

January 18, 2012

VIA EMAIL

Chuck Hubert, Panel Manager Gahcho Kué Environmental Impact Review Panel Ph – 867-766-7052 Fx - 867-766-7074 chubert@reviewboard.ca

Dear Mr. Hubert,

## <u>Re: EIR0607-001 (2006), De Beers Canada Inc., Gahcho Kue Diamond Mine</u> <u>Project – Information Requests (Round 1)</u>

I am pleased to submit Information Requests from the GNWT to De Beers Canada Inc. (DBCI)

Please note that EC&GNWT IRs #1-4, located at the end of this document, are identical to those submitted by Environment Canada to DBCI.

Please contact me if you have any questions regarding the attached submission.

Sincerely,

anom

Environmental Assessment Analyst Environmental Assessment and Monitoring Environment and Natural Resources, GNWT loretta\_ransom@gov.nt.ca Phone #: 867-873-7905

cc. David Ash, A/Regional Director, EC (via email) Veronica Chisholm, Permitting manager, DBCI (via email)

IR Number:	GNWT 1
Source:	Government of the Northwest Territories
To:	De Beers Canada Inc. (DBCI)
Subject:	Regional Scale Monitoring

Recent discussions signal a growing interest in coordinating monitoring efforts amongst partners and monitoring at a regional scale. This approach:

- a) recognizes that regional scale monitoring is most appropriate for determining how wide-ranging species are affected by development (particularly if sampling protocols are consistent across the region);
- b) increases capacity to understand how the cumulative effects of disturbance impact wildlife (e.g., Johnson et al. 2005); and
- c) increases the potential to optimize use of resources available for monitoring.

There is existing coordination of monitoring schedules, standardization of sampling protocols and sharing of resources for species like raptors. The ground work for using a similar approach for other species already exists:

- In 2005 and 2006, DBCI collaborated with the GNWT, BHPB, and DDMI to use a standardized DNA hair snagging sampling protocol to monitoring wolverine populations within the Gahcho Kue RSA (Boulanger *et al*, 2007). The results of this study indicate that a DNA-based approach provides a more extensive and robust data set for understanding how mines affect wolverines than other methods like track counts.
- Following discussions at a 2011 grizzly bear monitoring workshop, DBCI has agreed in principle to participate in a multi-partner, regional DNA hair snagging monitoring study to determine if mine-related activities influence the relative abundance and distribution of grizzly bears over time. This agreement in principle applies to Snap Lake and Gahcho Kue. Other partners have expressed interest in participating in this regional scale monitoring effort starting in 2012.

A regional scale approach is also most appropriate for determining how wolves and barren-ground caribou respond to mine activity. Currently, GNWT-ENR conducts large-scale wolf den surveys on the tundra and shares this information with the diamond mines. Barren-ground caribou monitoring at other mine sites has been done using a variety of methods, including use of aerial flights and use of GNWT-ENR's collar data.

## **Request:**

- 1. To what extent is DBCI willing to participate in ongoing regional wolverine monitoring using a standardized DNA hair snagging protocol in concert with other mines, the GNWT and aboriginal governments and organizations?
- 2. To what extent is DBCI willing to participate in ENR's ongoing large-scale spring wolf den survey (i.e., in terms of data collection and providing resources for data collection)?
- 3. Please describe how DBCI will structure caribou monitoring such that it fits within a broader regional approach and is consistent with monitoring methods at other mines.
- 4. Is DBCI willing to provide support for ongoing raptor nest surveys in its RSA?

## Literature Cited:

- Boulanger, J. and R. Mulders. 2007. Analysis of 2005 and 2006 wolverine DNA mark-recapture sampling at Daring Lake, Ekati, Diavik, and Kennady Lake, Northwest Territories. Draft Report prepared for Environment and Natural Resources, Government of the Northwest Territories by Integrated Ecological Research.
- Johnson, C.J, M.S. Boyce, R.L. Case, H D, Cluff, RJ. Gau, A. Gunn, and R. Mulders. 2005. Cumulative effects of human development on arctic wildlife. Wildlife Monographs No.160.

