



September 13, 2022

**To:**

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

**Re: CSA Consultation Paper 43-401 – Consultation on National Instrument 43-101  
Standards of Disclosure for Mineral Projects**

## **Introduction**

Thank you for the opportunity to provide feedback on the questions set out in the Consultation Paper and other general comments on Canadian Securities Administrators (CSA) enforcement of mining disclosure standards in the Canadian capital markets.

Wood is a global leader in the delivery of project, engineering and technical services to energy and industrial markets. The company serves many of the world leaders in the mining industry, and maintains mining offices across Canada, the USA and Australia, as well as in Santiago, Chile; Lima, Peru; and Johannesburg, South Africa. In nearly 100 countries, we have provided a full range of services for mining projects.

Wood considers this is a particularly opportune time for the CSA to reach out and consult with stakeholders in the Canadian capital markets for mining issuers:

- The latest significant rule change to NI 43-101 Rule, Form and Companion Policy was June 30, 2011, over 12 years ago and the mining industry has been through a complete cycle since then.
- There have been recent significant developments in mining disclosure standards and regulations
  - S-K 1300 in the USA
  - 2012 JORC Code review by JORC has been ongoing since late 2020 and has begun publishing results of their stakeholder consultation process
  - Updates to the PERC and SAMREC reporting codes
  - CIM has published updates to existing practice guidelines and is currently finalizing new practice guidelines to assist the Canadian mining industry

One of the issues that Wood has commented on in many of our responses to the questions raised in this consultation paper is an observed shift over the past few years in CSA mining staff's approach to what is considered when deciding whether scientific and technical disclosure regarding mineral projects is compliant with NI 43-101 or is potentially misleading. Wood believes this shift has caused an uncertainty in the ability of issuers and their Qualified Persons to determine what will be considered by CSA mining staff as compliant disclosure. Wood has observed CSA mining staff challenge Qualified Persons' judgment calls on accepted industry practice in the context of their project. Wood views this different approach to regulation of the Canadian capital markets for mining issuers has increased the cost of compliance, increased the risk to ability of issuers to raise finance, and has the net effect of diminishing the attractiveness of the Canadian capital markets as a source of mining finance.

An important consideration for the CSA when compiling the responses to the questions is that many of the questions are framed in such a way as to be leading questions. The preambles to many of the questions are presented in a manner that may evoke a particular answer. Unfortunately, the conclusions drawn from those responses may be biased by the preamble wording and how the question was framed. Wood recommends CSA mining staff exercise caution when using potentially biased industry responses in determining any course of action resulting from this consultation process.

## **A. Improvement and Modernization of NI 43-101**

*The disclosure items in the Form have generally remained unchanged since NI 43-101 was adopted in 2001, with some reorganization for advanced stage properties in 2011.*

### **Question A-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.*

Wood's response:

No, and nor should they. Investors require many other types of information about the issuer, its management, and the risks and opportunities involved in creating value from investments in mineral projects. Much of this information is not required content of a technical report, and nor should it be. Investors consider many factors when determining whether to invest in a particular mining company. For example:

- The quality of the management of the company, including track history of success in creating value for investors
- The ability of management to maintain funding for the company's projects and effectively apply those funds to adding value to the mineral properties held by the company, and maintain investor interest in the company to provide liquidity in the market for the company's shares
- The quality and frequency of all types of continuous disclosure provided by the issuer's management

- Recommendations by mining analysts regarding the issuer, its management, and the assets of the company

This is an example of poor choice of wording in the question and may convey the impression that NI 43-101 technical reports are somehow the main source of information that an investor would need to make a “fully informed investment decision”. The question also does not appear to recognize that technical reports will only contain information up to the effective date of the report, and investors will need to examine other, more recent disclosure documents when assessing the value of the mineral property and how that should be factored into their investment decision to buy, sell, or hold shares of a particular issuer.

## Question A-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?*

Wood’s response:

Wood does not believe there is need for an alternative to the present NI 43-101 requirement for preparing technical reports on material mineral properties following Form 43-101F1.

Until relatively recently, Canada was unique in its securities regulations requiring the preparation and filing of a summary technical document in a prescribed report format, with required content, and prepared by Qualified Persons. Securities regulators for the Australian Securities Exchange (ASX) considered implementing technical report filing requirements similar to NI 43-101 but rejected it as too much of a burden on their industry, among other reasons. Competent person reports are prepared, but not necessarily made publicly available, and most jurisdictions that have adopted the CRIRSCO International Reporting Template for the public reporting of Exploration Targets, Exploration Results, Mineral Resources and Mineral Reserves - 2019 (CRIRSCO) have selected the summary Table 1 as a condensed format for presenting limited information on mineral resources and mineral reserves.

Wood’s view is that the requirement for filing an NI 43-101 technical report (technical report) was an important element in the recognition of the NI 43-101 “brand” that helped establish credibility of Canadian capital markets for Canadian mining issuers. Wood receives requests to prepare NI 43-101 technical reports for issuers that are not subject to NI 43-101 because the issuer’s management are requested by investors and investment bankers to have such a document made available to them.

It was notable that the United States Securities and Exchange Commission (SEC) chose to emulate much of the NI 43-101 disclosure rules, when they replaced Industry Guide 7 with their new Regulation S-K 1300 mining disclosure standard. This included the filing of a Technical Report Summary that follows much of the format and content requirements of the technical report.

Wood considers the technical report to be a summary report of what, in most cases, should be a more detailed report in the issuer's files. The technical reports should support an issuer's disclosure on their material mineral properties, but those technical reports should not, and cannot be the only source of information for investors on the mineral properties. Each technical report represents the information that is available up to the effective date of the report, and issuers must supplement the content of the technical report with current information disclosed on their website, and through news releases, investor presentations, and periodic company filings.

There must be an acceptance by investors and securities regulators that technical reports become stale-dated over time, but that does not mean the report is no longer useful or somehow becomes "potentially misleading" or should be replaced by some other single disclosure document.

### **Question A-2(b)**

*If so, for which stages of mineral projects could this alternative be appropriate, and why?*

Wood's response:

Wood does not agree that there should be a complete alternative to the filing of a technical report. However, other forms of disclosure of more recent scientific and technical information should be provided to allow issuers to delay the need to prepare and file new technical reports for as long as they consider reasonable. This is particularly pertinent to early-stage exploration properties where just a few new drill holes could be viewed as a material change to the most recent technical report on file. The cost of preparing a new technical report can be high, and alternative forms of disclosure of the scientific and technical information by the issuer should be encouraged and used to extend the shelf-life of a technical report.

More of the triggers for filing a new technical report should be tied to first time disclosure of mineral resources, mineral reserves, or a PEA; or a material change to the mineral resources, mineral reserves, or PEA. The present technical report triggers for an Offering Memorandum, a Rights Offering, and most importantly, an Annual Information Form should be aligned with the technical report triggering content in a Short Form Prospectus – first time disclosure of, and material changes to, mineral resources, mineral reserves, and the results of a PEA.

### **Question A-3(a)**

*Should we consider greater alignment of NI 43-101 disclosure requirements with the disclosure requirements in other influential mining jurisdictions?*

Wood's response:

Canada already has a reasonable level of alignment with the mining disclosure standards in other influential mining jurisdictions as part of its obligations as a CRIRSCO member. Many of the definitions in the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) follow the standard definitions in CRIRSCO, and have, in some cases, an appended additional individual country paragraph that is

allowed under CRIRSCO. The few CRIRSCO standard definitions that are absent from CIM Definition Standards are being considered for inclusion by the CIM Mineral Resources and Mineral Reserves Committee and likely will be added before the next update of NI 43-101.

Wood recommends the CSA remove the standard definitions that are embedded in the NI 43-101 rule (Exploration Information, Qualified Person, and PEA (Scoping Study)). These standard definitions should be added to the CIM Definition Standards to allow CIM to be the keeper of these definitions and the guidance that supports them. NI 43-101 can then incorporate these definitions by reference as it now does for the other standard definitions (Mineral Resource, Measured Mineral Resource, Indicated Mineral Resource, Inferred Mineral Resource, Mineral Reserve, Proven Mineral Reserve, Probable Mineral Reserve, Preliminary Feasibility Study, and Feasibility Study). Having all of the standard definitions in the CIM Definition Standards document would allow updates to the standard definitions and guidance on a more frequent basis than the current time it takes the CSA to agree to an update of NI 43-101. This would benefit the Canadian capital markets supporting the mining industry by maintaining harmonized standard definitions used by the global mining industry, and assist CSA by having CIM modify or add guidance to address particular disclosure issues that the CSA brings to CIM's attention.

