



Fraser Fairman Indian Affairs and Northern Development Canada YELLOWKNIFE, NT

Laura Van Ham National Energy Board CALGARY, AB

January 18, 2005

Re: MVEIRB Questions and Comments: Pre-Consult to Modify - EA03-005

Please find attached, the list of original measures and proposed modifications for EA03-005 (Paramount Cameron Hills Extension Project). The Review Board has included some specific questions and general comments for the DRA, federal minister and responsible ministers, in preparation for the meeting January 24, for your consideration.

Comments and questions are linked by numbers to the appropriate text. It is our hope that outstanding issues with many of the measures can be dealt with quickly and efficiently in that meeting. Please ensure that all the authorities involved in the Consult to Modify receive a copy of these questions.

Yours-sincerely

Mary Tapsell

Manager,

**Environmental Impact Assessment** 

#### **WITHOUT PREJUDICE**

#### MVEIRB Questions and Comments: Pre-Consult to Modify - EA03-005

January 18, 2005

Below is the list of original measures and proposed modifications for EA03-005 (Paramount Cameron Hills Extension Project). The Review Board has included some specific questions and general comments for the DRA, federal minister and responsible ministers, in preparation for the meeting January 24, for your consideration. Comments and questions are linked by numbers to the appropriate text. It is our hope that outstanding issues with many of the measures can be dealt with quickly and efficiently in that meeting. Please ensure that all the authorities involved in the Consult to Modify receive a copy of these questions.

#### R-1 Accepted

#### R-2 Original Measure

The Review Board recommends that Paramount prepare a report within 12 months and thereafter, annually, until the developments on the SDL are abandoned and restored, for distribution in plain language to the parties in this EA. This report will outline the implementation status of each commitment made during the course of this EA, as set out in Appendix A.

#### **Proposed Modification - NEB**

The Review Board recommends that Paramount prepare a report in plain language within 12 months and thereafter, annually, until the developments on the Cameron Hills SDL(s) and PL(s) are abandoned and restored that outlines the status of compliance with commitments Paramount made during the course of this EA. In the event of non-compliance, the report will provide a plan for achieving compliance or detail as to why compliance cannot be achieved. Paramount will submit the annual report to appropriate regulatory agencies (1) and make it readily available through an approved distribution medium (2) to other members of government and the public (2).

Review Board Questions and Comments for NEB re: R-2





- 1. Who are the "appropriate regulatory agencies"? Is the NEB the appropriate regulatory agency? Are there others? The appropriate regulatory agencies need to be specified, in order to alleviate Review Board and public concerns about implementation.
- 2. The Review Board's objective was and is to make sure that ultimately the information goes to the parties. We are very concerned that the terms "make it readily available through an approved distribution medium" do not clearly define either the medium or the vehicle for delivery of the information. Can this be reworded in a more informative manner? Who will approve the distribution medium?
- 3. The Review Board feels that the term "affected Aboriginal groups", as seen elsewhere in the NEB modifications, needs to be added to the distribution list in the modification's last sentence. In addition, can the NEB state why different terminology is used in Proposed Modifications 2, 4 and 9, in regards to "public"?

#### R-3 Original Measure

The Review Board recommends that prior to the issuance of any further licenses or permits Paramount install a meteorological station (at minimum must monitor wind speed, wind direction and temperature) in the Cameron Hills SDL to gather baseline data related to its development. Meteorological data will be provided annually to air quality staff of GNWT-RWED and Environment Canada along with a detailed re-modeling of Paramount's various development scenarios to ensure onsite meteorological conditions are reflected in the modeled outputs.

#### Proposed Modification - NEB (1)

The R eview B oard r ecommends t hat P aramount ins tall m eteorological equipment in the Cameron Hills SDL & PL over the winter of 2004/2005 (at minimum must monitor and record wind speed, wind direction, standard deviation of wind direction and temperature on an instantaneous, continuous basis). The purpose of the monitoring equipment is to provide on-site meteorological information for inclusion in subsequent reassessments (dispersion modeling) of facility emissions as well as ongoing tracking and assessment of air pollution episodes should they occur. Following collection of sufficient meteorological data (2), Paramount will undertake a detailed re-modeling of the various development scenarios to

ensure on-site meteorological conditions are reflected in the modeled outputs. Meteorological data and re-modeled development scenarios will be provided to appropriate government agencies, and made readily available through an approved distribution medium (3) to other members of government and the public. The requirement to maintain and report on-site meteorological monitoring will be reviewed on a regular basis by the appropriate government agencies (4).

