are listed on the previous page. No significant concern was submitted to the MVLWB in relation to the project. Extensive follow up was done to ensure that first nations groups were aware that comments needed to be submitted to the MVLWB for consideration, even if comments were submitted past the deadline date. Requests were received from First Nations for extensions to the review period. At this point First Nations were informed that late comments would be accepted up to three weeks after the deadline date.

With the exception of the K'atlodeeche First Nation in Hay River, no first nations groups submitted comments/concerns to the MVLWB relating to the Cameron Hills project. Environmental aspects of comments from K'atlodeeche First Nation in Hay

River are dealt with through project mitigative measures and the Land Use Permit conditions. Concerns relating to economic and social factors are outside the scope of the MVLWB's mandate.

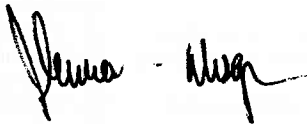
Government Departments submitted comments which are summarized in the MVLWB staff report. Overall no significant public concern was submitted to the MVLWB.

Industry standard practices and mitigation measures proposed in operating conditions will result in the operation having no significant environmental impact. Additionally, no significant public concern was submitted to the MVLWB, therefore this project should proceed through the regulatory process.

## **6. Recommendation**

The Mackenzie Valley Land and Water Board should issue the Land Use Permit and Water License for a period of five years.

**Respectfully submitted,**



**Regulatory Officer**

**FIRST NATIONS**

Organization & Contact	Concerns/ Suggestions	How they were dealt with / incorpora.
<p>Liidii Kue First Nation Rita Clii, Chief Comments received by MVLWB Oct 23, 2000</p>	<ul style="list-style-type: none"> <li>Supports Ka'a'gee First Nation for final approval in land use and economic activities on Cameron Hills area.</li> </ul>	
<p>Katlodeeche First Nation Pat Martel, Chief Comments received by MVLWB Oct 17, 2000</p>	<ul style="list-style-type: none"> <li>The KFN have identified concerns with the Cameron Hills Project and requested that the LUP and WL applications for the project be referred to the MVEIRB for Environmental Assessment.</li> <li>The KFN listed conditions to be addressed in the Land Use Permit and Water License.                             <ul style="list-style-type: none"> <li>- A liaison officer should be hired from the band for info and potential impacts to traditional land users</li> <li>- A compensation agreement from Paramount should be established to address potential impacts to traditional land users.</li> <li>- Paramount will check that no trappers are working along access routes and that trappers are informed when Paramount is using cut lines.</li> <li>- Clean up equipment will be kept on site.</li> <li>- Band should have greater input into the environmental screening report for the next phase of the project.</li> </ul> </li> <li>The KFN also submitted comments specifically in regards to the environmental screening report and are summarized below.                             <ul style="list-style-type: none"> <li>- Report does not give adequate information on traditional knowledge and traditional land users. (Section 4.11 of Env. Screening Report)</li> <li>- Report does not give adequate information on socio-economic potential impacts or to a compensation agreement to traditional resource users. (Section 4.12 of Env. Screening Report)</li> <li>- Extra care must be taken to ensure that low lying areas are not disturbed and that soils are not compacted in these areas. (Section 6.1 of Env. Screening Report)</li> <li>- Timber and brush from well leases should be pile and burned. This will promote decomposition and nutrient release into the environment. (Section 6.2 of Env. Screening Report)</li> <li>- Re-seeding should only done with native/natural seed to prevent exotic species introduction (Section 6.3 of Env. Screening Report).</li> <li>- No fueling within 100m of any waterbody (Section 6.6 of Env. Screening Report).</li> <li>- when will the traditional knowledge study be completed and what is the bands involvement? (Section 7.9 of Env. Screening Report)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>- No specific reasons for EIRB referral</li> <li>- Issues pertaining to compensation, band liaison officer, and input into the screening report do not fall within the environmental scope of project assessment and cannot be incorporated into the LUP conditions.</li> <li>- Issues pertaining to trappers will be addressed in the LUP conditions.</li> <li>- Spill contingency plan is in place for clean up equipment.</li> <li>- Environmental concerns relating to soils, timber disposal, refueling, and restoration are addressed in LUP conditions.</li> <li>- Socio-Economic concerns are outside the scope of this board's mandate.</li> <li>- Following concerns are all addressed in project mitigations and Land Use Permit Conditions.</li> <li>- Conditions 68-72</li> <li>- Conditions 75-79</li> <li>- Condition 63</li> </ul>
<p>Deh Cho First Nations Michael Nadlii, Grand Chief Comments received by MVLWB Oct 16, 2000</p>	<ul style="list-style-type: none"> <li>DCFN requested a two week extension to allow affected communities to review the Cameron Hills Application.</li> </ul>	<ul style="list-style-type: none"> <li>DCFN was informed that the MVLWB cannot extend the review period for two weeks regarding the Cameron Hills LUP and WL applications, but that late submissions would be accepted since the board meeting for the Cameron Hills Project is not until Nov 9, 2000.</li> </ul>
<p>Fort Providence Metis Council Albert Lafferty, President Comments received by MVLWB Oct 13, 2000</p>	<ul style="list-style-type: none"> <li>FPMC requested an extension of two weeks to review the Cameron Hills Application.</li> </ul>	<ul style="list-style-type: none"> <li>Left message for Albert Lafferty on Oct 16 to call MVLWB in respect to extension request.</li> </ul>
<p>Ka'a'gee Tu First Nation Lloyd Chicot, Chief Comments received by MVLWB Oct 13, 2000</p>	<ul style="list-style-type: none"> <li>KTFN requested a two week extension to review the Cameron Hills Application.</li> </ul>	<p>Phone call on Oct 17, KTFN was informed that the MVLWB cannot extend the review period for two weeks regarding the Cameron Hills LUP and WL applications, but that late submissions would be accepted since the board meeting for the</p>