When it comes to disclosure requirements in other influential mining jurisdictions, until recently, NI 43-101 was the only mining capital market that had their mining disclosure standards enshrined in law. The United States has followed Canada by having the SEC replace Industry Guide 7 with the new Regulation S-K 1300 Disclosure by Registrants Engaged in Mining Operations. The SEC took on board many of the disclosure rules and policies in NI 43-101, including the requirement to file a Technical Report Summary, that is very similar to the technical report format, and content requirements under NI 43-101. However, the SEC also did not include some of the restrictive language that now exists in NI 43-101 (see Wood's response to question A-3(b)). Wood recommends the CSA monitor the outcomes of these less restrictive SEC mining disclosure rules and consider similar easing of restrictions in the next update of NI 43-101. Wood considers the best protection for investors is more rather than less disclosure, since Wood's experience is that overly restrictive disclosure rules often result in less disclosure and not necessarily better disclosure.

### **Question A-3(b)**

*If so, which jurisdictions and which aspects of the disclosure requirements in those jurisdictions should be aligned, and why?*

Wood's response:

Wood recommends the CSA align more of the disclosure standards in NI 43-101 to the new SEC Regulation S-K 1300. A step in this direction is for the CSA to remove some of the restrictions in NI 43-101, or certain disclosure requirements in NI 43-101 that the SEC considered unnecessary.

Examples of more restrictive disclosure required under NI 43-101 than required under S-K 1300 are discussed in the following subsections:

**Disclosure of Alternative Mine Development Options:**

CSA mining staff take a very restrictive interpretation of what is allowed under Section 2.3(3) of NI 43-101 when disclosing the results of a PEA of an alternative mine development option that includes Inferred Mineral Resources, when disclosing, at the same time, a mine development option that results in the declaration of mineral reserves. Although NI 43-101 allows the disclosure of the results of the two studies, CSA mining staff have come up with additional restrictions based on a sentence in a CIM guidance document that was addressing the need for disclosing a base case mineral resource when showing sensitivity of the mineral resource estimate to cut-off grade.

See Wood's response to question D-14.

The SEC did not include restrictions on disclosure of more than one mine development option or having more than one current technical report summary on a mineral property on file at the same time. This flexibility by the SEC recognizes that it is common practice, if not expected practice, for mining company management to be constantly assessing opportunities to improve the value of their mineral projects, and considering different development options. Using scoping level studies to assess these options is common industry practice. The SEC appear to recognize that the mining issuer management should be allowed to share this information with their investors. The CSA, however, have taken the position that this is information that should be withheld. Wood recommends the CSA consider aligning their disclosure rules with the SEC on this issue.

**Qualified Person Definition**

When drafting the new S-K 1300 mining disclosure standard, the SEC copied many of the NI 43-101 rules word for word. In some cases, the SEC modified their version. One example of a modification that the CSA should consider themselves is the definition of a Qualified Person:

*“(1) A mineral industry professional with at least five years of relevant experience in the type of mineralization and type of deposit under consideration and in the specific type of activity that person is undertaking on behalf of the registrant”*

The definition of a Qualified Person in NI 43-101 is much narrower:

*(a) is an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, relating to mineral exploration or mining;*

Wood considers the SEC definition preferable as it recognizes the broad range of disciplines and expertise that are involved in the preparation of information used in mining studies. The concept of “a mineral industry professional” under S-K 1300 is much broader than “an engineer or geoscientist” under NI 43-101. S-K 1300 expands the pool of industry professionals that are eligible to be Qualified Persons. There is a growing concern in the mining industry on the limited number of mining professionals

willing to be Qualified Persons to meet securities regulatory requirements in the US and Canada.

Wood recommends the CSA align their mining disclosure standards with the approach taken by the SEC. After all, under the Multi-Jurisdictional Disclosure System (MJDS), the CSA must accept the SEC mining disclosure standards filed in Canada by US incorporated mining companies that are complying with S-K 1300. The CSA should remove barriers to Canadian incorporated mining issuers that are not MJDS eligible, to allow them access to the deep and liquid pool of capital in the USA that is available to mining issuers.

#### **Question A-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.*

Wood's response:

Wood considers the 45-day (maximum) allowance for the filing of a technical report triggered by: first time disclosure of mineral resources, mineral reserves, or the results of a PEA; or a material change to mineral resources, mineral reserves, or is necessary and should be retained. Wood understands the pressure to provide investors and their advisors with the supporting information in a technical report as soon as possible. However, in Wood's experience the process of technical report preparation is an important quality control measure on the information that is summarized in the technical report. The Qualified Persons and their peer reviewers often catch errors during the report compilation process. Wood encourages clients to at least have the NI 43-101 technical report in draft form before the disclosure triggering the technical report is made. It is still a rush to get the technical report in final form within the 45 days allowed.

Any reduction in the 45-day allowance in Wood's view will lead to an overly hurried process of technical report preparation that will result in more errors getting through undetected and cause more re-filings of amended and revised technical reports. This unintended consequence would likely offset any perceived benefit from a shorter time period being imposed for the supporting technical report to be made available to investors.

Wood notes the question only considers a reduction of the 45-day period. Our experience is 45 days is often tight, but acceptable for early-stage exploration properties up to those with mineral resource estimates. Sixty days would be more reasonable for advanced stage properties that contain mining studies or PEA due to the quantity of information that must be summarized, and the larger number of Qualified Person authors that are involved in preparing the technical report. Wood has observed in the decade or more since the 30-day allowance was increased to 45 days, technical reports have on average become lengthier documents, and have on average more Qualified Person authors involved in preparing each report. Wood's experience

is that longer reports, with more Qualified Person authors and peer reviewers, take more effort and more time to prepare.

### **Question A-5(a)**

*In recent years, CSA staff have observed mining issuers making use of new technologies to conduct exploration on their properties, including the use of drones. During the COVID-19 pandemic, we received inquiries from Qualified Persons about the possible use of remote technologies to conduct the current personal inspection.*

*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?*

Wood's response:

Wood considers the judgment of the Qualified Person as the best investor protection function. Whether a Qualified Person should conduct a personal inspection of the mineral property, what should be involved in the inspection, how and when that inspection is conducted should be the decision of the Qualified Person, in discussion with the issuer, and not the decision of CSA staff or some general policy statement or guidance document.

Wood believes the Qualified Person should make decisions regarding personal inspection of the property in the context of that mineral project that may involve a number of considerations:

- Stage of development of the property
- Type and amount of information that is available to be reviewed at site
- History of the property
- Who else has been to site, and the scope of their site visit(s)
- Location of the property, ease of access and amount of exposure that is available/accessible

Video obtained by drone, satellite imagery, and high-quality air photo analysis can offer better data coverage, at much lower cost than could be achieved by “walking the property” depending on the discipline of the Qualified Person and the objectives of the personal inspection of the property.

### **Question A-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?*

Wood's response:

This is a judgment call that should be left to the Qualified Person and should not be the subject of prescriptive requirements in Form 43-101F1. Any guidance necessary on this practice issue should be addressed by CIM in their practice guidelines.



Wood disagrees with the assumption that the use of tools in the field by Qualified Persons would somehow be a threat to the integrity of the current personal inspection requirement without CSA mining staff intervention. This is an example of CSA mining staff over-reaching and usurping the role of CIM as the standard setters for the mining industry in Canada and the role of the Qualified Person to make the judgment calls in the context of the mineral project, its location, the type of information that is required to be collected, the history of the mineral project, and the other types of information that are available on the project.