#### Review Board Questions and Comments for NEB re: R-3

- 1. Why is the modified measure so prescriptive, when in other measures the modifications move from prescribed specific actions to plans submitted by the developer?
- 2. We feel that allowing Paramount wide discretion on the question of whether there is "sufficient meteorological data" to remodel may not result in the results the Review Board wanted. There should be a period specified after which remodeling must be done in any event.
- 3. Again, what is meant by "appropriate government agencises" and "readily available via an approved distribution medium"?
- 4. The continuous monitoring must be ongoing, without possibility of stopping the program via "review on a regular basis by the appropriate government agencies". In other words, the monitoring must continue until there is a sufficient data base and remodeling results convince the authorities responsible for air quality that more data will not change the management framework. Present wording indicates that this requirement might in future be waived—this is not acceptable to the Review Board. We require wording indicating this continuous monitoring will last at least the length of the operation. Among other things this is necessary to make NEB's proposed measure R-5/6 workable.



#### R-4 Original Measure

The Review Board recommends that Paramount install a continuous gas analysis monitoring system to track ambient air quality (at minimum 1 hour SO<sub>2</sub> and NO<sub>2</sub>) and provide the data to the general public via website, to be updated no less than monthly if a live connection is not available. Annual reports on the status of the air quality at Cameron Hills will be provided by Paramount to all potentially affected communities and government in a plain language document throughout the life of the Paramount operations at Cameron Hills.

#### Proposed Modification – NEB (1)

The R eview B oard r ecommends t hat Paramount ins tall ins tantaneous, continuous gas analysis monitoring over the winter of 2004/2005 to track ambient air quality (at minimum 1 hour average  $SO_2$  and  $NO_x$  and  $H_2S$  concentrations should be calculated and recorded). Data and plain language annual reports on the status of the air quality at Cameron Hills will be provided by Paramount to appropriate government agencies and made readily available through an approved distribution medium (2) to other members of government and the public. The requirement to maintain ambient air quality monitoring will be reviewed on a regular basis by the appropriate government agencies (3).

#### Review Board Questions and Comments for NEB re: R-4

- 1. Why is the modified measure so prescriptive, when in other measures the modifications move from prescribed specific actions to plans submitted by the developer?
- 2. Again, what is meant by "appropriate government agencies" and "readily available via an approved distribution medium"?
- 3. The continuous monitoring must be retained, without possibility of stopping the program via "review on a regular basis by the appropriate government agencies". Present wording indicates that this requirement might in future be waived – this is not acceptable to the Review Board. We require wording indicating this continuous monitoring will last at least the length of the operation. Among other things this is necessary to make NEB's proposed measure R-5/6 workable.

#### R-5 Original Measure

The Review Board recommends that Paramount install an amine fuel sweetening unit at the Central Battery (H-03) location prior to bringing any further wells online or pipe in sweet fuel from outside Cameron Hills, as per Paramount's original development plan.

#### R-6 Original Measure

The Review Board recommends that any further combustion engines being installed for line heaters and pumpjacks at the Cameron Hills operation must use the sweetened fuel or an alternate source of no sulphur fuel.

Proposed Modifications - NEB: Meant to Combine R-5 and R-6

The Review Board recommends that prior to any new production from the Cameron Hills field, Paramount submit to regulatory agencies, for approval, and appropriate federal and/or territorial government air quality staff an emission mitigation plan (1) for the Cameron Hills field. The emission mitigation plan will detail:

- A strategy for demonstrating that current and future S0<sub>2</sub> and N0<sub>x</sub> and H<sub>2</sub>S emissions in the Cameron Hills field will not result in exceedences of relevant air quality standards (2);
- A statement describing Paramount's commitment to minimizing emissions from facilities in the Cameron Hills field;
- A contingency plan that includes a comprehensive listing and a
  decision tree for selection of all possible mitigation options to be
  implemented in the event that S0<sub>2</sub> and N0<sub>x</sub> and H<sub>2</sub>S emissions in the
  Cameron Hills field result in measured or predicted exceedences of
  relevant air quality standards, the contingency plan will outline
- The mitigation options (e.g. pollution prevention planning, best management/environmental practices, best available technology, etc.) currently employed and proposed future options, along with triggers and/or timelines for implementation; and
- The mitigation options considered and rejected, along with rationale for rejection.

