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British Columbia Securities Commission
Alberta Securities Commission
Financial and Consumer Affairs Authority of Saskatchewan
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
Financial and Consumer Services Commission, New Brunswick
Superintendent of Securities, Department of Justice and Public Safety, Prince Edward
Island
Nova Scotia Securities Commission
Office of the Superintendent of Securities, Service NL
Northwest Territories Office of the Superintendent of Securities
Office of the Yukon Superintendent of Securities
Nunavut Securities Office

Via e-mail: ccollins@bcsc.bc.ca, comments@osc.gov.on.ca, consultation-en-cours@lautorite.qc.ca

RE: CSA 43-101 CONSULTATION COMMENTS

To whom it may concern:

Kindly find below my comments in response to CSA's 43-101 Consultation paper dated April 14, 2022.

1. Do the disclosure requirements in the Form for a pre-mineral resource stage project provide information or context necessary to protect investors and fully inform investment decisions? Please explain.

(1.) For a pre-mineral resource stage project, under Section 4, add a requirement to disclose the nature and extent of aboriginal and community consultations, or state if none done, or if none apply.

2.a) Is there an alternate way to present relevant technical information that would be easier, clearer, and more accessible for investors to use than the Form? For example, would it be better to provide the necessary information in a condensed format in other continuous disclosure documents, such as a news release, annual information form or annual management's discussion and analysis, or, when required, in a prospectus?

(2.a) The condensed formats, such as, JORC Table 1 increase disclosure risk by lacking context enabled by the more narrative form of a Technical Report. The process of preparing a Technical Report encourages and promotes checking and reflection of information disclosed. Technical Reports establish an important disclosure timeline that show how historically identified risks are mitigated over time.

4. Paragraph 4.2(5)(a) of NI 43-101 permits an issuer to delay up to 45 days the filing of a technical report to support the disclosure in circumstances outlined in paragraph 4.2(1)(j) of NI 43-101. Please explain whether this length of time is still necessary, or if we should consider reducing the 45-day period.

(4.) The 45 day period is appropriate, it provides a balance between timely disclosures and written technical disclosures.

5.a) Can the investor protection function of the current personal inspection requirement still be achieved through the application of innovative technologies without requiring the qualified person to conduct a physical visit to the project?

(5.a) A personal inspections is fundamental to Technical Reports and the limits of remotely sensed information should be recognized.

5.b) If remote technologies are acceptable, what parameters need to be in place in order to maintain the integrity of the current personal inspection requirement?

(5.b) There is a role for technology to extend the relevance period of personal inspections, for example, to check for any subsequent surface work and potential environmental disturbances.

6. Is the current definition of data verification adequate, and are the disclosure requirements in section 3.2 of NI 43-101 sufficiently clear?

(6.) The disclosure requirements in sections 3.2 of NI 43-101 should emphasize that data verification applies to all material sampled data, including, geochemical, geophysical, metallurgical, geotechnical and hydrological data, as well as, requiring a statement of representativeness to support opinions disclosed by the QP.

7. How can we improve the disclosure of data verification procedures in Item 12 of the Form to allow the investing public to better understand how the qualified person ascertained that the data was suitable for use in the technical report?

(7.) It may be best for Item 12 to refer to a standard practise guideline from an approved professional organization and/or learned societies.

8. Given that the current personal inspection is integral to the data verification, should we consider integrating disclosure about the current personal inspection into Item 12 of the Form rather than Item 2(d) of the Form?

(8.) Personal inspections and data validation are partially overlapping activities, possibly involving different QPs and should remain separate Items, however, Item 12 is commonly misunderstood to apply only to drilling information owing to its location in the Technical Report, therefore, it should be removed as a standalone Item and inserted as sub-items in Items 10, 11, 13, 14, 15, 16, 17, 18, 19, and 20.

9. Is the current definition of historical estimate sufficiently clear? If not, how could we modify the definition?

(9.) The definition of historical estimate is sufficiently clear.