## **Subsection B: Data Verification Disclosure Requirements**

*Mineral projects commonly pass through the hands of several property holders, each generating exploration and drilling data. Using data collected from former operators prior to the current issuer's involvement in the project (**legacy data**) may be legitimate, but this data needs to be carefully verified, and transparently documented in technical reports. CSA staff see inadequate data verification disclosure at every project stage, from early stage exploration properties to feasibility studies.*

*Describing sample preparation, security, analytical procedures, and quality assurance/quality control (QA/QC) measures is critical to an understandable mineral resource estimate. Qualified Persons must state their professional opinion on those processes, explain the steps they took to verify the integrity of the data, and state their professional opinion whether the data suits the purpose of the technical report. CSA staff emphasized these requirements in both CSA Staff Notice 43-309 Review of Website Investor Presentations by Mining Issuers and CSA Staff Notice 43-311 Review of Mineral Resource Estimates in Technical Reports (CSA Staff Notice 43-311). Data verification as defined in section 1.1 and outlined in section 3.2 of NI 43-101 applies to all scientific and technical disclosure made by the issuer on material properties. For example, data verification:*

- requires accurate transcription from the original source, such as an original assay certificate,*
- is not adequate when limited to transcribing data from a previous technical report,*
- is not limited to technical reports but also to other disclosure such as websites, news releases, corporate presentations, and other investor relations material, and*
- is not limited to the drill hole database and must be completed for all data in a technical report.*

Wood's response:

Wood disagrees with the CSA staff position that appears to consider all legacy data as suspect and illegitimate until proven otherwise. Legacy data often represents tens of millions of dollars, and years of work, by highly qualified mining professionals. The mining industry recognizes that there is significant value in legacy data on a mineral property, and the determination of what data requires verification, and the types of verification procedures that are necessary or adequate when relying on that data, is a judgment call of the Qualified Person. This will require consideration of the particular type of: mineral deposit, mineral project, sampling method, analytical procedures involved, and the type of data generated. The Qualified Person's knowledge of the previous operator's work practices, and the quality of the documentation on sampling and analytical procedures will influence a Qualified Person's determination of what type of data verification procedures should be done, and to what extent.

Wood is concerned that the CSA's determination of inadequate disclosure on data verification procedures immediately invalidates any use of the legacy data. In an ideal world, issuers management and Qualified Persons would want all of the data available to have been verified as reliable. However, there are a number of situations where this is not possible and project data with limited verification is still used. For example, the price paid for an acquired mineral property is often based on unverified results of exploration, metallurgical, geotechnical sampling and testing programs, as well as environmental baseline studies, and social studies on the property area. There may be a discount applied to the purchase price of the property because of the risk of unrecognized biases in the unverified legacy data, but that does not mean the data are unsuitable to be used in any form.

## Question B-6

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

*Item 12: Data Verification of the Form addresses a core principle of NI 43-101 and is a primary function of Qualified Persons. Mining Reviews demonstrate that disclosure in this item is often non-compliant. For example, we do not consider any of the following to be adequate data verification procedures by the Qualified Person:*

- *QA/QC measures conducted by the issuer or laboratory;*
- *database cross-checking to ensure the functionality of mining software;*
- *reliance on data verification by the issuer or other Qualified Persons related to previously filed technical reports; and*
- *unqualified acceptance of legacy data, such as disclosing that former operators followed "industry standards".*

Wood's response:

Yes, the current definition of data verification in Section 1.1 of NI 43-101 is clear, but the process for obtaining verified data that would meet CSA staff requirements is not. CIM should take responsibility as the holder of the definition and provide more discussion and guidance on what a Qualified Person should consider in the context of different mineral deposits, the types of data requiring verification, and what combination of activities and results would support the data being considered acceptable for use.

Wood does not agree with the CSA's position that QA/QC measures conducted by the issuer or laboratory to be inadequate procedures. Properly documented QA/QC measures by industry professionals working for the issuer or the analytical laboratory should be considered a legitimate part of the data verification process.

Wood also disagrees with the CSA position regarding "*Reliance on data verification by the issuer or other Qualified Persons related to previously filed technical reports*". The opinions of Qualified Persons on the results of their data verification activities are a valuable source of information that cannot be ignored or discounted. Previous internal and external audits on the project contain important information on sampling and analytical procedures and QA/QC activities often at critical milestones of the project. These audits individually or in aggregate often involve more time at site, and

a more extensive investigation of the data than what is often accomplished directly by the Qualified Person authoring a technical report.

Depending on the deposit type, sample type, method of sample collection, sample preparation, and the type and purpose of the analytical procedures, the Qualified Person will need to use their judgment on what can be, and needs to be, verified. Often a Qualified Person must use a combination of verification procedures to provide an adequate basis for determining that the data are suitable to be used. Prescriptive rules around what data verification must entail, what must be excluded from the process, and detailed explicit disclosure of the Qualified Person's verification activities should be avoided. This can lead to second guessing the Qualified Person's judgment of why a particular data verification activity is acceptable, when it is often the results of several data verification activities that supports the Qualified Person's opinion on suitability of data for the purposes used.

Regarding the disclosure requirements in section 3.2 of NI 43-101, CIM has provided some limited guidance on data verification activities in CIM Mineral Exploration Best Practice Guidelines (2018) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (2019). However, there could be more discussion in CIM guidance documents on how a combination of activities during the data verification process can help support a Qualified Person's opinion that the data in question is suitable to be used.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA's preamble to the question may be leading by the inclusion of the phrases: "*Mining Reviews demonstrate that disclosure in this item is often non-compliant ...*", "*we do not consider any of the following to be adequate data verification ...*", "*unqualified acceptance of legacy data ...*". The industry responses may be biased by the CSA text provided around the question and a different response may have been elicited by respondents if the preamble text had been phrased objectively.

## Question B-7

*In addition, Qualified Persons frequently limit data verification procedures to the drill hole data set, resulting in a general failure to meet the disclosure requirements of Item 12 of the Form, which apply to all scientific and technical information in a technical report.*

*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?*

Wood's response:

Wood also has observed most data verification activities have been undertaken by the geological Qualified Persons that mostly focused on the assay data base. Wood has observed examples of Qualified Persons from other disciplines: such as metallurgy, geotechnical, and geochemical finding significant issues on reliability of data because of sampling or analytical issues. However, this is more often discussed in their relevant sections of the technical report: Sections 13, 16, and 20, respectively. Often this is the

appropriate section in the technical report to discuss their data verification activities as the discussion has the context of type of samples and analytical procedures involved, and how the data are used.

One area that appears to be lacking in most discussions of data verification is the adequacy of the data for the purposes used. For example: sufficient geotechnical holes supporting surface infrastructure designs or mine designs; metallurgical variability testing supporting process design or production scheduling; geochemical testing for acid rock drainage or metal leaching, density determination for accurate tonnage estimates, etc. Wood recommends the discussion on suitability of data for the purposes used also includes the adequacy of the quantity of data for the purposes used, not just the quality of the data. Many traumas to the capital markets servicing the mining industry were caused by overly simplistic interpretations and assumptions regarding the mineral resource model, the geotechnical models, and the metallurgical characterization of the deposit, caused by insufficient testwork supporting the more advanced mining studies.

## Question B-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?*

Wood's response:

Wood does not agree with the statement that "*the current personal inspection is integral to the data verification*". In some cases, for certain deposits, at certain stages of development, for certain Qualified Person disciplines, it may be. But as a blanket statement, there are many situations where this is not correct. The Qualified Person should be the one to decide whether a personal inspection of the property is necessary and will provide important information that cannot be obtained without a visit to the property, by that Qualified Person.

Wood does not see a compelling reason to modify the Form so that the personal inspection of the property is moved out of Item 2 and into Item 12. The Qualified Persons completing content in Section 12 (Item 12) can always cross-reference the content in Section 2 on personal inspection.

## Subsection C: Historical Estimate Disclosure Requirements

*In spite of extensive guidance in the Companion Policy, CSA staff see significant non-compliant disclosure of historical estimates. We remind issuers that non-compliance with section 2.4 of NI 43-101 can trigger the requirement to file a technical report under subsection 4.2(2) of NI 43-101*

*Examples of non-compliance include:*

- *failure to review and refer to the original source of the historical estimate,*
- *failure to include the cautionary statements required by paragraph 2.4(g) of NI 43-101, or inappropriate modification of such statements,*

- *failure to include required disclosure of key assumptions, parameters and methods used to prepare the historical estimate, and*
- *inappropriate disclosure by an issuer of a previous estimate.*

Wood's response:

Wood questions the premise that historical estimates are a significant cause of misrepresentations in mineral property disclosure. In most cases there is a current estimate, which makes any disclosure about historical estimates, just that, a bit of history on the property. Often the historical estimates were prepared by Qualified Persons with a supporting technical report.