IR Number:GNWT 2Source:Government of the Northwest TerritoriesTo:De Beers Canada Inc. (DBCI)Subject:Wolverine mortalityEIS Section:Page11.10-160TOR Section:Fage11.10-160

## Preamble:

The EIS states that "since 1996, there have been 11 wolverines removed from the SGP population due to direct mine-related mortality, which is equivalent to a mortality rate of 0.204 wolverine per mine per year" (page11.10-160). In response to comments provided by GNWT-ENR that the 10 reported wolverine removals from the existing diamond mines should also be effectively considered as mortalities, DBCI (via Golder) reanalyzed their data to indicate that mortalities may be as high as 0.389 wolverine per mine per year. This result did not change DBCI's assessment that the incremental effect should remain low.

While DBCI's willingness to reassess this information is appreciated, wolverine mortalities at exploration camps and winter road camps also need to be considered in DBCI's analysis. GNWT records indicate that since 1998, there have been 27 wolverine mortalities and/or relocations reported to date in relation to mining activity on the central barrens.

In addition, the significance of the mortality and relocations needs to be examined with respect to predicted effects on population size (e.g., Boulanger and Mulders 2007).

# **Request:**

1. Please reanalyze the impacts of mines on wolverine population size using all available mortality and relocation data.

# Literature Cited

Boulanger, J. and R. Mulders. 2007. Analysis of 2005 and 2006 wolverine DNA mark-recapture sampling at Daring Lake, Ekati, Diavik, and Kennady Lake, Northwest Territories. Draft Report prepared for Environment and Natural Resources, Government of the Northwest Territories by Integrated Ecological Research.

IR Number:	GNWT 3
Source:	Government of the Northwest Territories
To:	De Beers Canada Inc. (DBCI)
Subject:	Waste Management and Wildlife
EIS Section:	11.9.2.6.3, Section 7.0 Appendix I, 119.3
TOR Section:	

The Waste Management Plan outlined in the EIS indicates that food waste will be placed in sealed plastic bags that are stored in sealed wildlife-resistant containers and transported to an incinerator storage area for incineration. After incineration, ash will be transported to the inert solid-waste landfill. Each step in this multi-stage process is subject to human error and the process itself may not eliminate all odors. The TOR states that "the EIS must include a discussion of alternatives to the proposed waste management plan that have been considered and any adaptive management options". Discussion of such factors as the location of the incinerator, the effectiveness of different models of wildlife resistant containers, and design features of the storage and incineration facilities is not complete enough to assess the effectiveness of the Waste Management Plan.

Furthermore, the EIS (Section 11.9.2.6.3) refers to Ekati and Diavik using adaptive management processes to transition toward enclosed incinerators and incineration storage facilities; however, neither the Wildlife Effects Mitigation and Management Plan (Section 7.0 Appendix I) nor the Waste Management Plan (Section 119.3) specifies whether a fenced or an indoor (enclosed) incineration and storage facility would be used. Either option will have different implications for wildlife attraction to waste.

- 1. What alternative waste management options has DBCI considered to minimize food odors and how were the proposed options selected?
- 2. Please provide a description of the sealed containers to be used for storing food waste awaiting incineration and elaborate on what is known with respect to their effectiveness.
- 3. Has DBCI followed up with the other mines on the effectiveness of enclosed incineration facilities on wildlife incidents and considered this information in its choice of storage and incineration facilities?
- 4. Has DBCI subsequently settled on whether it intends to proceed with either a fenced or enclosed storage/incineration facility, and if so, what was the rationale for the choice?
- 5. Is DBCI prepared to work with the GNWT to develop its Waste Management Plan?

IR Number:GNWT 4Source:Government of the Northwest TerritoriesTo:De Beers Canada Inc. (DBCI)Subject:Monitoring winter road accessEIS Section:TOR Section:

#### Preamble:

Winter roads can negatively impact wildlife populations by increasing access to harvesters. Other road-related impacts can include disturbance and increased vehicular mortality. Consequently, winter roads must be included as part of the cumulative effects of development.

The Gahcho Kue winter access road is situated within the restricted hunting area that was put in place by the GNWT in 2010 to protect and conserve the Bathurst barren-ground caribou herd. The GNWT has imposed new regulations in this area and jointly developed and implemented agreements with aboriginal organizations to help the Bathurst herd recover. The size and health of surrounding herds (Bluenose East (BNE) and Beverly/Ahiak) are also monitored to avoid similar situations.

The *Tibbitt to Contwoyto Winter Road Joint Venture*, to which DBCI is a partner, prepared a Q & A relating to caribou and the winter road on November 24, 2006.

