

# **MATERIAL CHANGE REPORT**

**1. Reporting Issuer:**

Niocan Inc.  
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**2. Date of Material Change:**

February 17, 2010

**3. Publication of Material Change**

A press release was issued on February 17, 2010

**4. Summary of Material Change**

Niocan announced its report on the mineral resources at its niobium property located in the Ste-Sophie range of Oka as per NI 43-101 and the CIM mineral resources classifications. The report was prepared by Mr. Serge Lavoie, geological engineer and qualified person (QP) according to NI 43-101 rules.

**5. Full Description of Material Change**

On February 17, 2010, Niocan Inc. announced its report on the mineral resources at its niobium property located in the Ste-Sophie range of Oka as per NI 43-101 and the CIM mineral resources classifications.

The report was prepared by Mr. Serge Lavoie, geological engineer and qualified person (QP) according to NI 43-101 rules. Mr. Lavoie was a geologist at the former St. Lawrence Columbium property in Oka when it was in operation.

Additional drilling of the main ore body at Oka, the S-60 deposit, was made by Niocan in 1995-1997 with 59 DDH, for a total of 21,976 meters. The steeply dipping cylindrical shaped deposit defined in the drilling campaign has an approximate dimension of 100m by 80m and extends 500 meters below surface. The deposit is still open at depth.

The revised mineral resources estimates calculated by Met-Chem under the supervision of Serge Lavoie (QP) in December 2009 are:

| Resources Classification at a 0.40% cut off grade Nb <sub>2</sub> O <sub>5</sub> | Tonnes (x MM) | % Nb <sub>2</sub> O <sub>5</sub> |
|----------------------------------------------------------------------------------|---------------|----------------------------------|
| Measured                                                                         | 4.28          | 0.72                             |
| Indicated                                                                        | 6.35          | 0.65                             |
| M & I Total                                                                      | 10.63         | 0.68                             |
| Inferred                                                                         | 3.22          | 0.61                             |

Met-Chem is in the opinion that more resources could be further identified with additional drilling from mineralized satellite lenses in the immediate proximity of the S-60 deposit. According to preliminary information, this additional drilling could increase the S-60 mineral resource base by up to 30 percent, according to Met-Chem.

The metallurgical testworks were first performed between 1996 and 1998 by the Centre de Recherche Minéral du Québec (CRM, now COREM) on core samples for the S-60 deposit. The pyrochlore recovery was 76.5%, yielding a commercial grade of 51% Nb<sub>2</sub>O<sub>5</sub> in the concentrate.

The following table sets forth additional historical resources of other known deposits on the property.

| Other Deposits                          | Historical Resources                                             |
|-----------------------------------------|------------------------------------------------------------------|
| HWM-2                                   | 5.9 x 10 <sup>6</sup> T at 0.56% Nb <sub>2</sub> O <sub>5</sub>  |
| SLC ore below 300m plus zones 112 – 114 | 21.7 x 10 <sup>6</sup> T at 0.44% Nb <sub>2</sub> O <sub>5</sub> |

These mineral resources are historical in nature and have not been validated by the independent qualified person. These mineral resources are not compliant with NI 43-101 and should not be relied upon.

Niocan believes that these historical mineral resources estimates provide a conceptual indication of the potential of the property and are relevant to future exploration and mining.

Niocan will also have all of its mineral resources recalculated with the lower cut off grades of 0.35% and 0.30% Nb<sub>2</sub>O<sub>5</sub> for the NI 43-101. This decision is based on the current ferroniobium price of \$21 USD per pound. This activity will be completed in due course for the revised bankable feasibility study since the 0.40% cut off grade was first used when the FeNb price was at \$6.50 USD per pound. This price and cut off grade were used in the 1998 and 2000 feasibility and updated feasibility studies completed by Met-Chem and SNC-Lavalin. The annual production rate in these studies was set at 4,370 tonnes of ferroniobium or 6.3 million pounds of payable niobium product. The daily milling rate, for these studies, remained unchanged at 2,500 tonnes per day.

In the fall of 2009, Niocan has also mandated Met-Chem to update the project capital and operating expenditures and the resulting economic assessments on the base of the previous study. The key parameters and the conclusions will be finalized before the end of February 2010.

The mineral resources of the S-60 deposit are now qualified as per NI 43-101 (S. Lavoie Q.P.) and KPMG has recently updated the socio-economic impacts study of the Oka niobium mine project.

With all these additional and updated studies complete, Niocan will continue its efforts to obtain the Certificate of Authorization from the Ministry of Sustainable Development Environment and Parks (MSDEP), which, if issued quickly by the MSDEP, would enable the Company to start the construction of the mine in late 2010. The estimated time required to build the mine would be approximately two years according to the previous engineering reports.

**6. Reliance on Confidential Filing Provisions**

Not applicable.

**7. Omitted Information**

Not applicable.

**8. Senior Officers**

Mr. Coulombe, President of Niocan, is knowledgeable about the material change set forth herein and can be reached at (514) 288-8506 (telephone) and (514) 843-4809 (fax).

**9. Statement of Senior Officer**

The foregoing accurately discloses the material change referred to herein.

Dated at the City of Montreal, in the Province of Québec, this 22th day of February, 2010.

**NIOCAN INC.**

A handwritten signature in black ink, appearing to read "Bernard Coulombe", written in a cursive style.

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Bernard Coulombe  
President