Wood questions whether the cause of the significant non-compliant disclosure issue reflects the onerous amount of disclosure required around an item that is simply part of the history of the property, that has often been replaced by current estimates. There are 14 separate disclosure requirements for historical estimates, many of which require significant analysis and lengthy text to meet the requirements. Wood recommends the required disclosure regarding historical estimates be covered by the allowance in Section 3.5 of NI 43-101 for an issuer to be able to rely on a previously filed document. This may help reduce the significant non-compliant disclosure of historical estimates.

Regarding the cautionary statements that are deficient, CSA staff have admitted that caution statements often have the opposite effect from what was intended. Investors will put more confidence in a statement with cautionary language than those without. Most of the caution statements are boilerplate and in Wood's view accomplish little, particularly when there is a current estimate available on the property.

Wood recommends the CSA reconsider whether disclosure regarding historical estimates is such a threat to investors, and significantly reduce the NI 43-101 disclosure requirements around historical estimates.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA's preamble to the question may be leading by the inclusion of the phrases: *"In spite of extensive guidance ...", "CSA staff see significant non-compliant disclosure..."*, *"failure to review ...", "failure to include ...", "inappropriate disclosure by an issuer ..."*. The industry responses may be biased by the preamble to the question and a different response may have been elicited by respondents if the preamble had been phrased objectively.

## Question C-9

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

Wood's response:

Wood has observed confusion by the mining industry between "historical estimates" and "previous estimates" prepared after the issuer acquired an interest in the property.

Wood recommends modifying Section 2.4 of NI 43-101 to include some very brief requirements regarding disclosure of previous estimates. This could include a statement in Section 2.4 of NI 43-101 and Item 6 of Form 43-101F1 to clarify disclosure of historical estimates and previous estimates are not required under NI 43-101 unless they are material or relevant to the mineral project.

## **Question C-10**

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

Wood's response:

Wood does not believe many historical estimate disclosures rise to the level of a misrepresentation. As defined in section 1 (1) of the Ontario Securities Act a misrepresentation is:

*"An untrue statement of material fact. An omission to state a material fact that is required to be stated or that is necessary to make a statement not misleading in the light of the circumstances in which it was made".*

Wood views most historical estimates as not being material, and therefore by definition their disclosure cannot be a misrepresentation. The omission of the required disclosure in Section 2.4 is often irrelevant to investors, particularly when there is a current estimate that has replaced the historical estimate. The omitted information should not be considered a misrepresentation.

Wood considers investors are sufficiently protected by the historical estimates being identified as such, and by disclosure of the current estimates if they exist.

## **Subsection D: Preliminary Economic Assessments**

*The disclosure requirements for preliminary economic assessments were substantially modified in 2011, resulting in unintended consequences requiring additional guidance published in CSA Staff Notice 43-307 Mining Technical Reports – Preliminary Economic Assessments in August 2012.*

*Mining Reviews continue to show that preliminary economic assessment disclosure remains problematic for issuer compliance and, more importantly, is potentially harmful to investors. While the inclusion of inferred mineral resources is a recognized risk to the realization of the preliminary economic assessment, CSA staff's view is that the broad, undefined range of precision of a preliminary economic assessment also contributes to that risk. This range of precision is incongruent with one of the core principles of NI 43-101, which is that investors should be able to confidently compare the disclosure between different projects by the same or different issuers. In addition, CSA staff see evidence of modifications to cautionary language required by subsection 2.3(3) of NI 43-101 that render this provision less effective.*

Wood's response:

Wood is not surprised with the CSA comment that “*Mining Reviews continue to show that preliminary economic assessment disclosure remains problematic for issuer compliance*”, which is more likely a reflection of a very narrow CSA view of what a PEA is used for, and the unreasonable expectation that a PEA should somehow be an accurate indicator of what the project will be. The PEA is a conceptual study performed at a snap-shot in time, often based on limited or preliminary data, that provides an indication of what a project could be.

Wood believes many of the issues raised by the CSA regarding PEAs are caused by the CSA's apparent misunderstanding of the purpose of a PEA and their expectations regarding its content.

The PEA is not a single purpose study and there should be no attempt to define it as such by the CSA.

AACEI in their Recommended Practice 47R-11 (2020) list synonyms for the Class 5 Cost Estimate as: Preliminary Economic Assessment per NI 43-101, order of magnitude estimate, conceptual study, scoping study, preliminary evaluation, among others. This category of mining studies has been a useful tool of the mining industry for many decades, well before NI 43-101 standards were contemplated.

Unfortunately, the CRIRSCO definition of a scoping study narrowed in on only one of the many purposes that scoping study may be used – justifying progress to a PFS:

*9.3: A Scoping Study is an order of magnitude technical and economic study of the potential viability of Mineral Resources that includes appropriate assessments of realistically assumed Modifying Factors together with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a Pre-Feasibility Study can be reasonably justified.*

Wood has observed that most scoping level studies identify gaps in testwork and the need for discipline specific studies required to better define the proposed mining project. Progress to an updated scoping study, not a PFS, is the more likely outcome once the recommended testwork and work programs have been completed.

Noort and Adams (2006) illustrated that scoping studies are used to eliminate the wide range of options that are under consideration when determining the path forward to develop a mineral deposit. There are multiple iterations of scoping studies as various options are eliminated, and more technical data is collected, to determine a much narrower range of options to be considered in the PFS. See figure below:

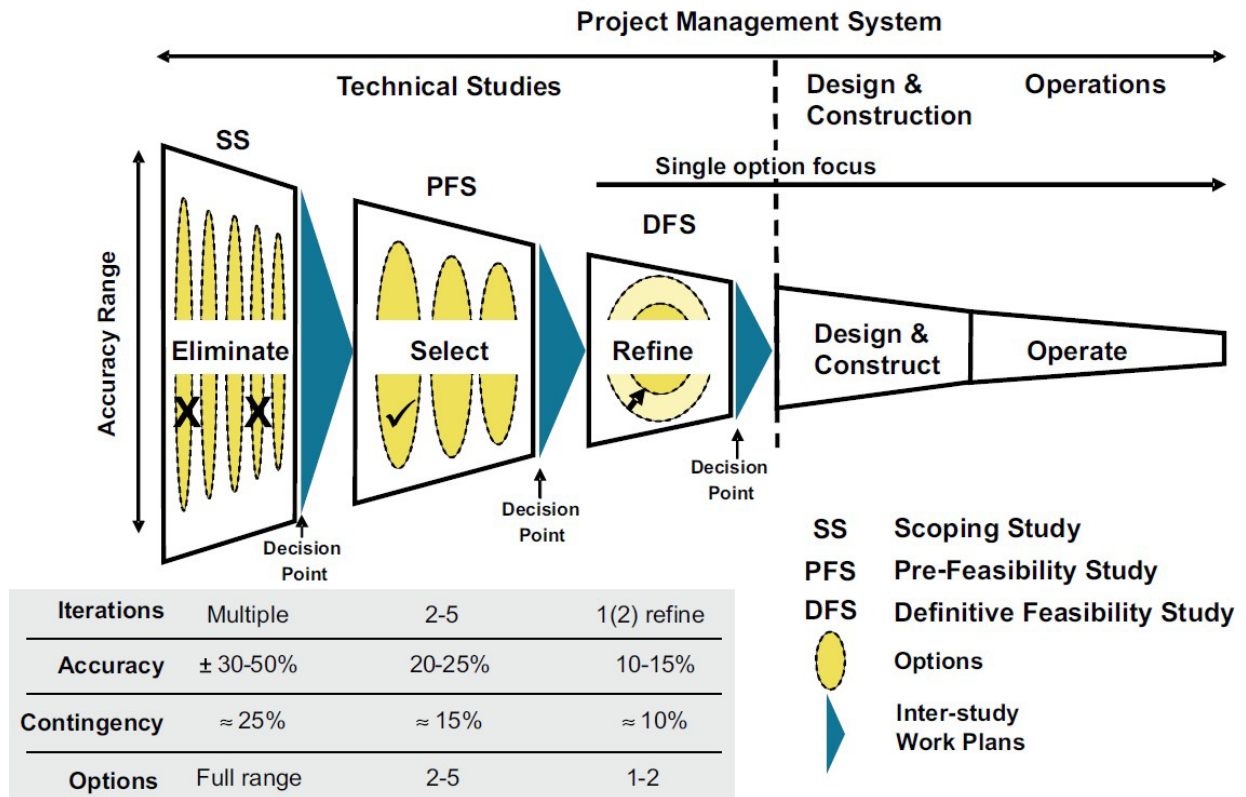


FIG 2 - Recommended phases of a mine development project.

