

Form 52-109F2
Certification of Interim Filings
Full Certificate

I, Trent Mell, **Chief Executive Officer of Electra Battery Materials Corporation**, certify the following:

1. **Review:** I have reviewed the interim financial report and interim MD&A (together, the “interim filings”) of **Electra Battery Materials Corporation** (the “issuer”) for the interim period ended **September 30, 2023**.
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.
4. **Responsibility:** The issuer’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (DC&P) and internal control over financial reporting (ICFR), as those terms are defined in National Instrument 52-109 *Certification of Disclosure in Issuers’ Annual and Interim Filings*, for the issuer.
5. **Design:** Subject to the limitations, if any, described in paragraphs 5.2 and 5.3, the issuer’s other certifying officer(s) and I have, as at the end of the period covered by the interim filings
 - (a) designed DC&P, or caused it to be designed under our supervision, to provide reasonable assurance that
 - (i) material information relating to the issuer is made known to us by others, particularly during the period in which the interim filings are being prepared; and
 - (ii) information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted by it under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation; and
 - (b) designed ICFR, or caused it to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with the issuer’s GAAP.
- 5.1 **Control framework:** The control framework the issuer’s other certifying officer(s) and I used to design the issuer’s ICFR is *Risk Management and Governance: Guidance on Control* (COCO Framework), published by The Canadian Institute of Chartered Accountants.

- 5.2 **ICFR – material weakness relating to design:** The issuer has disclosed in its interim MD&A for each material weakness relating to design existing at the end of the interim period
- (a) a description of the material weakness;
 - (b) the impact of the material weakness on the issuer’s financial reporting and its ICFR; and
 - (c) the issuer’s current plans, if any, or any actions already undertaken, for remediating the material weakness.
- 5.3 **Limitation on scope of design:** “N/A”
6. **Evaluation:** The issuer’s other certifying officer(s) and I have
- (a) evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer’s DC&P at the end of the interim period and the issuer has disclosed in its interim MD&A our conclusions about the effectiveness of DC&P at the end of the interim period based on that evaluation; and
 - (b) evaluated, or caused to be evaluated under our supervision, the effectiveness of the issuer’s ICFR at the end of the interim period and the issuer has disclosed in its interim MD&A
 - (i) our conclusions about the effectiveness of ICFR at the end of the interim period based on that evaluation; and
 - (ii) for each material weakness relating to operation existing at the end of the interim period
 - (A) a description of the material weakness;
 - (B) the impact of the material weakness on the issuer’s financial reporting and its ICFR; and
 - (C) the issuer’s current plans, if any, or any actions already undertaken, for remediating the material weakness.
7. **Reporting changes in ICFR:** The issuer has disclosed in its interim MD&A any change in the issuer’s ICFR that occurred during the period beginning on January 1, 2023 and ended on September 30, 2023 that has materially affected, or is reasonably likely to materially affect, the issuer’s ICFR.

8. ***Reporting to the issuer's auditors and board of directors or audit committee:*** The issuer's other certifying officer(s) and I have disclosed, based on our most recent evaluation of ICFR, to the issuer's auditors, and the board of directors or the audit committee of the board of directors any fraud that involves management or other employees who have a significant role in the issuer's ICFR.

Date: November 16, 2023

/s/ "Trent Mell"

Trent Mell
Chief Executive Officer