

## Unimin/ Public Liaison Committee Meeting Minutes – December 12, 2016

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Date: December 16, 2016

To: PLC Members

Copies: Blue Mountain Modernization PLC Engagement files; Mary Kainer (Environmental Chair, LKRA); posted on [www.CanadianNepheline.ca](http://www.CanadianNepheline.ca) website

**Subject: Public Liaison Committee - Minutes of December 12, 2016 Meeting**

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**Meeting Date: Monday December 12, 2016**                      **Time: 2:00 – 3:45 pm**

**Attendees: Lake Kasshabog representatives:**

Jim Davison – East Lake rep

Janet Humber – West Lake rep

Mike Delsey – East Lake rep (via telephone)

**Unimin Canada Ltd:**

Bob Marshall, Mikhail Clarkson, Cynthia Jamieson, Michele Oxlade

**Absent:** Dawn Mitchell, Rick Rye

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**Agenda Items:** The purpose of this meeting was to review the air and noise application for the Modernization project. Bob Marshall explained that the agenda would consist of reviewing and discussing the following documents: (1) the PLC Terms of Reference (ToR); (2) the Environmental Compliance Approval (ECA) application; (3) the Acoustic Assessment Report (AAR); and (3) the Emission Summary and Dispersion Modelling (ESDM) report. In advance of the meeting, copies of all documents were previously distributed via email to each PLC member. To facilitate a group review, relevant sections and discussion items were presented on the meeting room large screen monitor. Mike Delsey followed along with his own copies remotely.

### **1. PLC Terms of Reference as it applies to Unimin's Air Permit Presented on Screen**

- B. Marshall reviewed Section 3.2 of the PLC Terms of Reference to explain the purpose of this consultation process and to offer the Meeting Minutes as proof of consultation.
- C. Jamieson asked the PLC members if they would prefer to submit a separate letter of comments and/or concerns to the MOECC (Ministry). J. Davison responded that it would be too onerous for the PLC and that the meeting minutes would suffice. J. Humber and M. Delsey agreed that once the minutes have been universally agreed upon they could be submitted to the Ministry as proof of consultation for the ECA Application (Application).

### **2. ECA Application Highlights Presented on Screen**

- B. Marshall flagged pertinent sections of the application for collective review. They were

as follows:

Page 4: Application summary, paragraphs 2 & 3 – review the scope of application.

Page 5: Supplemental Information, paragraph 2 – review the scope of pre-consultation.

Page 15: Section 3.3 – review details of Consultation.

Page 22: Section 5.2 Does *the AAR show that the applicable limits are met?* Yes, is checked.

- C. Jamieson explained that this application addresses only air and noise. In support of the application, models are generated by qualified professionals to demonstrate that emissions and noise generated by the proposed project would be in compliance with government standards. C. Jamieson gave an overview of why Unimin needs a permit and stated that given the distance to noise receptors Unimin would not normally require a permit for noise but due to historical concerns an assessment is required. C. Jamieson explained that in Ontario, models must be prepared in advance of construction. J. Davison asked if when the modelling is done, since it is based on manufacturers data, does Unimin have to go back and verify? C. Jamieson responded that it is permit dependent. Typically, the applicant has to prepare a model before any change and then it is up to the permit to say 'Prove it'. B. Marshall added that it is in Unimin's best interest to show that levels are in agreement with the model. The previous air approval required Unimin to conduct a noise audit post-construction and to conduct stack testing. C. Jamieson also added that the ESDM model is updated with the actual data afterwards to ensure that the model is as accurate as possible.

### **3. Dillon Acoustic Assessment Report (Nov 2016) Presented on Screen**

- B. Marshall showed the group the Acoustic Assessment Report (AAR) and the associated receptor locations on the site maps relative to the Unimin sources that were used for the modelling. J. Humber asked who chose the receptor locations and R. Marshall responded they were chosen by Dillon Consulting.
- Executive Summary, Table ES-1 illustrates that all Points of Reception are well within compliance of MOECC daytime and night time limits and are comparable to current sound levels measured in the most recent acoustic audit. B. Marshall stated that these are pretty much 'spot on' with current conditions. J. Davison asked if these were post-modernization numbers and C. Jamieson responded yes. M. Delsey noted that the Table reflects limits for "seasonal" receptors, and he asked if the limits were the same for "permanent" residents. C. Jamieson responded yes. J. Humber asked if these were year round conditions or averaged. B. Marshall stated that it most likely reflected worst case scenario but he was not 100% sure.
- Previously Pinchin completed the model and Cambium completed that actual on the ground levels and both sets of values matched.