From Noort & Adams: Effective Mining Project Management Systems: International Mine Management Conference, October 2006.

Often scoping studies are used within a PFS or even FS to perform trade-off studies to choose between a range of options for a particular aspect of mine development (mine development, equipment selection, scale of process plant, method of waste management, etc.).

The Australian Securities & Investment Commission (ASIC) attempted to limit what they considered acceptable disclosure of scoping studies to investors in the Australian capital market, and they received industry pushback and backed down from some of their more unreasonable positions in: ASIC INFO 214 (2016). A telling industry comment at the time was published in MiningNews.net: As one institutional investor told *MNN* in respect of the ASIC crackdown, “it just boggles the mind how far the authorities will go to protect the masses from the few most guilty ... and then usually get the control solution precisely wrong”. Wood recommends the CSA do not make the same mistake with their current efforts to place ever increasing limits around the disclosure of the results of a PEA.

Wood believes the CSA exhibits an unrealistic expectation regarding the precision of a PEA with their statement: “Mining Reviews continue to show that preliminary economic assessment disclosure remains problematic for issuer compliance and, more importantly, is potentially harmful to investors. While the inclusion of inferred mineral resources is a recognized risk to the realization of the preliminary economic



assessment, CSA staff's view is that the broad, undefined range of precision of a preliminary economic assessment also contributes to that risk. This range of precision is incongruent with one of the core principles of NI 43-101, which is that investors should be able to confidently compare the disclosure between different projects by the same or different issuers."

The 2012 version of AACEI Recommended Practice No. 47R-11 includes an illustration of the wide range of expected cost accuracies for the Class 5 Estimate (PEA level). The practice note comments that estimated accuracy ranges overlap the estimate classes (Class 5 overlaps with Class 4, and Class 4 overlaps with Class 3). The result is that some PEA studies are more precise than a PFS and some PFS are more precise than an FS. See the overlapping pink bars in the figure below:

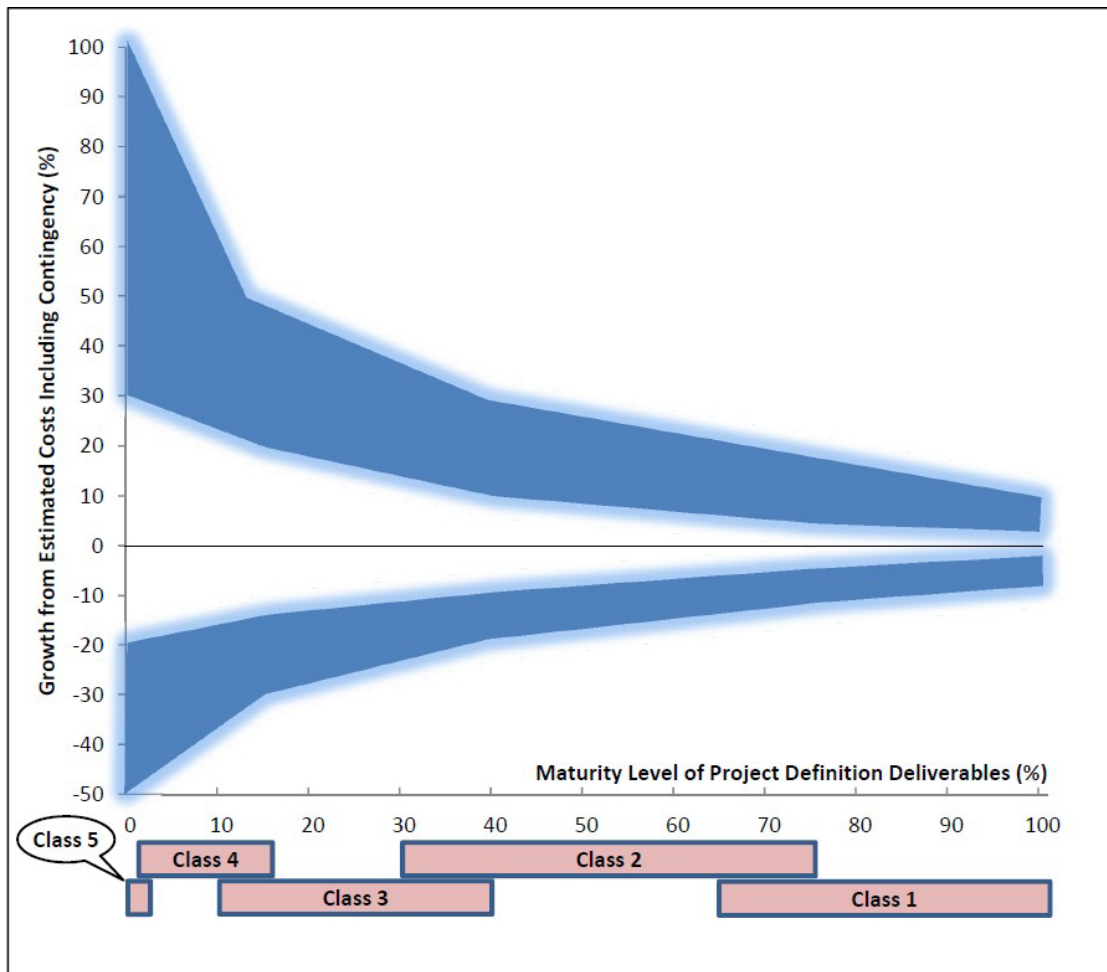


Figure 1 – Example of the Variability in Accuracy Ranges for a Mining Industry Estimate

The figure above illustrates the fallacy of the statement: "This range of precision is incongruent with one of the core principles of NI 43-101, which is that investors should be able to confidently compare the disclosure between different projects by the same or different issuers." There is a range of precision in the cost estimates of all levels of mining studies, and no two mining studies are identical in their technical characteristics including geology, geometry of the deposit, grade and distribution of metals of interest, mineralization controls, metallurgy, geotechnical conditions, methods of mining and

mineral processing, general location of the property, site conditions, and social and environmental conditions. Wood considers it an unreasonable expectation by CSA *“that investors should be able to confidently compare disclosure between different projects”*.

Wood views the CSA staff’s comments regarding PEAs shows their unreasonable expectation regarding PEA studies. The statement that PEA disclosure *“is potentially harmful to investors”* goes against the premise that the best method for protecting or reducing harm to investors is to provide them with more disclosure and not less. The preamble to this part of the consultation paper and the questions posed appear to be directed towards obtaining feedback that will allow the CSA to place restrictions on the types of PEA studies that can be disclosed, and prescriptive requirements for the content of those studies.

Wood recommends the CSA focus on investor educational efforts so that investors have a better understanding of the basis of a PEA, purposes of the studies, and the study limitations.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA’s preamble to the question may be leading by the inclusion of the phrases: *“... resulting in unintended consequences requiring additional guidance ...”, “... preliminary economic assessment disclosure remains problematic for issuer compliance ...”, “harmful to investors”, “... broad, undefined range of precision ...”, “... incongruent with one of the core principles of NI 43-101 ...”, “... render this provision less effective”*. The industry responses may be biased by the preamble to the question and a different response may have been elicited by respondents if the preamble had been phrased objectively.

## Question D-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?*

Wood’s response:

Wood believes the defining of PEA by what it is not *“a study, other than a prefeasibility or feasibility study”* has resulted in the unintended consequence of CSA staff declaring any references to a PEA study components being done *“to the standards of a PFS”* as being incompatible with the definition of a PEA, and non-compliant with NI 43-101. As explained above, advanced mining studies such as a PFS or FS, often cycle back to a PEA to assess alternative development options or opportunities to optimize or de-risk a project, or address issues raised during permitting. Many of the components of a PEA may have been done to PFS or FS level. CSA Staff Notice 43-307 considers representing components of a PEA having been done to, or close to PFS level, as treating the PEAs as a substitute or proxy for a PFS requiring restating and re-filing of the PEA technical report, and may result in enforcement or other regulatory action. This appears to be an overly harsh response by CSA to what is likely to exist in most PEA studies that are prepared after a PFS or FS on the project, or a PEA that is evaluating some change to an operating mine.

