Form 52-109F2 – IPO/RTO

Certification of Interim Filings Following an Initial Public Offering, Reverse Takeover or Becoming a Non-Venture Issuer

I, Mark A. Smith, Chief Executive Officer of NioCorp Developments Ltd., certify the following:

- 1. **Review:** I have reviewed the interim financial report and interim MD&A (together, the "interim filings") of NioCorp Developments Ltd. (the "issuer") for the interim period ended March 31, 2015.
- 2. **No misrepresentations:** Based on my knowledge, having exercised reasonable diligence, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings.
- 3. *Fair presentation:* Based on my knowledge, having exercised reasonable diligence, the interim financial report together with the other financial information included in the interim filings fairly present in all material respects the financial condition, financial performance and cash flows of the issuer, as of the date of and for the periods presented in the interim filings.

Date: May 15, 2015

<u>/signed/ Mark A. Smith</u>

Mark A. Smith

Chief Executive Officer