

National Energy Board Reasons for Alteration of the Proposed Modifications to the Mackenzie Valley Environmental Impact Review Board Recommended Measures (EA03-005) for the Paramount Resources Ltd. (Paramount) Cameron Hills Extension Project

Prepared by the National Energy Board (NEB)

The following provides the reasons for the NEB's actions in response to the substantive comments received with respect to the NEB's request for comment process. The discussion is divided into two parts: general comments that were raised with respect to more than one recommended measure; and, comments specific to a recommended measure. This information is intended to supplement that already supplied in the NEB 15 October 2004 *Draft Proposed Conditions and Proposed Modifications to the Mackenzie Valley Environmental Impact Review Board Recommended Measures (EA03-005)*.

GENERAL COMMENTS

Information distribution

Paramount: Paramount submits that regulators should be responsible for the identification and the distribution of the information that is to be collected and reported for the project. Paramount also states that, subject to confidentiality concerns outlined below, it has no problem with the Ka'a'Gee Tu First Nation (KTFN) obtaining whatever information regarding Paramount's operations that it requires through the appropriate regulatory agency.

KTFN: The KTFN says that Paramount has a legal obligation to provide information to it and that the Mackenzie Valley Environmental Impact Review Board (Review Board) has recognized this. According to the KTFN, the NEB modifications fail to recognize this legal obligation to provide information.

NEB response: The NEB will identify in its authorization(s) requirements for information collection, reporting and distribution on matters that are within the NEB's mandate. The NEB's authorization(s) will indicate that it is the proponent's responsibility to collect, prepare reports and distribute the information to specified parties.

The NEB considers it appropriate to require Paramount to make certain information "readily available to the public" and for Paramount to recommend, and the NEB to approve, the method for doing that. Having this information "readily available" will satisfy any obligation to provide the information to the KTFN.

Thus, for recommended measures 2 and 4, the NEB is not persuaded that it should change its position that it is not justified in requiring Paramount to report to parties external to regulatory agencies, and agencies providing specialist advice to the regulatory agencies.

For recommended measure 9, the NEB accepts that direct reporting to the KTFN on environmental problems (i.e., erosion and/or sediment deposits into waterbody/watercourse) was identified in the Review Board's analysis as a key component of the recommended measure. Accordingly, the NEB adopts the Review Board's original wording with respect to information recipients in this measure.

Confidentiality of information

Paramount: Paramount submits that, while it does not object to providing all data to regulatory agencies, it requests that only the summary reports be distributed to other members of government and the public to maintain confidentiality over the raw data.

KTFN: KTFN submits that Paramount fails to demonstrate the confidential nature of the information and the production of this information is required.

Government of Northwest Territories (GNWT): The GNWT indicate that the data and reports regarding the ambient environment are of use to everyone and should be made readily available.

NEB Response: The NEB recognizes that the raw data could have commercial value to Paramount. The NEB also notes that, while the raw data would certainly be of value to ambient air quality and meteorological monitoring initiatives in the Northwest Territories, the primary intent of recommended measures 3 and 4 is to ensure that activities in the Cameron Hills field do not exceed relevant air quality standards. It is the responsibility of the regulators to ensure that Paramount appropriately collects, analyzes and reports on the ambient air data to meet this intent, and as such the NEB will require that Paramount supply raw data and reports to air quality staff within the federal and territorial government for the purpose of data quality assurance. The public will have access to the analyzed data in reports prepared from the raw data, but the NEB does not find justification for making the raw data available to the public. Public access to the raw data will be left to Paramount's discretion. However, in the interest of compiling a more complete data set of meteorological and ambient air quality conditions in the Northwest Territories, the NEB hopes that Paramount would explore opportunities to cooperate with air quality sections of the GNWT and Environment Canada (EC).

RECOMMENDED MEASURE 2

Report timing

Paramount: Paramount requests report preparation within 16 months to allow 12 months of data collection and 4 months to prepare the report.

KTFN: KTFN submits that timing should be left as recommended by the Review Board.