#### **Addendum-December 20, 2016**

*In response to a suggestion proposed by Mike Delsey, below, C. Jamieson contacted Dillon Consulting and Shelby Hudgens, regarding modelling scenarios for the Acoustic Assessment Report and the Emission and Summary Dispersion Modelling (ESDM) report, respectively. The responses were as follows:*

- *Per Dillon, "the predicted noise levels from the model (e.g., the 33.9 dBA level) would be reflective of the worst case scenario noise impact"*
- *Per S. Hudgens, "The emission rates modeled to determine every POI limit shown in the*

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*Executive Summary tables are based on maximum hourly throughputs or fuel consumption numbers that are assumed to be the same over every 8,760 hours in any given year. This is the worst case emission scenario.”*

*Therefore, the models represent worst case scenarios.*

**Deviation from Agenda**

John Davison had a question to ask on behalf of Dawn Mitchell (PLC Member-at-large). D. Mitchell wanted to know “Is Unimin taking water from Kasshabog? Is there more requirements for water (with Modernization) and will Unimin drill more wells?” C. Jamieson responded with a summary of Unimin’s water taking practices as follows.

Unimin takes water from three sources (1) Barrette Lake, (2) Big Mountain Lake; and (3) the quarries. The quarry water is used for road dust suppression. Unimin waters the road every day that it doesn’t rain as a condition of the air permit. The MOECC prefer that water be taken from disturbed areas such as the quarries to minimize the impact on the environment. Process water is taken from Barrette Lake and Big Mountain Lake for domestic and industrial purposes. The majority of water is used to transport currently non saleable Nepheline material to the tailings deposition areas. In 1996, Unimin converted the Blue Mountain tailings from a dilute slurry system to a modified thickened tailings. The previous system used a lot more water. Since this conversion, Blue Mountain has decreased its water taking to less than one half of the original amount. The Nephton tailings uses a dilute slurry system. There are too many challenges to convert to thickened tailings at this time. Modernization will mean that Unimin continues to use the Blue Mountain tailings system and consequently less water. Existing site wells are for water quality monitoring purposes only and do not supply the plants or tailings systems.

**3. Agenda Item 3 Cont’d**

C. Jamieson asked J. Humber if she had any noise issues. J. Humber responded that noise was noticeable prior to the silencers, but that there is no noise now just haul road traffic. B. Marshall indicated that Modernization would reduce traffic on the haul road.

**4. Emission Summary and Dispersion Modeling (ESDM) Report 2016 (Shelby Hudgens, Unimin) Presented on Screen**

- B. Marshall presented the ‘Executive Summary’ from the report and C. Jamieson gave a review of the summary which included emission source areas and compounds of concern. All emissions are modelled as a worst case scenario.
- Review of the ‘Impacts from Combined Facilities Table’ (page 4). C. Jamieson explained that this table consisted of current combined emissions from Nephton and Blue Mountain facilities scaled up to show that despite the increase, the facilities should neer exceed any MOECC limits. B. Marshall asked if the Regulation determines the factor of safety (scaled up values) which is used in the modelling. C. Jamieson replied no, that these factors were determined through discussions between the air modelling engineer and the Ministry.
- Review of the ‘Maximum Allowable Emissions by Facility Table’ (page 4).
- Review of the ‘Emission Summary Table’ (page 4) which contains the actual potential emissions for post-Modernization emissions. It was noted that modelled emissions are well within government limits.
- Review of the ‘Sources and Contaminant Identification table’ which include descriptions of some of the processes. C. Jamieson explained how this table shows the list of all emission sources incorporated into the model. M. Delsey asked if heavy quarry equipment was included in the ESDM. C. Jamieson responded no, mobile sources do not need to

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be modeled. M. Delsey asked about blasting? Shelby Hudgens, the engineer who prepared the ESDM report, was contacted by phone during the meeting to provide assistance. S. Hudgens explained that blasting cannot be modelled because it is not a steady state emission, however quarry activities including loading and hauling are accounted for in the model.

**5. Other concerns**

- C. Jamieson asked around the table what is the members biggest concern regarding Modernization. J. Davison responded that anyone he has talked to regarding the plant/project is concerned with dust and noise. He stated if that's addressed, and he thinks that it has been, then carry on. M. Delsy agreed with J. Davison. J. Humber also agreed with J. Davison and added that dust is her greatest concern. Plant related night time lighting is also a concern but has been reduced. B. Marshall added that Modernization is addressing lighting mitigation to respect neighbours' wishes for "Dark Skies".
- R. Rye had not previously conveyed any comments or concerns to any members in attendance.
- J. Davison asked if the Modernization decision was scheduled for June/July. M. Clarkson responded that it more likely targeted for September.

**Next Meeting** – To be scheduled for May and to include a facility tour. R. Rye & J. Humber have not toured the Blue Mountain facility previously.

**Meeting adjourned at 3:45pm**