"When the caribou winter near the Tibbitt to Contwoyto Winter Road, the road provides public access to the animals. Caribou hunting by both residents and Aboriginals along the winter road is the single largest road related effect on caribou. To better understand the potential effects of hunting along the winter road, the Joint Venture, which operates the winter road, contributes to ENR's wildlife check point at Ross Lake. The check point data is available from ENR. This effect could be largely mitigated by the control of public access to the winter road."

In undertaking a response to the MVEIRB on December 15th, 2011, with regards to "Uncertainty of effects from harvesting on caribou due to increased access from the project winter access road," DBCI stated that it would support additional engagement and consultation with ENR and communities to develop and define appropriate monitoring (e.g., check stations) to evaluate predictions and address uncertainties associated with the potential effects of the winter access road on the abundance and distribution of caribou.

- 1. Would DBCI be willing to work in collaboration with ENR, communities and Aboriginal governments and organizations to jointly develop and implement a Road Access Management Plan to proactively address uncertainties about wildlife mortalities, harvest and other issues as they arise along the Gahcho Kue Winter Access Road?
- 2. Please identify any specific involvement DBCI has had so far with respect to monitoring and mitigation efforts along the Tibbitt to Contwoyto Winter road.

IR Number:	GNWT 5
Source:	Government of the Northwest Territories
То:	De Beers Canada Inc. (DBCI)
Subject:	Wildlife Effects Monitoring Plan
EIS Section:	11.10.10, Appendix 7.I
TOR Section:	

More detailed information on the Wildlife Effects Monitoring Plan (WEMP) is required to assess the effectiveness of proposed mitigation measures and management plans and to determine how impact predictions will be tested. This includes discussion on how DBCI will take an adaptive approach to monitoring and impact mitigation/management (see Section 11.10.10 in the EIS).

- 1. Provide an outline of the proposed WEMP. For each species to be monitored (i.e. barren-ground caribou, wolverine, wolves, grizzly bears, raptors, and species-at-risk), include:
  - a. Specific impact predictions to be tested for each phase of the project, including the temporal or spatial scale at which they will be investigated, proposed methods/sampling protocols, potential partnerships and roles of partners in monitoring.
  - b. Which mitigations outlined in the Wildlife Effects Mitigation and Management Plan (Appendix 7.I) will be evaluated and how they will be evaluated, including methods, potential study designs and the way in which the information generated will be used to minimize impacts to wildlife.
- 2. Provide greater detail on how DBCI will structure wildlife monitoring in an adaptive manner as (i) results from existing WEMPs are analyzed; and (ii) new methods and research emerge. Please include information on how will WEMPs be evaluated and adapted, who will be involved in this process, and how often will this occur).

IR Number:	GNWT 6
Source:	Government of the Northwest Territories
To:	De Beers Canada Inc. (DBCI)
EIS Section:	
TOR Section:	
<b>Reference:</b>	DBCI October 26 & 27, 2011 EIS Workshop

During the EIS Workshop (October 2011) the proponent stated that they intend to have employees share sleeping quarters at the mine site. As per the *Public Health Act: General Sanitation Guidelines* section 11(1) any sleeping quarters must provide, at a minimum,  $11m^3$  of free airspace per employee. Note: free airspace is any unoccupied space in a room (e.g. you would have to subtract the volume of the furniture from the total volume of the room).

- 1. Please provide details of the dimensions for the sleeping quarters and the furniture.
- 2. How many people will be staying in each room?
- 3. How many toilets will be available?
- 4. What will the rate of ventilation be in the sleeping quarters?

IR Number:	GNWT 7
Source:	Government of Northwest Territories
To:	De Beers Canada Inc. (DBCI)
Subject:	Sustainable Development
EIS Section:	Section 12, MPD Report
TOR Section:	3.1.2, 4.1.7

The Terms of Reference (TOR) Section 3.1.2 asks the developer to provide economic information, including total expected revenues (at current market values for diamonds). Section 3.2.6 also requires a reasonably detailed analysis of alternatives the developer considered, such as different extraction rates that would extend the life of the mine.

The TOR Section 4.1.7 notes the developer is proposing to extract a resource at a time when northerners may not be in a position to fully benefit because they will already be working at other mines. That resource may not be available when communities may be in a better position to benefit from such a development. The geographical scope for this Key Line of Inquiry includes all communities in the Tlicho and Akaitcho regions and the Northwest Territories (NWT) overall. Currently, De Beers intends to commit to only 137 full time equivalents for NWT residents.

A report issued by Mountain Province in 2011 indicates the Gahcho Kué Project is expected to produce 49,000,000 carats over its 11 year life. The price per carat in this sample valuation averaged \$185 with a base case scenario of \$122.