Wood recommends CIM provide a better definition of PEA, along with guidance to industry, including investors, on the different uses of a PEA, expectations around minimum content, and reasonable expectations on their precision, or lack thereof, and how that will likely change as the project advances.

Wood does not agree that “*modifying the definition... to enhance the study’s precision*” will be in accordance with the range of engineering definition that exists for most PEA studies, and the intended purpose of the studies. The CSA should not create the expectation that PEA studies will be, or should be, precise or accurate because of the conceptual nature of most of the studies. It is difficult enough for the mining industry to meet a certain expectation of precision or accuracy in the results of an FS, let alone the results of a PEA study.

Wood disagrees with the CSA introducing disclosure requirements related to cost estimation parameters or the amount of engineering completed. The AACEI Recommended Practice 47R-11 shows how wide a cost estimate range can be expected with these types of studies. Forcing an unrealistically narrower range will cause a different set of unintended consequences that will not be in the public’s best interest.

## Question D-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?*

Wood’s response:

Wood disagrees with the premise that any amount or type of risk statements will be able to “*adequately inform investors of the full extent of the risks associated with the disclosure of a preliminary economic assessment*”. This is another example of creating an unreasonable expectation around what a PEA study can do. Because of its conceptual nature, and limited supporting data, there are many known unknowns, and many more unknown unknowns. The results of the study are expected to change with more supporting testwork, and more engineering definition. The types of risks and the likely impact of those risks on the project will change as the project advances.

Depending on the PEA study, some specific risks will be reasonably well understood, but many will be known as a general industry risk. Yes, there should be a discussion of risks in the NI 43-101 technical report that summarizes the PEA study, but even detailed cautionary statements are unlikely to adequately inform investors of the full extent of the risks to the results of the study.

## Question D-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?*

Wood's response:

Wood recommends the CSA align themselves with most other reporting requirements in recognized mining jurisdictions and remove the regulatory requirement for independence of technical reports under any circumstance.

Interestingly, the SEC considered whether independence should be required of the Qualified Persons preparing Technical Report Summaries under Regulation S-K 1300. The SEC decision was that it was not necessary.

There are good reasons to remove the independence requirement for technical reports in NI 43-101:

- It is already difficult for issuers to obtain Qualified Persons with the necessary experience and qualifications, and the independence requirement reduces the pool further.
- Often the Qualified Persons with the most experience on the property, understand how the data were collected, witnessed the changes to interpretations in the information over time, and understand the risks best, are the employees of the issuers who would not meet any independence requirement.

There are times when issuer's management will have independent Qualified Persons involved in preparing a technical report, even if there is no independence requirement under NI 43-101. The CSA should see this as a better approach, and only require the relationship of the Qualified Persons to the mineral property and the issuer be disclosed. Investors can then consider that when relying on the information in the technical report.

Investment banks or stock exchanges may have their reasons for requiring a certain technical report be independent, but that should not be an NI 43-101 responsibility, just that it should be reported in the technical report in the Introduction under terms of reference, and in the Certificates of the Qualified Persons.

Therefore, Wood does not agree that the CSA should introduce a specific independence requirement for the disclosure of significant changes to PEAs.

## Question D-14

*In 2011, we broadened the definition of preliminary economic assessment in NI 43-101 in response to industry concerns that issuers needed to be able to take a step back and re-scope advanced properties based on new information or alternative production scenarios. In this context, the revised definition was based on the premise that the issuer is contemplating a significant change in the existing or proposed operation that is materially different from the previous mining study.*

*CSA staff continue to see considerable evidence of preliminary economic assessment disclosure, subsequent to the disclosure of mineral reserves, which is potentially misleading and harmful to investors. In many cases, issuers continue to disclose an economic and technically viable mineral reserve case, while at the same time disclosing a conceptual alternative preliminary economic assessment with more optimistic assumptions and parameters. In many cases, the two are mutually exclusive options.*

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

Wood's response:

Wood recommends the CSA exercise caution before deciding whether certain mining technical disclosure should be identified as “potentially misleading”. Many of these determinations are based on the judgement call of CSA staff, sometimes reinforced by their referencing specific CIM practice guidelines.

Wood considers it inappropriate for the CSA staff to use CIM practice guidelines as extensions of the NI 43-101 rules. It creates an unreasonable level of uncertainty for mining issuers wanting to access the Canadian capital markets, in being able to accurately assess whether their mineral project disclosure will be considered compliant by CSA staff. Industry are particularly concerned with a compliance issue that is only identified to the issuer in the middle of a prospectus finance and potentially derailing the finance. Qualified Persons have also expressed concern that their practices are being judged, not by their peers in the industry, but by CSA staff who may not have relevant experience in the subject matter being challenged.

Wood disagrees that the type of disclosure that has been cited by CSA staff in the preambles to questions in this consultation process, and in particular the questions regarding PEAs, are really “*harmful to investors*”. Study results prepared by appropriate Qualified Persons, in a transparent manner following industry accepted practices, in the structured format of NI 43-101 technical reports and other disclosure documents of the issuer are unlikely to be harmful to investors. Unreasonably restricting an issuer's ability to communicate with its investors, and causing significant uncertainty as to whether an issuer's disclosure will be considered compliant, and creating barriers to capital formation, should be considered harmful to investors.

CSA staff monitor the number of technical reports that are filed for the different types of mining studies. Their presentations on this show a significant proportion of the technical reports filed on SEDAR summarize PEA studies. This indicates the level of

interest investors have in seeing the results of these studies, and the importance these studies are to the mining industry in Canada.

Wood does not understand why there is resistance by the CSA to the disclosure of alternative development options that are “mutually exclusive”. As long as studies forming the basis of the development options have been prepared by Qualified Persons, are presented in a transparent manner and are not confusing, the study and its results should be the type of information investors can expect to be shared with them.

Wood recommends the CSA retain the ability of issuers to disclose the results of a PEA on a mineral project when current mineral reserves have been established. The limits the CSA has tried to impose on this allowance in NI 43-101 should be removed.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA’s preamble to the question may be leading by the inclusion of the phrases: “CSA staff continue to see considerable evidence of ...”, “which is potentially misleading”, “harmful to investors”, “... disclosing a conceptual alternative preliminary economic assessment with more optimistic parameters and assumptions ...”. The industry responses may be biased by the preamble to the question and a different response may have been elicited by respondents if the preamble had been phrased objectively.

## Question D-15

*In some cases, issuers are disclosing the results of a preliminary economic assessment that includes projected cash flows for by-product commodities that are not included in the mineral resource estimate. This situation can arise where there is insufficient data for the grades of the by-products to be reasonably estimated or estimated to the level of confidence of the mineral resource. We consider the inclusion of such by-product commodities in the preliminary economic assessment to be misleading.*

*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.*

Wood’s response:

Wood agrees that any metal or mineral included in a mining study production schedule or economic analysis must be included in the mineral resource estimate. This goes for the disclosure of all levels of mining studies, not just PEAs.

The Qualified Person in the technical report and the issuer in their disclosure of the results of mining study, should be allowed to discuss the opportunity for capturing the value of these by-product metals by addressing the missing information that would allow them to be included in the mineral resource estimate. They should also have the option to point to the sensitivity analysis that shows the impact of changes to metal prices, which is a proxy for increased revenues from by-product metals.

## Subsection E: Qualified Person Definition

*CSA staff have substantial evidence that the current Qualified Person definition is not well understood, and have seen an increase in practitioners with less than 5 years of experience as professional engineers or geoscientists acting as Qualified Persons in technical reporting. CSA staff have directed many comments to issuers informing them that the Qualified Person does not meet the requirements of NI 43-101 in the circumstance under review.*

Wood response:

Wood does not agree with the recent interpretation by the CSA staff that the five years of experience in the mining industry that is relevant to his or her professional degree or area of practice, only begins after the mining industry expert has obtained registration with a professional association and membership category recognized under NI 43-101. CSA staff appear to have focused on “professional degree” as requiring registration in a recognized professional association for the five-year clock to start. However, the definition has an “or clause” as the five years of experience can be in the individual’s area of practice. So as long the individual has at least five years of experience in the mining industry, in their area of practice, meeting the definition should not also require five years of experience after having gained a professional registration.