Throughout the life of the Cameron Hills field, Paramount should be required to review and update the plan in the event of changes in its field development scenarios or improvements in available mitigation technology.





#### Review Board Questions and Comments for NEB re: R-5 and R-6

- 1. Will this plan be enforceable? By whom? How can its implementation be shown to the "public" and verified to their satisfaction?
- 2. The Review Board is amenable to moving from a requirement for specific actions to allowing the developer to select the appropriate action to achieve acceptable air quality, provided:
- The "relevant air quality standards" are defined (i.e. the developer is being held to a particular set of standards, e.g. CCME).
- An enforcement mechanism is in place. In its current form the measure does not seem to contemplate any enforcement of either the plan or any standards
- Affected aboriginal groups are given opportunity to provide input into the plan

#### R-7 Original Measure

The Review Board recommends that the Government of Canada (INAC and Environment Canada) and the Government of the Northwest Territories, implement recommendation 7 from the Ranger-Chevron EA by June 2005.

#### Proposed Modification - Federal Minister Recommends Removal

#### Review Board Questions and Comments for the Federal and Responsible Ministers re: R-7

- 1. The Review Board remains concerned that air quality issues, while an expressed concern of governments, remain unlegislated in the NWT. Expressing these concerns was the essence of the original measure. The Review Board is still in favour of a revised measure requiring NEB to enforce measures 2, 3, 4, and 5 as part of an overall air quality strategy in the Cameron Hills. However, the Review Board is willing to be flexible on this issue, if all our concerns with proposed modifications to 2, 3, 4, and 5 are adhered to in the final version.
- 2. When can we expect enforceable standards governing Air Quality in the Northwest Territories anticipated? What hurdles remain?

#### Review Board Questions and Comments for NEB re: R-7

- 1. What is the status of enforceable air quality guidelines in the NWT? What role does NEB play in the discussions?
- 2. Which air quality guidelines (existing) will NEB use to govern Paramount's activities in the Cameron Hills Extension Project?

#### R-8 Accepted





#### **Original Measure**

The Review Board recommends that Paramount continue to monitor all work sites for erosion, and take appropriate measures in advance to avoid such problems. The Review Board recommends appropriate erosion mitigation measures be identified in advance and authorized by the NEB and INAC inspectors, and that any remediation of sites be documented and reported to regulators and the Ka'a'Gee Tu First Nation on a quarterly basis.

#### **Proposed Modification - NEB**

The Review Board recommends continuous monitoring for erosion by Paramount of all work sites, and the <u>implementation (1)</u> of appropriate mitigation and remediation measures. Regulators <u>should</u> (2) include appropriate permit conditions to prevent and remediate erosion. Paramount <u>should</u> (2) be required to submit to regulatory agencies, and make r eadily av ailable t o t he p ublic, a nd other g overnment agencies, annual reports detailing remediation measures taken by Paramount in response to sediment deposits in water bodies and erosion. Any deposit of sediment into a water body/watercourse <u>should</u> (2) require Paramount to immediately implement remediation measures and notify the appropriate government agencies and <u>affected First Nations (3)</u>.

#### Review Board Questions and Comments for NEB re: R-9

- 1. The Review Board feels this measure needs to have something in it focusing on "timely implementation" of anti-erosion measures.
- 2. This is a measure rather than a suggestion. It is appropriate to take out any reference to "should" and replace with "will" or "shall".
- 3. The Review Board believes that the term used here "and affected First Nations" should be in each measure requiring public notification. Why should the affected First Nations be notified under this measure, but not under measures R-2 and R-4?

#### R-10 Accepted

#### R-11 Original Measure

The Review Board recommends that the Department of Fisheries and Oceans conduct regular site visits to the Cameron Hills to inspect for determine if any impacts to fish or fish habitat. Reports of these inspections must be made publicly available via DFO and also be sent directly to the Ka'a'Gee Tu First Nation, in a plain language version.

#### Revised Measure - Federal Minister

The Review Board recommends that the Department of Fisheries and Oceans conduct regular site visits to the Cameron Hills to inspect for, and determine if any impacts to fish or fish habitat have occurred. Reports of these inspections, if not related to any investigations (1), must be made publicly available via DFO and also be sent directly to Ka'a Gee Tu First Nation (2), in a plain language version.