This information is important, as the GNWT's Sustainable Development Policy requires it to equally weigh conservation and economic development in any decisions regarding the use of non-renewable resources.

## **Request:**

- 1. Please indicate the anticipated market value of the total forecasted resource for the Gahcho Kué Project.
- 2. If the value of the Gahcho Kué resource significantly changes, what adjustments is DBCI prepared to implement in the design of the Gahcho Kué Project?

Specifically, what changes would DBCI introduce to:

- a. employee transportation arrangements (both own-force and contractors' employees);
- b. rotation cycles (e.g., 2-week versus 1-week rotation schedules) for own-force and contractors` employees;
- c. the rate of extraction;
- d. De Beers Corporate Social Responsibility programs operating in the NWT?
- 3. At what point(s) would the above changes be triggered?

IR Number:	GNWT 8
Source:	Government of Northwest Territories
To:	De Beers Canada Inc. (DBCI)
Subject:	Geographic Scope of Economic Impact (employee transportation)
EIS Section:	12.6-8, EIS Analysis Session, IRR 2.5.53
TOR Section:	5.3.1, 3.2.7, 3.1.2, 3.2.6, 4.1.5

Sections 5.3.1 (p.43) and 3.2.7 (p.20) of the Terms of Reference (TOR) require DBCI to state where the likely labour pool "draw" is going to be from for this development. This must include an assessment of the available labour pool, at varying geographic scales, to meet the direct mine labour requirements, including: individual communities and the Akaitcho and Tlicho Regions as a whole, territorial, and beyond the Northwest Territories (NWT).

The TOR also requires DBCI to report on arrangements for transportation to work and alternative transportation and rotation arrangements, and to describe its planned actions with respect to maximizing the proportion of direct mine employees that are NWT residents (TOR 3.1.2, 3.2.6, 4.1.5).

Access to industrial work sites from remote communities can be a significant barrier to employment for NWT residents. A clear understanding of the steps a developer will take to eliminate this barrier through the developer's transportation arrangements is therefore very important.

DBCI stated in its November/December 2011 Environmental Impact Statement (EIS) session that the project had been designed so that there would be no barriers to employment. However, DBCI has not yet provided details on transportation arrangements for its employees and its contractors' employees.

Both the Mackenzie Gas Project and Canadian Zinc Prairie Creek Project have committed to pay the full transportation cost for all project employees living in the NWT, which the GNWT views as an industry best-practice. BHP Billiton has committed to pay full transportation costs for its Ekati Diamond Mine employees living in 13 NWT communities, including communities in the Beaufort-Delta and Sahtu Regions.

In addition to the cost of transportation, the length of rotation has also been identified as a factor in creating viable employment opportunities for NWT residents. The Avalon project, for example, is proposing a one-week rotation in order to attract more NWT residents to its workforce. During the environmental assessment for the Snap Lake Mine, De Beers also noted that a 1-week rotation schedule was more attractive to NWT residents than a 2-week rotation schedule (Information Request Response (IRR) 2.5.53). A 1-week rotation schedule has been

the industry standard in northern Saskatchewan, and De Beers reported this had been confirmed as the preferred rotation schedule of Saskatchewan workers (IRR 2.5.53).

DBCI is currently taking certain steps with regard to training, recruitment and employee transportation at its Snap Lake Mine. Based on the success of those measures at Snap Lake, DBCI is predicting the Gahcho Kué Mine will result in a modest 137 full-time equivalent positions in each of its 11 years of operation. This prediction assumes the Ekati and Diavik mines will not be operating and that trained employees from those mines will be recruited to work at Gahcho Kué.

The predicted 137 person years of NWT resident employment during operations represents less than 38 percent of the operations workforce. In contrast, DBCI's *2010 Report to Society* stated that about 40 per cent of its workforce at the Victor Mine was Aboriginal (p. 31). Direct employment alone at Attawapiskat represented 78 persons<sup>1</sup> (p. 57). At Snap Lake, in 2010 the largest concentration of NWT resident employees (apart from those living in Yellowknife) was 28 person years from Hay River. There were 16 person years of employment from Behchoko (Snap Lake 2010 Socio-economic Report).

As of December 2011, 10,000 NWT residents over the age of 15 years were either unemployed or not working. This represents 31 percent of the NWT labour force. EIS Table 12.6-8 would indicate that a large proportion of those 10,000 residents want to have a job.