Wood is concerned that this latest interpretation of what is required to meet the definition of Qualified Person is a fabricated compliance issue. It is harmful to the credibility of the CSA staff being fair in their interpretation and application of the disclosure standards. It creates a new, unnecessary area of uncertainty regarding compliance with NI 43-101, and reduces the already insufficient pool of mining industry experts that are willing to accept the role of a Qualified Person.

Under this new CSA staff interpretation, individuals with decades of experience in the mining industry, working with highly competent individuals, undergoing professional training throughout their career, often with well-established and highly professional mining companies, will not be accepted as a Qualified Person until they have five additional years of work experience after they have obtained registration with an NI 43-101 recognized professional association. Wood considers this CSA position inappropriate and not in the public interest. Wood employs many foreign educated engineers and geoscientists in our mining group, and does not see why there should be a delay for another five years after they gain professional registration, before they could meet the Qualified Person requirements.

None of the other reporting codes that have a Qualified Person or Competent Person requirement, require the five years of professional registration.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA’s preamble to the question may be leading by the inclusion of the phrases: *“CSA staff have substantial evidence ...”, “not well understood”, “... less than 5 years of experience as professional engineers or geoscientists acting as Qualified Persons ...”, “CSA staff have directed many comments to issuers informing them that the Qualified Person does not meet*

*the requirements of NI 43-101...". The industry responses may be biased by the preamble to the question and a different response may have been elicited by respondents if the preamble had been phrased objectively.*

## **Question E16**

*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.*

Wood does not see anything missing in the current Qualified Person definition. Wood is not clear on why there has been a change of interpretation by the CSA staff of the part of the Qualified Person definition regarding when the five years of mining industry experience that is relevant to their "professional degree" or "area of practice" begins. The definition appears to be clear in this area, it is the reasoning of the CSA staff interpretation of this part of the definition that is not clear, nor is it clear why there has been a recent change in the CSA staff interpretation.

Wood recommends broadening the types of degrees allowed to meet the Qualified Person definition: see Wood's response to Question E-17.

Wood recommends that CIM take ownership of the definition of Qualified Person so that there is panel of mining industry advisors, and a formal process within CIM that can provide any necessary updates to the definition, and guidance around meeting the definition. This would avoid arbitrary changes to interpreting the definition, and provide a forum for discussion by industry peers should any changes to the definition be proposed by CSA staff.

As much as possible standard definitions used by the mining industry and formalized into mining disclosure standards, should be principles based, and not be based on prescriptive requirements.

## **Question E-17**

*Currently, the Qualified Person definition requires the individual to be an engineer or geoscientist with a university degree in an area of geoscience or engineering related to mineral exploration or mining.*

*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?*

Wood's response:

Wood recommends the definition of Qualified Person be expanded to allow degrees in disciplines that are commonly subject matter experts that contribute to a mining study. The current definition often requires an engineer or geoscientist to take responsibility for content in a technical report that is outside of their area of practice. The principle in the Qualified Person definition should be that the appropriately qualified individual prepares the information and takes responsibility for that information in the technical report.



Wood recommends the CSA take a similar approach to how the SEC defined Qualified Person in their new S-K 1300 mining disclosure standard. The SEC replaced the narrower NI 43-101 term “engineer or geoscientist” with a much broader term “mineral industry professional”. That change allows subject matter experts who may be chemists, biologists, cost estimators, sociologists, to be able to take responsibility as a Qualified Person for content related to their professional degrees in the technical report. CRIRSCO also uses the term “minerals industry professional” when defining Competent Person, which is their equivalent of a Qualified Person. CRIRSCO does not limit Qualified/Competent Persons to just engineers or geoscientists.

## Question E-18

### *Qualified Person independence*

*The gatekeeping role of the Qualified Person is essential for the protection of the investing public. CSA staff see evidence of issuers and Qualified Persons failing to properly apply the objective test of independence set out in section 1.5 of NI 43-101. The Companion Policy provides certain examples of specific financial metrics to consider. This list is not exhaustive. There are multiple factors, beyond financial considerations, that must also be considered in determining objectivity, including the relationship of the Qualified Person to the issuer, the property vendor, and the mineral project itself.*

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

Wood’s response:

Wood disagrees with the term “gatekeeping” when referring to the role of the Qualified Person. Section 2.1(1) of Companion Policy 43-101CP clarifies that the primary responsibility for public disclosure remains with the issuer and its directors and officers (they control what is disclosed to the investing public, and hence are the gatekeepers). The Qualified Person is responsible for preparing or supervising the preparation of the technical report and providing scientific and technical advice in accordance with applicable professional standards (quality control role, but not the gatekeeper role). The proper use, by or on behalf of the issuer, of the technical report and other scientific and technical information provided by the Qualified Person is the responsibility of the issuer and its directors and officers (the gatekeepers). The onus is on the issuer and its directors and officers ... to ensure that disclosure in the document is consistent with the related technical report or advice (the issuer, its directors and officers are the gatekeepers). An issuer should consider having the Qualified Person review the disclosure that summarizes or restates the technical report or the technical advice or opinion to ensure that the disclosure is accurate (quality control role, not gatekeeper role).

Wood does not see the need for the CSA to require independence of technical reports filed to meet NI 43-101 requirements. Canada appears to be the only mining jurisdiction in the world that has this requirement. Requiring independence for the Qualified Persons authoring technical reports reduces the pool of individuals able to fulfill the role of Qualified Person, which is an undue burden on the mining industry. It also removes from the eligible pool of Qualified Persons individuals who likely have

the most relevant information regarding the scientific and technical information in the technical report.

Wood does not offer a recommendation for how the test for independence should be clarified since Wood does not agree that there should be a requirement for independent technical reports.

## **Question E-19**

### *Named executive officers as Qualified Persons*

*CSA staff are concerned that the gatekeeping role of the Qualified Person conflicts with the fiduciary duties of directors and officers. We have seen situations where the self-interest of such individuals in promoting an attractive outcome for the mineral project overrides their professional public interest obligation as a gatekeeper.*

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

Wood's response:

Wood disagrees with the CSA's position that a Qualified Person for a mining issuer who is also an officer or directors of the issuer somehow has a conflict of interest. Wood considers the professional and ethical practices that a Qualified Person applies to their work is complimentary to the fiduciary duty of an officer or director to the shareholders and the issuer. Wood sees it as a positive action for an issuer to have one or more of their officers or directors as Qualified Persons.

Wood has provided its response to Question E-18 on the inappropriate assignment of a "gatekeeper role" to the Qualified Person.

Wood does not agree with the CSA's view of the mining industry exemplified by their statement: *"We have seen situations where the self-interest of such individuals in promoting an attractive outcome for the mineral project overrides their professional public interest obligation as a gatekeeper"*. Officers and directors of mining issuers are hired to be optimists. They are expected to apply their skills to finding value in the mineral properties, and a development path for the mineral property that would be an attractive outcome for their investors. That is their job. The officers and directors of an issuer are required to convey that information to investors and the broader capital market. The market rewards those companies that do this successfully and that is the system within which the mining industry operates. Promotion of the activities of a mining company should not be viewed by the CSA as a bad activity. It is an essential activity. Having the professional standards and ethical obligations of a Qualified Person included in the company management should be viewed by the CSA as a positive, and not some form of conflict of interest that must be prohibited.

In response to the E-19 question:

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

Wood does not agree with the NI 43-101 requirement for Qualified Person authors of technical reports to be independent. Wood considers having Qualified Person authors who are officers or directors of the issuer filing the technical report to be a positive as they likely have had more involvement in the mineral project in question over a longer period. In answer to the question, no, directors and officers of an issuer should not be disqualified from authoring any technical reports for that issuer.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA's preamble to the question may be leading by the inclusion of the phrases: *"CSA staff are concerned ...", "gatekeeping role of the Qualified Person conflicts with the fiduciary duties of directors and officers", "self-interest of such individuals", "... overrides their professional public interest obligation as a gatekeeper"*. The industry responses may be biased by the preamble to the question and a different response may have been elicited by respondents if the preamble had been phrased objectively.

