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March 27, 2012

Environmental Impact Review Board
107 – Mackenzie Rd. Suite 204
P.O. Box 2120
Inuvik, NT X0E 0T0

Attention: Eli Nasogaluak, Environmental Assessment Coordinator

RE: ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA RESPONSES TO THE EIRB INFORMATION REQUESTES

Dear Eli,

Please find enclosed our responses to the Board's Information Requests related to the Inuvik to Tuktoyaktuk Highway development:

IR Number: 78
Source: MSES Inc.
To: GNWT – ENR
Environment Canada
AANDC

Subject: Cumulative Effects Management – Regional Initiatives

1. Please explain how AANDC, ENR and Environment Canada will engage the Developer with respect to cumulative effects management in the context of the proposed project.

   AANDC's Response:
   The Developer is responsible for identifying impacts, and mitigating these with the objective of reducing or eliminating cumulative impacts. The department awaits the review of the EIRB with respect to residual impacts and whether these are of a cumulative nature. Should any residual impacts be apparent, we look forward to the EIRB recommendation for mitigating these.

2. Please provide examples of tangible results from other developments for cumulative effects regional initiatives in the ISR and/or the Northwest Territories.

   AANDC's Response:
   There are several "cumulative effects regional initiatives" in the NWT and the ISR. Examples of such initiatives include: (a) cumulative effects assessment as part of project reviews (i.e. Mackenzie Gas Project), (b) strategic environmental reviews (Beaufort Regional Environmental Assessment (BREA)), and (c) monitoring initiatives such as BREA and the

Cumulative Impact Monitoring Program. Results from these studies can be found on the respective project websites.

IR Number: 79
Source: MSES Inc.
To: ILA
AANDC

Subject: Cumulative Effects Assessment – Land Use

1. Please provide an estimate of land use change (i.e., the amount of disturbance with respect to zones of influence) as a result of the construction and operation of the development. Please indicate whether this change is in the development RSA and/or LSA.
2. Please explain and justify the approach taken and describe and explain the results with respect to historical, current and future rates of change in land use.
3. Please explain and justify post-construction land use mitigation measures and examples of where such mitigation has been determined to be successful.

AANDC's Response:
These questions centre on impact assessment and prediction, and the questions should perhaps be answered by the Developer. While AANDC can assist in reviewing and corroborating the Developer's findings, AANDC will not provide an assessment at this time.

IR Number: 89
To: AANDC
DFO
EC

Subject: Worst Case Scenario

1. Please review and comment on the Developer's explanation of the likely fate of diesel spilled in the worst case scenario as set out in the EIS.

AANDC's Response:
In developing and assessing worst case scenarios, AANDC concurs that there are a myriad of conditions and situations that could present themselves during a spill of this nature. It is further recognized that this creates difficulties in establishing a single measurable response that the Developer can articulate in an EIS. It is apparent however, that while the Developer has adequately described a worst case scenario as requested of them, that the subsequent effects of the spilled product and its fate are based on some "best" case conditions.

a. Most significantly, it should be noted that should a spill occur into a creek during spring freshet, the conditions described in Husky Lakes are not completely accurate. It is AANDC's view that while there may be some open water for the diesel to flow into once (or if) it reaches the lake, it is more likely that the area of Husky Lakes beyond the first 100 m of shoreline would be still frozen. It may also be plausible that should the season be several days later, the shore could possibly be laden with a significant quantity of

broken ice. It may not be unreasonable to suggest that the diesel will evaporate within the timeline indicated by the Developer, but less than ideal conditions will potentially affect the timeliness of this natural process as described.

b. The ideal condition described in the EIS related to successfully attaining an in situ burn may also not be present. Most apparent, if broken ice conditions in Husky Lakes are present, significant challenges to burn product in situ with any degree of the success as described will be difficult, if not impossible to attain. However, it may well be the case that the shore ice is still attached to the shore and as commented by the Developer (based of their realm of experience), this will ease the burn operation considerably.

c. Water temperature suggested to evaporate spilled product is also based upon a best case condition. While it is noted that the temperatures to successfully evaporate product in the time frame suggested is +10 degrees C in the model, it is not unreasonable to suggest that temperatures experienced may be significantly lower. Temperatures observed by Environment Canada at Trail Valley and Hans Creek on May 25, 2011 were in the order of +1 or +2 degrees C. Although it is acknowledged that lake temperatures would potentially be higher than that of a fast flowing stream, it is not unrealistic to suggest that lake temperatures during spring break-up would be substantially lower than 10 degrees C. This would potentially slow evaporative processes, resulting in a longer time during which the product could impact other areas such as riparian habitat along the stream or lake shore.

d. Absorption into soil and vegetation along the stream banks has been minimally addressed by suggesting that the effects are short term and usually need little or no clean up attention. If it is the intention that the acceptable methodology is to allow natural processes to occur to address this aspect of a spill, it should be noted. Should this be the case, it is likely that effects from the spill will last beyond the suggested 10 day containment and recovery operation.

e. It is AANDC's view that should an accident of this nature occur, the possibility of a spill occurring without impacting land (the area between the spill source and the water in the creek) is very unlikely. The scope of a worst case scenario should also include this area as methods of containment and clean up are quite different.

f. The IR requests the Developer to address the cost of a full B train spill. Being nearly 50,000 litres, it is difficult to comprehend that a full B train spill would dealt with in 5 to 10 days in either water or on land.