# **Request:**

Given the above factors please provide the following.

In addition to the measures being taken for the Snap Lake Mine:

- 1. Plans that will be put into effect by DBCI, or others with the support, financial or otherwise, of DBCI, to ensure that a higher number and proportion of the Aboriginal and NWT population can meet the standards of employment at the mine.
- 2. How such plans will be implemented to ensure greater participation by Aboriginal and NWT people at the mine.
- 3. Describe what contractors' and sub-contractors' commitments will be for hiring priorities, recruitment and retention strategies, and training.
- 4. Describe when direct transportation from a community would be feasible, including the following information and any other information necessary to make a careful assessment of potential project effects:
  - a. Explain what criteria were used to decide whether transportation is feasible.

<sup>&</sup>lt;sup>1</sup> The total Victor workforce for 2010 was 503 persons.

- b. Describe what conditions would be needed for DBCI to provide direct transportation to and from each community that can supply workers for the Gahcho Kué Diamond Project.
- 5. Provide an analysis of the feasibility of a 1-week rotation schedule during operations.
- 6. Verify whether all contractors and sub-contractors will use the same rotation cycle as DBCI. If not, provide details of the probable rotation cycles for all mine site employees.
- 7. Describe what incentives DBCI will put in place to assist employees wanting to move to the NWT.
- 8. Describe what policies will be in place to monitor whether employees continue to reside in the NWT.
- 9. Describe what alternative measures will be used in cases where a proposed mitigation does not produce the anticipated results (TOR 3.2.7).

IR Number:	GNWT 9
Source:	Government of Northwest Territories
То:	De Beers Canada Inc. (DBCI)
Subject:	Northwest Territories (NWT) Procurement
EIS Section:	12.6-21, Appendix 1.IV, Appendix 12.II
TOR Section:	5.3.1

Contracting and procurement from NWT-owned businesses provides secondary employment opportunities for NWT residents and contributes to the NWT's economy. Maximizing contracting and procurement opportunities for the NWT is a driver for business development in the NWT. NWT businesses have demonstrated an ability to build business capacity within the mining sector, as cumulatively the diamond mines are spending 73 percent of their procurement purchases within the NWT.

Over the life of the Snap Lake Project, De Beers has been able to meet the 70 percent northern procurement commitment as set out in the Snap Lake Socio-Economic Agreement (SEA) accruing a cumulative \$1.537 billion into the NWT economy. Over the course of 2010, NWT purchases fell slightly down to 68 percent totaling \$146 million into the NWT economy annual.

Although it is not clear in the Environmental Impact Statement the specific levels of expected NWT procurement from the Gahcho Kue Project, encouraging information is presented. The NWT Business Policy as well as results from the business interview demonstrates that DBCI is willing to provide procurement benefits locally and that the local community is ready to grow with increased demand. This was reiterated at the December 20, 2011 meeting between the GNWT and DBCI. DBCI also committed to provide the GNWT with an updated procurement strategy, predicted purchases from northern businesses, and to clarify adaptive management measures prior to the technical session. In addition to this commitment the GNWT is looking for clarification on a few remaining issues.

- 1. Please confirm that the same levels of northern procurement from the Snap Lake Project are committed to be achieved for the Gahcho Kué Project.
- 2. Please provide the methodology and assumptions applied in the estimation of procurement targets.
- 3. Detail how, under the implementation of the NWT Business Policy, the Gahcho Kué Project will build on the success of the Snap Lake procurement achievements.
- 4. What specific measures in the Gahcho Kué project will be taken to ensure that NWT businesses have full opportunity to provide goods and services to the Gahcho Kué mine?

IR Number:	EC&GNWT IR#1
Source:	EC & GNWT
To:	De Beers Canada Inc. (DBCI)
Subject:	Air Quality Modeling Input and Output Data
EIS Section:	
TOR Section:	

The quality of model predictions is dependant on the quality of the input data used in the model. The selection of model options and the configuration of model domains and grids can also affect the quality of predictions.

To provide confidence in the air quality model predictions provided in the EIS, all input data and selected model options and configurations must be reviewed.

### **Request:**

1. EC/GNWT requests that the proponent provide all input and control files used in the CALPUFF model to generate the air quality predictions presented in the EIS. All files should be in a format that can be used directly into CALPUFF. Please include all output files in the raw CALPUFF format.