10. Do the disclosure requirements in section 2.4 of NI 43-101 sufficiently protect investors from misrepresentation of historical estimates? Please explain.

(10.) The requirements in section 2.4 of NI 43-101 regarding historical estimates are sufficient.

11. Should we consider modifying the definition of preliminary economic assessment to enhance the study's precision? If so, how? For example, should we introduce disclosure requirements related to cost estimation parameters or the amount of engineering completed?

(11.) To be comparable, PEA must be supported by an appropriate level of engineering and permitting investigations, namely, sub-studies, the presence or absence of supporting sub-studies is responsible for much of the precision variance noted in PEAs. For example, PEA's should be required to have scoping-level, land title, metallurgical, geotechnical, mine planning, and permitting sub-studies completed and listed in the references.

12. Does the current cautionary statement disclosure required by subsection 2.3(3) of NI 43-101 adequately inform investors of the full extent of the risks associated with the disclosure of a preliminary economic assessment? Why or why not?

(12.) The current cautionary statement in subsection 2.3(3) is inadequate, it should include the requirement that PEAs be supported by an appropriate level of scoping-level technical sub-studies performed and validated by a QP and these listed in the references.

13. Subparagraph 5.3(1)(c)(ii) of NI 43-101 triggers an independence requirement that may not apply to significant changes to preliminary economic assessments. Should we introduce a specific independence requirement for significant changes to preliminary economic assessments that is unrelated to changes to the mineral resource estimate? If so, what would be a suitable significance threshold?

(13.) PEAs should continue to be exempt from triggering independence requirements, these studies are designed and intended to efficiently test various development scenarios based on scoping-level engineering and permitting support. Discouraging PEAs from evaluating alternative development scenarios would be a disservice to investors.

14. Should we preclude the disclosure of preliminary economic assessments on a mineral project if current mineral reserves have been established?

(14.) PEAs should not be precluded if mineral reserves have been established as mineral reserves support the current long term mine plan, whereas, a PEA is helpful to evaluate expansions based on upgrading of mineral resources and/or modifications to mineral processing, etc..

15. Should NI 43-101 prohibit including by-products in cash flow models used for the economic analysis component of a preliminary economic assessment that have not been categorized as measured, indicated, or inferred mineral resources? Please explain.

(15.) By-products should not be precluded from PEAs provided adequate support is provided to support estimated quantities and grades, mineral processing characteristics, and payment terms.

16. Is there anything missing or unclear in the current qualified person definition? If so, please explain what changes could be made to enhance the definition.

(16.) No, the current QP definition is sufficient.

17. Should paragraph (a) of the qualified person definition be broadened beyond engineers and geoscientists to include other professional disciplines? If so, what disciplines should be included and why?

(17.) Yes, the QP definition should be broadened beyond geoscientist and engineers, to include, members of professional associations that can better assess and disclose section 4 and 20, for example, lawyers and biologists.

18. Should the test for independence in section 1.5 of NI 43-101 be clarified? If so, what clarification would be helpful?

(18.) The test for independence should be qualified by not being a position of a conflict of interest, see (<https://engineerscanada.ca/public-guideline-conflict-of-interest>).

19. Should directors and officers be disqualified from authoring any technical reports, even in circumstances where independence is not required?

(19.) Board directors and officers of a company should be disqualified from authoring technical reports for that issuer, however, this should not disqualify them from authoring technical reports for other issuers.

20. Should we consider adopting a definition for a "current personal inspection"? If so, what elements are necessary or important to incorporate?

(20.) Consider adopting a definition for a "current personal inspection" that requires "non-visiting QPs" to provide questions and instructions to "visiting QPs" sufficient to assess potential concerns related to their areas of responsibilities.

21. Should the qualified person accepting responsibility for the mineral resource estimate in a technical report be required to conduct a current personal inspection, regardless of whether another report author conducts a personal inspection? Why or why not?