## Review Board Questions and Comments for the Federal and Responsible Ministers re: R-11

The Review Board accepts the substance of the proposed change, but would like some wording changes for clarification purposes.

- 1. DFO: What is defined as an investigation may need spelling out; certain audiences have expressed concern that any "research investigations" may not be made publicly available? Why are they closed off to "affected First Nations" and other stakeholders? When will information be released if the investigation is completed or abandoned?
- 2. Why is the language not KTFN and "other affected First Nations"?





#### **Original Measure**

The Review Board recommends that RWED will, within the next six months, initiate the formation of a Deh Cho Boreal Caribou Working Group (DCBCWG). The Working Group will, among other things, consider: habitat identification, range plan development, thresholds, monitoring systems, adaptive mitigation, research programs and cumulative effects models. In addition, it will coordinate its activities with similar working groups in Alberta and British Columbia.

#### **Proposed Modification – Federal Minister**

The Review Board recommends that RWED will, within the next six months, initiate the formation of a Deh Cho Boreal Caribou Working Group (DCBCWG). RWED shall lead the DCBCWG in the development of a Boreal Caribou Management Plan for boreal caribou populations in the southern Deh Cho (south of the Mackenzie River and east of the Liard River) (1) within 18 months. In developing the Boreal Caribou Management Plan, RWED shall ensure that the DCBCWG considers. among other things: habitat identification, range plan development, thresholds, monitoring systems, adaptive mitigation, research programs and cumulative effects models. RWED shall also coordinate the DCBCWG's activities with similar working groups in Alberta and British Columbia; and operate within the framework of recovery planning for Boreal Caribou in the NWT, and develop a Boreal Caribou Management Plan specifically for the Cameron Hills area (1). RWED shall provide applicable thresholds for the Project to the MVLWB over time based on the outcomes of future research and natural changes to the boreal caribou habitat.

## Review Board Questions and Comments for the Federal and Responsible Ministers re: R-12

The Review Board accepts the substance of the proposed change, but would like some wording changes for clarification purposes.

1. The geographic area covered by the proposed DCBCWG needs to be clarified. There are two area descriptions in the measure. Do they refer to two separate management plans?

#### R-13 Original Measure

The Review Board recommends that the MVLWB adopt an average linear disturbance target of 1.8 km per km squared as a boreal caribou disturbance threshold for the entire Cameron Hills, NT area, in order to prevent significant adverse environmental impacts on boreal caribou populations whose range includes the Paramount SDL and surrounding area. This shall be considered in all future land use applications for the area.

#### Proposed Modification - Federal Minister (1) (5)

The MVLWB shall include conditions in its authorizations for this project that will ensure boreal caribou do not experience disturbance (2) as a result of Project activities. As part of this, the MVLWB (3) should (4) define a geographic area for the project area based on an ecologic classification system developed by the GNWT. The MVLWB (3) should (4) also consider the applicability of targets for habitat disturbance. Such conditions shall be reviewed annually and adjusted as necessary, based on the best available scientific information, other advice and project area information including Paramount reports and plans (see below).

Paramount shall submit an annual report to the MVLWB detailing disturbance to boreal caribou habitat resulting from past Project activities and the state of re-growth of disturbances. The annual report shall be similar to proponent reports done in other jurisdictions such as British Columbia or Alberta. Paramount shall also include its plans that may affect boreal caribou habitat for the upcoming year.

## Review Board Questions and Comments for the Federal and Responsible Ministers re: R-13

1. The Review Board feels very strongly that a specified boreal caribou disturbance threshold be put in place for the areas affected by Paramoun't's activities for the interim until the DCBCWG can generate a specific value for the affected area. We based our deliberations on recognized scientific data<sup>1</sup>. The Review Board would accept an interim number being put in place and be a condition in any permitting. RWED and the DCBCWG would then

Francis, S., R. Anderson, and S. Dyer (2002). Development of a threshold approach for assessing industrial impacts on woodland caribou in Yukon. Presentation at the Assessment and Management of Cumulative Effects Workshop, Whitehorse, Yukon, March 25-26, 2002.