IR Number:	EC&GNWT IR#2
Source:	EC & GNWT
То:	De Beers Canada Inc. (DBCI)
Subject:	Air Emissions
EIS Section:	3.5.3, 3.10.2.4, 11.4.II.3.2.3, 11.4.II.3.2.6
TOR Section:	

EC/GNWT requires clarifications on the project emission sources and on how the emission estimates are calculated. Haul trucks tend to be a large source of combustion emissions as well as fugitive dust. In Section 3.5.3 of the EIS, the Proponent states that depending on the phase of the project, there will between four to ten 230 tonne haul trucks and three 100 tonne haul trucks operating. How many haul trucks were assumed to be operating in the emission estimates for the Application Case?

In Section 11.4.II.3.2.3, the Proponent states that the "mining equipment was assumed to meet U.S. EPA Tier 2 emission standards for non-road diesel engines". Was it also assumed that the haul trucks would meet Tier 2 standards?

Table 11.4.II-26 list default load factors for various equipment but does not include load factors for haul trucks. What load factor was assumed for estimating emissions from haul trucks?

In Section 3.10.2.4, the Proponent states that three 2,825 kW diesel generators will be used to produce the expected 7 MW power demand for the project. What load factors were assumed in the estimating emissions from the diesel generators?

In Section 11.4.II.3.2.6, the Proponent states that fugitive dust from the expose lake bed due to the partial draining of Kennady Lake is unlikely. The Proponent supports its conclusion by citing anecdotal evidence from the Ekati Diamond Mine through personal communication with Dan Jarret and Soren Jensen of Rescan. However, the anecdotal evidence was not provided in the EIS. It is unclear if the draining of lakes at the other diamond mines (Ekati and Diavik) are suitable analogues for this project. After the other diamond mines drained water from lakes, the fine sediments of the exposed lake bed was excavated as part of the mine pit. At other mines, such as the Meadowbank Gold Mine in Nunavut, exposed lake beds have been found to be a significant source of fugitive dust. The Proponent has estimated fugitive dust from the lake bed using a methodology developed for Aggregate Handling and Storage Piles (U.S. EPA AP-42, Section 13.2.4). Is this methodology suitable for fugitive dust from lake beds? Is this methodology likely to over-estimate or under-estimate fugitive dust from lake beds?

# **Request:**

EC/GNWT requests that the Proponent provide the following information:

- 1. Details on the emission calculations for each emission source from this project, including the issues noted in the Preamble and all assumptions used in the emission calculations; and
- 2. Discussion of potential fugitive dust from the exposed lake bed of Kennady Lake.

IR Number:	EC&GNWT IR#3
Source:	EC & GNWT
To:	De Beers Canada Inc. (DBCI)
Subject:	Air Quality and Emissions Management Plan
EIS Section:	11.4.9.2
TOR Section:	

In Section 11.4.9.2 the Proponent commits to developing and implementing an Air Quality and Emissions Management Plan. Additional detail on the management plan is required. The plan should include annual emission tracking of air pollutants and GHGs, fuel consumption, and an ambient and deposition monitoring plan. The management plan should also include mitigation and contingency plans and triggers level at which adaptive management will need to be taken.

# **Request:**

1. EC/GNWT request that the Proponent provide details on its Air Quality and Emissions Management Plan.

IR Number:	EC&GNWT IR#4
Source:	GNWT
То:	De Beers Canada Inc. (DBCI)
Subject:	GNWT Guidelines and Air Quality Monitoring
EIS Section:	11.4.2.2.3, 11.4.4.2, 11.4.4.6
TOR Section:	

The Proponent refers to the GNWT Guideline for Ambient Air Quality Standards in the NWT, however, has not used the most recent version. This should be updated to reflect the 2011 version of the standard.

Furthermore, the Proponent indicates that background concentrations of gaseous substances were estimated using data from measurements taken in NWT communities, which included  $NO_2$  and Ozone measurements from the Yellowknife airport in 2006. EC/GNWT is unclear what agency conducted monitoring at the airport in 2006. Further, the Proponent indicates that no regional CO monitoring has been conducted, however, would like to clarify that CO monitoring has been ongoing at the ENR/NAPS Yellowknife station since 2003.

- 1. GNWT/EC requests that the Proponent update all references to the GNWT Guideline for Ambient Air Quality Standards in the NWT.
- 2. GNWT/EC requests that the Proponent clarify the source of data for the background concentrations of  $NO_2$  and Ozone, and consider the CO readings collected in Yellowknife for additional background concentration data.