



Snap Lake Environmental Monitoring Agency
Main Floor, Lahm Ridge Tower
4501 Franklin Avenue
P.O. Box 95, Yellowknife, NT X1A 2N1
Phone: 867-765-0961 FAX: 867-765-0963
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Jason Ash
Permitting/Environmental Superintendent
Snap Lake Mine
De Beers Canada Inc
300 - 5102 50th Ave
Yellowknife, NT.
X1A 3S8

January 19, 2011

Re: Review of De Beers Snap Lake Mine Air Quality, Meteorological Monitoring and Emission Reporting 2009 Annual Report

Dear Ms. McCallum,

The Snap Lake Environmental Monitoring Agency (SLEMA) has completed a review of the Air Quality, Meteorological Monitoring and Emission Reporting 2009 Annual Report (2009 AQMMERAR). Please accept the following comments as our views and assessments of the document.

General Comments

The above report presents necessary analysis and discussion for air quality, meteorological monitoring and emissions reporting for 2009 and fulfills the related reporting requirements of the Environmental Agreement.

SLEMA would like to acknowledge De Beers efforts in making progress in reducing the sulphur content in diesel fuel and then significantly reducing SO₂ emissions.

Air Quality Monitoring and Response

De Beers defined the action levels, at which emissions mitigation would be employed, for each compound based on the Air Quality Update predictions, the applicable ambient air quality criteria and a percent change (year to year) in measured concentrations.

Based on monitoring results in 2009, action level II or III was triggered for TSP, PM₁₀ and PM_{2.5}. It is stated in the report that details of the response are provided in Section 3.4.8. However, the discussion in this section appears to be insufficient. It is recommended that the action plan should be developed for dust control to respond to the increase of action levels.



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In addition, the annual monitoring averages for SO_2 , NO_2 , PM_{10} and $\text{PM}_{2.5}$ in 2008 and 2009 are significantly different from the air modeling update predictions, which was carried out in 2007.

- Measured concentrations of SO_2 and NO_2 are much lower than those of air modeling update predictions, and
- Measured concentrations of PM_{10} and $\text{PM}_{2.5}$ are much higher than those of air modeling update predictions

It is recommended that De Beers re-assess the air quality modeling and provide update in 2011.

Dioxins and Furans

Incinerator stack testing results in 2007 showed non-compliance with the Canada-Wide Standards (CWS) for total dioxins and furans incinerator emission concentrations.

SLEMA made recommendation for stack testing to confirm the compliance on April 23, 2009 (comment letter for 2007 AQMMERAR) and march 9, 2010 (comment letter for 2008 AQMMERAR). No stack testing in 2009 for incinerator was reported. Therefore, SLEMA would like to reaffirm the recommendation.

If no stack testing in 2010 for incinerator was conducted, it should be done in 2011.

If you have any questions whatsoever please feel free to contact David White at 867-765-0961 / dwhite@slema.ca.

Sincerely,

(Original signed by)

Rachel Crapeau
Vice Chairperson

cc: Indian and Northern Affairs Canada
Environment and Natural Resources, GNWT
Environmental Canada
Mackenzie Valley Land and Water Board