NEB Response: The NEB finds it appropriate to indicate a report due date to avoid a reporting period that depends on an undefined start date. For practical reasons, reporting on recommended measure 2 is linked to other environmental reporting requirements in the NEB's draft proposed conditions 3 and 4 (address reporting requirements for recommended measures 2, 9, 3, 4, 5 and 6). Combining environmental reporting requirements into one yearly submission allows for more manageable tracking by regulatory agencies, predictable timing for interested members of the public to access the reports and consistent reporting periods for Paramount. The report due date (1 June of each year) is based on the KTFN suggested deadline for installation and operation of the meteorological and gas analysis monitoring equipment (31 March 2005) and Paramount's request for additional months to analyze and report on the data collected over the year (at a minimum, allows Paramount two months to analyze and report on the data). The NEB anticipates that Paramount will be able to install and begin operation of its equipment before the 31 March deadline and that all substantive development activities undertaken during that winter season

would be completed with time allowed for Paramount to comply with all environmental reporting requirements by the 1 June due date. Due to the limited months of meteorological and gas analysis data collection available before 1 June 2005, the reporting on condition 3.c. and 3.d. is expected to be less conclusive in 2005 than in the year(s) to follow.

RECOMMENDED MEASURE 3

Period of data collection

Paramount: Paramount requests that only one year of data collection be required as per draft modeling guidelines for the Northwest Territories and due to the results of the air quality assessment in the DAR, and EC confirmation, which indicate air quality guidelines would be met for the development scenarios.

GNWT: The GNWT submits that one year of data collection is considered a minimum requirement for modeling purposes, and that 5 years is preferable. The GNWT reiterates that the meteorological data collection is to be used for on-going tracking and assessment of air pollution episodes and that it is concerned with the model inputs used in the DAR air quality assessment.

Environment Canada: EC reiterated its concerns regarding the data input in the model (e.g., lack of on-site meteorological data, stack height manipulation and the uncertainty in emission rates due to uncertainty in the type of fuel to be used at the facility) and noted that slight modifications to the input can cause predictions to exceed air quality standards.

KTFN: KTFN disagree with Paramount's request.

NEB response: The NEB notes the issues raised by the GNWT and EC with respect to the model inputs and timeframes for meteorological data collection, recognizes that air quality and related public concern are key issues in the environmental assessment, and sees value in incorporating local meteorological data in modeling of the various development scenarios. Accordingly, Paramount will be required to collect meteorological data until such time that an acceptable modeling exercise is undertaken that demonstrates current and expected future emissions in the Cameron Hills field are well within limits of relevant air quality standards. Acceptability of the modeling exercise will be determined by the Chief Conservation Officer in consultation with federal and territorial government air quality staff.

RECOMMENDED MEASURE 4

Requirement for gas analysis monitoring

Paramount: Paramount request that the requirement for gas analysis monitoring be considered only if the results of the meteorological data collection and subsequent re-modeling confirm the need for and appropriate location of gas analysis monitoring.

GNWT: The GNWT submits that timely implementation of gas analysis monitoring would help to alleviate immediate concerns with respect to the:

- high level of public concern regarding air quality;
- predicted current SO₂ emissions being within 98% of air quality standard; and,

- uncertainty in the model inputs and the quality and quantity of emission sources in the field.

KTFN: The KTFN disagree with Paramount's request.

NEB response: The NEB is of the view that immediate installation of the gas analysis monitoring equipment is justified for the reasons noted by the GNWT above and considering that the results of re-modeled development scenarios are unlikely to be available until after at least 1 year of meteorological data collection and report preparation. The purpose of the data collection is to ensure that current and near-future operations in the field do not exceed relevant air quality standards. Paramount will be required to collect gas analysis monitoring data until the data, along with acceptable re-modeling, demonstrate that current and expected future emissions in the Cameron Hills field are well within limits of relevant air quality standards. The decision to no longer require Paramount to collect gas analysis monitoring data will be made by the Chief Conservation Officer in consultation with federal and territorial government air quality staff.

RECOMMENDED MEASURES 5 and 6

Modification is a rejection of the original measure

KTFN: The KTFN submit that the original measures outline steps that Paramount had to complete to reduce its emissions and that the NEB's proposed modifications to the measures do not impose emission reduction requirements upon Paramount. The KTFN claim that the NEB's proposed modifications would constitute a fundamental change to the purpose, substance or effect of the recommendation and this requires the NEB to refer the project to environmental impact review.