(21.) While this is a best practise, no, the QP accepting responsibility for the mineral resource estimate [Item 14] should not be required to conduct a current personal inspection. The relative importance of a QP is very much property specific, for example, metallurgical or licence-to-operative may be key risks to assess during a personal inspection, moreover, such language may be viewed as discriminatory to QP's with mobility issues.

22. In a technical report for an advanced property, should each qualified person accepting responsibility for Items 15-18 (inclusive) of the Form be required to conduct a current personal inspection? Why or why not?

(22.) QPs accepting responsibility for Items 15-18 should not be required to conduct a current inspection. Technical risks are specific to the property and it should be left to QP(s) to manage, however, the decision should be guided by the property's technical risks, requiring personal inspection from QPs for areas with higher risks.

23. Do you have any concerns if we remove subsection 6.2(2) of NI 43-101? If so, please explain.

(23.) No concerns removing subsection 6.2(2), that is, remove it or amend it to include other exceptional delays such as a global pandemic.

24. Are the current requirements in section 3.3 of NI 43-101 sufficiently clear? If not, how could we improve them?

(24.) Section 3.3 is sufficiently clear and reasonable, however, could include the basis for estimating true thickness.

25. Should Item 14: Mineral Resource Estimates of the Form require specific disclosure of reasonable prospects for eventual economic extraction? Why or why not? If so, please explain the critical elements that are necessary to be disclosed.

(25.) Yes, Item 14 should emphasize that all key RPEEE assumptions as defined by CIM Definition Standard guidance must be disclosed by the QP. That said, it is out of scope for CSA to define changes to CIM guidance. I expect CIM will review RPEEE guidance in due course and hopefully add something about constraining mineral resources by conceptual mining shapes for both open pit and underground scenarios.

26.a) Should the qualified person responsible for the mineral resource estimate be required to conduct data verification and accept responsibility for the information used to support the mineral resource estimate? Why or why not?

(26.a) A QP for the mineral resource estimate must be required to conduct data [and estimate] verification. Equally, other key data-driven Items of the 43-101 should be required to conduct data [and analysis] validation to support a QP's opinion of representativeness and suitability. Having Item 12 broken-out rather than inserting it as a sub-item to Items 10, 11, 13, 14, 15, 16, 17, and 18 is likely responsible for some of this poor compliance.

26.b) Should the qualified person responsible for the mineral resource estimate be required to conduct data verification and accept responsibility for legacy data used to support the mineral resource estimate? Specifically, should this be required if the sampling, analytical, and QA/QC information is no longer available to the current operator. Why or why not?

(26.b) A QP must be responsible to conduct data verification for legacy data if analytical and QA/QC information is no longer available, but it does not need to be the mineral resource QP.

27. How can we enhance project specific risk disclosure for mining projects and estimation of mineral resources and mineral reserves?

(27.) Paragraph 3.4(d) is meaningful for mineral reserves that have been the subject of multi-disciplinary economic studies. Projects with mineral resources only have not been studied to that detail, so it may be more accurate for the QP to state what if any legal, political, and environmental studies have been completed and whether they support reasonable prospective of eventual economic extraction, otherwise, state none have been completed. This approach would be more informative than any boilerplate.

28. Do you think the current environmental disclosure requirements under Items 4 and 20 of the Form are adequate to allow investors to make informed investment decisions? Why or why not?

(28.) Tailings Management Facilities (TMF), Waste Rock Management Facilities (WRF) and stockpiles should be pulled-out of Items 20(b) and 18 and inserted as a new Item. They present material capital and technical risks for most mining projects. Their design, construction, costing, monitoring and closure should be demonstrated and presented following recognized geotechnical engineering best practises with results used to support initial and sustaining cost estimates in Item 21.

29. Do you think the current social disclosure requirements under Items 4 and 20 of the Form are adequate to allow investors to make informed investment decisions? Why or why not?