Salmo Consulting Inc. et al (2003). Cumulative Effects Assessment and Management for Northeast British Columbia: Volume 2 – Cumulate Effects Indicators, Thresholds, and Case Studies. Prepared for the BC Oil and Gas Commission and the The Muskwa-Kechika Advisory Board. March 2003. 12



<sup>&</sup>lt;sup>1</sup> See, for example, the following citations:



have time to determine what the permanent threshold level need be.

- 2. The term "ensure boreal caribou do not experience disturbance" is a non-starter. Disturbance from these activities is inevitable; the Review Board's intent in the original measure was to reduce it below a significant impact level.
- The MVLWB has indicated to us in writing that they cannot handle what is being asked of them by this proposed modification; nor should they have to, nor do they want to.
- 4. Any terminology that is not in the imperative (i.e., "should"), needs to be eliminated. These are required measures, not suggestions.
- 5. The Review Board requests the insertion of a phrase to the effect of "The MVLWB will consider the required boreal caribou disturbance threshold in all future licenses for work in the Cameron Hills area", that recognizes caribou habitat disturbance as an ongoing and cumulative concern.

#### R-14 Accepted

#### R-15 Original Measure

The Review Board recommends that Paramount and the other parties to the unfinished Cameron Hills Wildlife and Resources Harvesting Compensation Plan developed in response to measures 13 and 15 of EA01-005 complete the compensation plan. If a compensation plan cannot be completed by these parties within 90 days of the federal Minister's acceptance of this report, this matter will proceed to binding arbitration, pursuant to the NWT Arbitration Act. A letter signed by the parties, indicating agreement to the compensation plan or in the case of arbitration, the arbitrator's decision must be filed with NEB and MVLWB prior to the commencement of Paramount's operations under land use permit MV2002A0046.<sup>2</sup>

#### Proposed Modification - Federal Minister Requests Removal

# Review Board Questions and Comments for the Federal and Responsible Ministers re: R-15

1. The removal of the original measure is not acceptable to the Review Board. The Review Board believes that some form of Harvester Compensation Plan is required. The concern about arbitration is not important. The clear intent of the original recommendation was to enforce the requirement for a plan and not to have this measure suffer the same fate as that in the previous EA.

Measure 15 - Paramount and the communities are to cooperate to the fullest extent possible in developing
the wildlife and resource harvesting compensation plan. If the parties are unable to come to an agreement
on the contents of the plan within the 90 day period, an independent arbitrator shall be jointly appointed
within 30 days by the GNWT and INAC. The arbitration process shall conclude within 30 days of the
appointment of the arbitrator.



<sup>&</sup>lt;sup>2</sup> The measures referred to from EA01-005 are included here in their final versions (see also Appendix A for issues related to these previous measures and that environmental assessment):

<sup>•</sup> Measure 13 - Paramount is to discuss, develop and implement a wildlife and resource harvesting compensation plan with potentially affected First Nation communities — Deh Gah Go'tie First Nation, Fort Providence Metis, Ka'a'gee Tu First Nation, K'atlodeeche First Nation and West Point First Nation. The scope of the plan is to include compensation for hunting, trapping, fishing and other resource harvesting activity losses resulting from the development as agreed to by Paramount and the communities. Paramount is to commence the consultations as soon as possible, with a draft plan submitted to the communities within 60 days of EA Report acceptance by the INAC Minister and a final plan submitted to the communities within 90 days of EA Report acceptance. The plan is to apply retroactively to impacts arising from the start of construction of the gathering facilities and pipeline. If requested by Paramount or any of the communities, the GNWT and INAC are to facilitate the discussions on the plan.



#### R-16

#### Original Measure

The Review Board recommends that the GNWT develop a socioeconomic agreement with Paramount in consultation with affected communities before operations proceed under the land use permit MV2002A0046. The socio-economic agreement is to address issues such as employment targets, educational and training opportunities for local residents and a detailed ongoing community consultation plan.

Proposed Modification - Federal Minister Requests Removal

#### Review Board Questions and Comments for the Federal and Responsible Ministers re: R-16

1. The Review Board will not accept the removal of this measure. The intent is to ensure that the social and economic well being of people in the region is protected, as per our mandate (see for example sections 114 and 115 of the MVRMA). The Review Board believes some form of agreement, between the developer and the GNWT, governing certain economic and social issues is required.

R-17 Accepted