<p>Dene Nation Bill Erasmus, Dene National Chief Comments received by MVLWB Oct 13, 2000</p>	<ul style="list-style-type: none"> <li>• DN requested a two week extension to allow affected communities to review the Cameron Hills Application.</li> </ul>	<p>Cameron Hills Project is not until Nov 9, 2000 Phone call on Oct 16, Bill Erasmus of the was informed that the MVLWB cannot extend the review period for two weeks regarding Cameron Hills LUP and WL applications that late submissions would be accepted since board meeting for the Cameron Hills Project not until Nov 9, 2000</p>
<p>Deh Gah Got'ie Dene Council and Fort Providence Resource Management Board Ronald Bonnetrouge, Chief Comments received by MVLWB Oct 13, 2000</p>	<ul style="list-style-type: none"> <li>• DGGDC and FPRMB requested a two week extension to review the Cameron Hills Application.</li> </ul>	<p>Phone call on Oct 16, to Greg Nyuli of FPI was informed that the MVLWB cannot extend the review period for two weeks regarding Cameron Hills LUP and WL applications, that late submissions would be accepted since board meeting for the Cameron Hills Project not until Nov 9, 2000</p>
<p>Katlodeeche First Nation Pat Martel, Chief Comments received by MVLWB Oct 12, 2000</p>	<ul style="list-style-type: none"> <li>• KFN requested a two week extension to review the Cameron Hills Application</li> </ul>	<p>Phone call on Oct 17, Pat Martel of KFN informed that the MVLWB cannot extend review period for two weeks regarding Cameron Hills LUP and WL applications, that late submissions would be accepted since the board meeting for the Cameron Hills Project is not until Nov 9, 2000</p>
<p>West Point First Nation Karen Thomas, Chief comments submitted to MVLWB Sept 18, 2000.</p>	<ul style="list-style-type: none"> <li>• Stated that WPFN does not support the application</li> <li>• WPFN have not been properly consulted in regards to their traditional hunting areas in Cameron Hills and request that proper consultation take place</li> </ul>	<p>Phone call on Sept 20, 2000 to WPFN direct Paramount to initiate consultation on Cameron Hills.</p>
<p>Fort Providence Metis Council Albert Lafferty, President comments submitted to MVLWB Sept 12, 2000</p>	<ul style="list-style-type: none"> <li>• Requested that FPMC be put on distribution list.</li> </ul>	<p>Cameron Hills info sent to FPMC</p>
<p><b>GOVERNMENT</b></p>		
<p>National Energy Board John Korec</p>	<ul style="list-style-type: none"> <li>• Standard Preliminary Screening recommendations.</li> <li>• Reminder of regulatory requirements under Drilling Regulations</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporated into Preliminary Screening Document</li> </ul>
<p>MACA Jim Coughlin Comments received by MVLWB Oct 13, 2000</p>	<ul style="list-style-type: none"> <li>• No concerns/comments</li> </ul>	
<p>STANTON REGIONAL HEALTH BOARD Craig Nowakowski Comments received Oct 11, 2000</p>	<ul style="list-style-type: none"> <li>• Sewage pits be located 30 meters from any building used for human occupancy</li> <li>• Sewage pits be fenced off, treated with hydrated lime, and be pumped out to the nearest disposal facility.</li> </ul>	<ul style="list-style-type: none"> <li>• Sewage will be disposed of in sumps which will be located at least 30m from building</li> <li>• Sewage will be treated and disposed with the mix, bury and cover method used for sumps.</li> </ul>
<p>DFO Karen Ditz, habitat biologist comments submitted to MVLWB Oct 3, 2000</p>	<ul style="list-style-type: none"> <li>• No mechanized clearing within 30 meters of any waterbody</li> <li>• No deposition of slash, debris, or sediment into any waterbody and materials will be stored so that they do not enter any waterbody.</li> <li>• A vegetative mat should be maintained adjacent to watercourses.</li> <li>• Where soil is disturbed, erosion control measures should be implemented such as earth breaks, cross ditches, reseeded slash bundles, and willow staking</li> <li>• No instream construction or disturbance in any watercourse.</li> <li>• In the event of damage to waterbodies, DFO should be immediately contacted.</li> <li>• Only ice and snow can be used to construct crossings over waterbodies.</li> <li>• Crossings over watercourses cannot restrict flow.</li> <li>• Crossings must be removed or V-notched prior to break up.</li> <li>• No drilling within 30 meters of the high water mark of any waterbody</li> <li>• All drill cuttings and associated wastes must be disposed of so that they do not enter fish habitat or watercourses.</li> </ul>	<ul style="list-style-type: none"> <li>• All concerns addressed in project mitigation measures and LUP Conditions.</li> </ul>

	<ul style="list-style-type: none"><li>• All water intakes must be properly screened to prevent fish entrainment.</li><li>• All sumps, wastes, and sewage containments must be located at least 30 meters from high water mark of any water body.</li></ul>	
Town of Hay River Don Howden, Town manager comments submitted to MVLWB Sept 28, 2000	<ul style="list-style-type: none"><li>• No comments/concerns</li></ul>	<ul style="list-style-type: none"><li>•</li></ul>