(29.) Yes, but provided are guided by best practises defined by an approved professional organization and/or learned societies, they should be incorporate into 43-101. It is beyond the scope of CSA to define those professional practises.

30. Should disclosure of community consultations be required in all stages of technical reports, including reports for early stage exploration properties?

(30.) Yes, but provided are guided by best practises defined by an approved professional organization and/or learned societies, they should be incorporate into 43-101. It is beyond the scope of CSA to define those professional practises.

31. What specific disclosures should be mandatory in a technical report in order for investors to fully understand and appreciate the risks and uncertainties that arise as a result of the rights of Indigenous Peoples with respect to a mineral project?

(31.) To help Investors understand risks and to promote understanding, summarize government policy outlining the rights of Indigenous Peoples with respect to a mineral project, and equally, any known claims by or on behalf of Indigenous Peoples with respect to a mineral project.

32. What specific disclosures should be mandatory in a technical report in order for investors to fully understand and appreciate all significant risks and uncertainties related to the relationship of the issuer with any Indigenous Peoples on whose traditional territory the mineral project lies?

(32.) To help Investors understand risks and to promote understanding, identify Indigenous Peoples on whose traditional territory the mineral project is located.

33. Should we require the qualified person or other expert to validate the issuer's disclosure of significant risks and uncertainties related to its existing relationship with Indigenous Peoples with respect to a project? If so, how can a qualified person or other expert independently verify this information? Please explain.

(33.) Yes, as a matter of record-keeping the QP should review consultation and community meeting documents, and summarize frequency, attendees and any material actions or outcomes.

34. Are the current disclosure requirements for capital and operating costs estimates in Item 21 of the Form adequate? Why or why not?

(34.) The current disclosure requirements for capital and operating costs estimates are inadequate. Total and unit capital and operating costs should be provided on project basis and then regrouped as initial capital, capitalized operating costs, sustaining capital, expensed operating costs, and closure costs. Operating costs should be built-up from key cost centers. Sustaining costs should be build up from key cost centers and presented as period costs. Capital cost should be build-up by Work Breakdown Structure (WBS) codes, an accepted standard practise. A statement should be provided

whether operating cost assumptions are based on historical costs or explain why they differ.

35. Should the Form be more prescriptive with respect to the disclosure of the cost estimates, for example to require disclosure of the cost estimate classification system used, such as the classification system of the Association for the Advancement of Cost Engineering (AACE International)? Why or why not?

(35.) AACE is a recognized professional standard that would help investors understand the accuracy of the estimates and align QPs to a reasonable standard appropriate for the study stage.

36. Is the disclosure requirement for risks specific to the capital and operating cost assumptions adequate? If not, how could it be improved?

(36.) With the above proposed professional practise enhancements (project cost basis, cost build-ups, WBS, AACE), the risks specific to the capital and operating costs would be adequately captured.

37. Are there better ways for Item 22 of the Form to require presentation of an economic analysis to facilitate this key requirement for the investing public? For example, should the Form require the disclosure of a range of standardized discount rates?

(37.) Investors generally understand an issuer's net asset value is built-up from individual operations and non-producing assets, therefore, it is fundamental that producers not be exempt from disclosing a cash flow model to support Mineral Reserves. Cash flow models are key to demonstrating economic viability. By not treating producers and non-producers equally the insinuation is poor practises and misleading statements are exclusive to non-producers. The policy may inadvertently encourage producers to take-on risks.

38. Are there other disclosure requirements in NI 43-101 or the Form that we should consider removing or modifying because they do not assist investors in making decisions or serve to protect the integrity of the mining capital markets in Canada?

(38.a) Add to Item 15 a requirement for producing issuers to present annualized mine-to-mill reconciliation to validate and support of the reserve statement. CIM best estimation practises discussed this under block model validations but it really needs a home within the Form.

(38.b) Add to Item 16 a requirement for a physical mine schedule table (ore, waste, grade, recovery, metal by period) including mine, and stockpile movements to support the mineral reserve disclosure.