NEB response: In the absence of any other relevant measurement to gauge the justification for including authorization conditions related to air quality matters, the NEB is using air quality standards as the limit against which to measure oil and gas related emissions. Without evidence that Paramount has exceeded relevant air quality standards, the NEB will not require Paramount to change its operations. However, in the event that air quality standards have been, or will be exceeded, the NEB's modification will impose emission reduction requirements on Paramount. The NEB feels that this modification maintains the intent of the original recommended measures while respecting the extent of the NEB's regulatory authority over air quality.

The NEB is not persuaded that modifications to these measures amount to a rejection of the entire Review Board recommendation.

Identification and selection of mitigation options

Paramount: Paramount requests removal of the reference to a "comprehensive listing" of mitigation options, a change from "all possible mitigation" to "appropriate mitigation" and a change from "best available technology" to "best economically achievable technology".

GNWT: The GNWT recognizes that not all technology will be appropriate for a variety of reasons, including economics, but regulatory agencies will require a comprehensive listing of all available technology to determine whether the appropriate mitigation has been selected.

KTFN: The KTFN submits that Paramount has demonstrated that its view of "appropriate" environmental management is inconsistent with that of the KTFN, other First Nations, regulators,

government and the Review Board. The changes limit mitigation options under discussion. The use of “best available technology” is the standard for modern environmental management.

NEB response: The NEB finds that in order for the well-timed selection of the most appropriate mitigation technology, the emission mitigation plan must include a comprehensive listing of all available mitigation options and a rationale where options are rejected. This provides Paramount with a clear and defensible plan to reduce its emissions to acceptable levels and allows regulatory agencies to determine, and the public to be aware, that appropriate mitigation has been selected.

Requirement to review and update the plan

Paramount: Paramount requests that the requirement to review and update the plan be based on a significant change or modification made during the life of the project.

KTFN: The KTFN request that Paramount be required to review and update the plan yearly.

NEB response: As the modified recommended measure includes consideration of Paramount’s current and proposed development scenarios during preparation of the emission mitigation plan, review and updating of the plan is not anticipated to be necessary on an annual basis. Review and update of the plan would be necessary if there is a change in Paramount’s planned activity that results in notable and unaccounted increases in field emissions and/or if new air emission mitigation technology is introduced that should be considered by Paramount in its project planning. The need for review and update of the plan will be determined by the Chief Conservation Officer in consultation with federal and territorial government air quality staff.

RECOMMENDED MEASURE 9

Affected First Nation

KTFN: The KTFN identify the potential for inconsistency in the way various parties interpret the phrase “affected First Nation”.

NEB response: The NEB recognizes the issue of variable interpretation and as such adopts the Review Board’s original wording with respect to the distribution of reports to and notification of the KTFN.

DRAFT CONDITION 1

Discretion of the Chief Conservation Officer

KTFN: The KTFN Request that the NEB provide an explanation for the discretion the Chief Conservation Officer would exercise with respect to the statement “Unless the Chief Conservation Officer otherwise directs”.

NEB Response: As there is no application before the NEB, and the components of an application may not include all the components evaluated in this environmental assessment, it is necessary for the Chief Conservation Officer to maintain discretion in requirements for environmental protection. It is the practice of the Chief Conservation Officer to use the criteria of equivalency of protection in

allowing changes to methods of environmental protection, similar to what is allowed by section 16. of the *Canada Oil and Gas Operations Act* regarding regulations. In regulating the proposal for development in this environmental assessment, the NEB is required by the *Mackenzie Valley Resource Management Act* to carry out, to the extent of its authority, any recommendation that it adopts.

DRAFT CONDITION 3.B. (NOW DRAFT CONDITION 3.D.)

Removal of the requirement for proof on cumulative sulphur emissions

NEB comment: The NEB removed the requirement for Paramount to provide evidence that cumulative sulphur emissions in the Cameron Hills field do not exceed 1 tonne/day for the following reasons:

- the NEB finds that, based on Paramount's current and near future proposed operations, cumulative sulphur emissions are well below 1 tonne/day and as such provision of evidence by Paramount is deemed unnecessary at this point in time; and,
- if over the course of future operations the NEB finds that cumulative sulphur emissions are approaching the 1 tonne/day limit, or some other relevant contemporary limit, Paramount will be required to provide the evidence identified above.