

# Message from the Medical Officer of Health Peterborough County-City Health Unit

May 16, 2013



## To the Residents of Kasshabog Lake:

**Due to high winds there is significant lift of dust off the Nepton tailings site that is washing over Kasshabog Lake. Residents of Kasshabog Lake are advised that until winds abate there may be significant dust in the air and that sensitive populations should take precautions.**

**This level of air pollution can be associated with eye, nose and throat irritation as well as other respiratory symptoms and may aggravate pre-existing lung conditions such as asthma. Residents of Kasshabog Lake who are experiencing symptoms should take steps to reduce their exposures to the dust during these events until this problem is resolved.**

### **Is dust harmful to health?**

Particles suspended in the air can be harmful to health. Typically, particles that are ten micrometers (a micrometer is one thousandth of a millimeter) or larger in size are effectively filtered by the nose and do not reach the lungs. However, particles five micrometers or smaller can reach the air spaces within the lungs and can cause damage, depending on their components. While most of the dust from the mine is too large to be inhaled some of it is small enough to be inhaled more deeply in the lung.

### **What is in the dust around Kasshabog and Bottle Lakes?**

Analysis of the dust from the tailings at Unimin mine shows nepheline syenite, a mineral used in a variety of industrial manufacturing processes including paint fillers, powder coatings and plastics. Nepheline syenite is refined through mechanical processes.

### **Is Nepheline syenite harmful to health?**

Nepheline syenite is a product of the earth's crust. It is inert and does not contain silica, which is associated with silicosis.

### **Are there impacts of the dust on human health?**

Exposure to dust has the potential to cause adverse health effects, especially for individuals with underlying respiratory or cardiovascular conditions. Although there is limited research available, studies do show an association between exposure to dust and acute respiratory symptoms such as cough, wheeze and nasal irritation. A few studies show an association with asthma, chronic obstructive lung disease (COPD) and admission to hospital for respiratory symptoms. Individuals with chronic respiratory and cardiovascular conditions, including asthma, may find that their conditions are exacerbated by dust in the air.

### **Has any action been taken to prevent more of these dust episodes this year?**

Unimin Mine has been working to reduce the dust coming from the plant and tailings. A number of measures were implemented last year and more are being planned for this month including hydro-seeding of the tailings. PCCHU has been advised and expects that these actions should be implemented soon.

### **What you can do:**

Anyone experiencing symptoms related to periods of high dust levels can reduce their exposure by staying indoors and using a HEPA type air cleaner that removes dust particles. Use of an air conditioner may also be helpful. Persons with persistent symptoms should see their personal physician.

### **What the Peterborough County-City Health Unit is doing:**

Health Unit staff are monitoring the situation and are working with the MOE and other public health authorities on resolving the dust emissions from the mine.

### **For more information please contact:**

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