In March 2005 spill 05-113 occurred at Hanna Creek on the winter road between Fort Good Hope and Norman Wells. The clean up efforts lasted for 14 days to deal with the bulk of a spill of approximately 15,000 litres of P-50 diesel fuel. The specific amount of fuel that migrated the short distance into the creek (a few metres) remains unknown, however, experience gained in this incident allows for weight to be placed on the assertion that fuel in a fast flowing stream will evaporate (or emulsify). It is worth noting though that containment booms and skimmers were not effective as well as that considerable remediation work was required on land where the spill originated. The estimated cost of the 14 day clean up of this site was in excess of $750,000. Granted the location was different, the size of the stream was

smaller, and it was in winter conditions. Regardless, there are valuable parallels that can be derived from the experience gained here.

In consideration of the above comments ("a" thru "e"), the statements made by the proponents are accurate, although dependant on many of the "right" conditions to be in place at the time of the spill event.

1. Please evaluate the impact of the worst case scenario on the fish and migratory bird habitat and populations in the streams, water courses and Husky Lakes. Provide an estimate of the cost of remediating these affected habitats.

AANDC's Response:
It is AANDC's view that these questions should be directed to Environment Canada or the Developer.

1. Please provide a critical evaluation of the estimated costs for cleaning up the fuel spilled under the worst case scenario.

AANDC's Response:

a. Please see reference to spill 05-133 above.

b. The associated costs per unit, or cost per day of clean up operations may be adequate, however, circumstances under less favorable conditions would indicate an operation would take longer than stated in the Developer's documentation. Increased costs are sure to follow.

c. Providing a critical evaluation of the clean up costs should only be followed by a scenario which takes into consideration more conditions that are less than ideal.

In respect of the Developer's response as it relates to who may be responsible for a clean up of a spill along the Highway, it should be noted that they are correct in that the party responsible for the spill remains responsible for the clean up and its associated costs. It needs to be clarified however, that the GNWT, Environment and Natural Resources are the lead agency for all spills that occur on NWT Highways. Spills which originate from a highway and further migrate to water remain an ENR lead responsibility. Other agencies identified in the Developer's IR response often assist and work with the lead in any situation where a request is made.

IR Number: 122
To: AANDC

Subject: IR Round 1 Response 55.1 Table F. Summary of Developer Commitments.

Please review the relevant general and specific mitigation measures provided by the Developer in IR 55.1 Table F and identify and confirm the adequacy of the wording of the mitigation measures or provide editorial suggestions to improve the wording to ensure the commitments are specific, measurable, attainable relevant and trackable.

1. Please identify and provide wording for additional mitigation measures required to ensure the avoidance or minimization of Project impacts.

AANDC's Response:

Commitments made during the course of this environmental assessment may help to improve the project design as well as mitigate and monitor potential impacts of the development on the biophysical and socio-economic environment. The commitments tables should reflect the information contained in the Environmental Impact Statement (EIS), supporting documents as well as any additional commitments made by the Developer over the course of the environmental assessment process including in Responses to Information Requests, Technical Sessions, Community Meetings and the final hearings. The commitments table should be a stand alone document, with sufficient detail, that it can be used over the life of the project as a record of all the relevant design considerations, mitigation measures, monitoring plans necessary to ensure the project does not cause significant adverse effects. The comments provided below are specific to Table F in the Developer's IR response # 55.1 with the understanding that over the course of the remainder of the EA commitments may need to be added or refined. Parties should be given the opportunity to comment on the final commitments table prior to the closing of the public registry.

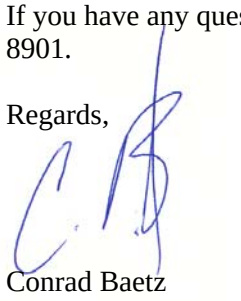
Many of the Developer's commitments in Table F are mitigations that AANDC already incorporates as terms and conditions within the regulatory authorizations AANDC issues. However, the wording and terminology of the measures in the table differ from the wording and terminology used within a tested term or condition in an AANDC authorization. For example, "*The Permittee shall not move any equipment or vehicles unless the ground surface is in a state capable of fully supporting the equipment or vehicles without rutting or gouging"*, is a standard permit condition found in most Land Use permits that addresses construction activities during winter months. There are also measures in Table F which are specifically stated as prohibitions within the Territorial Land Use Regulations as well as the Territorial Quarry Regulations, such as sec 18 of the TLUR which reads, "*Subject to the terms and conditions of his permit, every permittee shall, after completion of a land use operation, restore the permit area as nearly as possible to the same condition as it was prior to the commencement of the land use operation".,* This addresses reclamation of borrow sources upon completion of quarry activities.

It is AANDC's view that Table F is adequate at this point for those mitigations which may not be a specific term or condition in an AANDC authorization. For those mitigations found within an AANDC authorization, however, AANDC will rely on its own terms and conditions contained within its authorizations to ensure the appropriate level of environmental protection.

It is important to note that "Management Plans" often include content which includes measures and processes that are beyond a single departmental responsibility. In these circumstances AANDC will ensure compliance with the aspects of the Plans that AANDC holds responsibility for.

If you have any questions, or if additional information is required, please contact me at (867) 777-8901.

Regards,



Conrad Baetz
District Manager

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