## Subsection F: Current Personal Inspections

*The current personal inspection requirement in section 6.2 of NI 43-101 is a foundational element of the Qualified Person's role as a gatekeeper for the investing public. It enables the Qualified Person to become familiar with conditions on the property, to observe the property geology and mineralization, and to verify the work done on the property. Additionally, it provides the only opportunity to assess less tangible elements of the property, such as artisanal mining or access issues, and to consider social licence and environmental concerns. The current personal inspection is distinctly different from conducting exploration work on the property; it is a critical contributor to the design or review, and recommendation to the issuer, of an appropriate exploration or development program for the property.*

Wood's response:

Wood is concerned that in their preamble to the question the CSA staff are overstating the need for personal inspections by Qualified Person authors of technical reports, and that any personal inspections must meet a prescriptive definition of being "current". None of the reporting codes in recognized mining jurisdictions make personal inspections of the mineral property mandatory. The SEC also did not require mandatory personal inspections of the mining property in their new S-K 1300 rule. They leave it as a practice decision of the Qualified Person. Wood agrees with this approach and recommends the CSA to consider this in any future updates to NI 43-101.

The NI 43-101 rule should recognize the Qualified Person's role in deciding whether a personal inspection of the property is necessary in the context of the mineral project, type of deposit, the information that may only be obtained by site visit by the Qualified Person, information that has been obtained by others who have been to site, and what is relevant to their content of the technical report. There should be no expectation that each Qualified Person that is an author of the technical report has been to site. Nor should the Qualified Persons that did not conduct a personal inspection of the property be forced to explain why they did not go to site, or be expected to explain every judgment call they made when providing their opinion on aspects of the mineral project.

There should be allowances in practice guidelines for site visits for Qualified Persons to rely on personal inspections of other members of the team that contribute to the information used in the Qualified Person's sections of the technical report. CIM should be the keeper of these guidelines, not the Companion Policy 43-101CP.

The concept of whether a personal inspection on a mineral property is considered current should also be the judgment call of the Qualified Person for their section of the technical report. This will be influenced by a range of factors that cannot be captured in a bright-line test. Such factors include whether there has been new information generated on the property since the Qualified Person's most recent site visit, whether that new information is material or not, and whether the new information is even relevant to the Qualified Person's content in the technical report. Wood recommends any definition of "current personal inspection" and guidance around that term be

delegated to CIM, and not be included in the NI 43-101 rule, guidance in the Companion Policy, or instructions to the Form.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA's preamble to the question may be leading by the inclusion of the phrases: "... *foundational element of the Qualified Person's role as a gatekeeper for the investing public*", "*only opportunity to assess less tangible elements of the property*", "*critical contributor to the design or review*". The industry responses may be biased by the preamble to the questions and a different response may have been elicited by respondents if the preamble had been phrased objectively.

## Question F-20

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

Wood's response:

Wood does not agree with the CSA adopting a definition for a "current personal inspection". Wood is concerned that it will be difficult for the definition to not be prescriptive and override the judgment of the Qualified Person. If the mining industry requires better guidance on considerations around current personal inspections of a mineral property, then that should be provided by CIM as practice guidance, which allows greater flexibility for commentary around the practice, and more timely updates as industry practices evolve.

## Question F-21

*CSA staff's view is that Qualified Persons must consider their expertise and relevant experience in determining whether they are suitable to conduct the current personal inspection. For example, geoscientists are generally not qualified to conduct elements of the current personal inspection related to potential mining methods or mineral processing. Similarly, engineers may not be qualified with respect to elements of the geoscience. In such cases, more than one Qualified Person may be required to conduct a current personal inspection, particularly for an advanced property.*

*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?*

Wood's response:

Wood does not agree with any effort by the CSA to impose a prescriptive requirement for the mineral resource estimating Qualified Person to conduct a current personal inspection of the property irrespective of context. That decision is a judgment call of the Qualified Person.

Wood considers it inappropriate for the CSA to require Qualified Persons to prepare and approve technical disclosure on a mineral project, and take responsibility for

content in the technical reports, and then remove or restrict the Qualified Person's ability to determine what is appropriate in their field of practice.

Wood is concerned with what appears to be a narrow and out of date perception of what is current practice in the mining industry. Wood considers biased statements by CSA staff can result in responses from industry that are also biased. The following statement in the preamble is an example of this:

*"For example, geoscientists are generally not qualified to conduct elements of the current personal inspection related to potential mining methods or mineral processing".*

Many geoscientists have worked in mine operations and have been part of multi-disciplinary teams contributing to mining studies. Through that they gain a broad knowledge of the interactions between the different disciplines and the need for sharing of information between disciplines. Geoscientists are often tasked with the collection of geotechnical data or develop fault models to support mine planning. Geoscientists collect geometallurgical data and interpret metallurgical domains in their geological models that support mineral process design.

Case studies on failed mineral projects often show the root cause to be related to insufficient quality data in the detail necessary to understand the deposit's complexity. In those cases, the flawed interpretations would not have been identified by current personal inspections of the property by additional Qualified Persons. Better peer review would likely have been a better investment.

## **Question F-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?*

Wood's response:

Similar to our response to Question F-21, Wood does not agree with any effort by the CSA to impose a prescriptive requirement for the Qualified Persons authoring sections of a technical report covering Items 15-18 (inclusive) of the Form to conduct a current personal inspection of the property irrespective of context. That decision is a judgment call of the Qualified Person.

Wood considers it inappropriate for the CSA to require Qualified Persons to prepare and approve technical disclosure on a mineral project, and take responsibility for content in the technical reports, and then remove or restrict the Qualified Person's ability to determine what is appropriate in their individual field of practice.

For example, the mineral process Qualified Person for a project on an undeveloped property often derives more value in visiting the laboratory where the testwork on the metallurgical samples is being conducted than performing a personal inspection of the property. The Qualified Person taking responsibility for content under Item 18 Infrastructure on a brownfield site may consider it reasonable to rely on the mining engineer to verify certain site-specific information. Wood recommends the CSA do not

insert themselves into the decision making of the Qualified Person and management of the issuer. The diversity of the mining industry, different types of projects at different levels of development, the composition of the teams involved in preparing the information used in a mining study, and risk profiles of the mineral projects requires flexibility and is the judgment call of the Qualified Person.

## Question F-23

*We expect issuers to consider the current personal inspection requirement in developing the timing and structure of their transactions and capital raising. Subsection 6.2(2) of NI 43-101 does allow an issuer to defer a current personal inspection in limited circumstances related to seasonal weather, provided that the issuer refiles a new technical report once the current personal inspection has been completed. However, this provision has been used infrequently since it was adopted in 2005. In rare circumstances where issuers do rely on this provision, CSA staff see significant non-compliance with the refiling requirement.*

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

Wood's response:

Wood considers the need for a personal inspection of the mineral property should be the decision of the Qualified Person based on the context of the specific mineral project. Wood believes the CSA should provide greater flexibility in how and when they meet any requirement for the personal inspection.

Although the specific conditions that lead to the allowance for a delayed personal inspection have changed – the diamond rush in Canada, the need for flexibility on timing of the personal inspection has not. Wood recommends the CSA remove the limited conditions under which a delay to the personal inspection is allowed in subsection 6.2(2)(a) and (b).

## Subsection G: Exploration Information

*CSA staff continue to see significant non-compliant disclosure of exploration information, including inadequate disclosure of:*

- the QA/QC measures applied during the execution of the work being reported on in the technical report,*
- the summary description of the type of analytical or testing procedures utilized, and*
- the relevant analytical values, widths and true widths of the mineralized zone.*

Wood's response:

Wood is concerned that CSA staff are conflating “summary disclosure” with “inadequate disclosure” and conflating “inadequate disclosure” with “non-compliant disclosure”. Instructions (1) and (3) of Form 43-101F1, which have the same expectation of compliance as a rule in NI 43-101, instructs the Qualified Person to provide summary disclosure in the technical report; and to keep in mind that the intended audience is the investing public and their advisors, and that to the extent possible, technical reports should be simplified.

Compliance action should not be taken against issuers for Qualified Persons following the instructions to the Form, particularly when the detailed information is available to investors in previously filed technical reports and other disclosure documents filed by the issuer. Wood is aware of Instruction (5) of the Form that requires the Qualified Persons to summarize information from previously filed technical reports by the issuer, but there should be some allowance for the Qualified Person to not have to reproduce:

- Lengthy descriptions of QA measures and QC results documented over the history of the property
- Summary descriptions of the type of analytical testing procedures
- Relevant analytical values, widths and true widths of the mineralized zone

if that information has already been well covered in previously filed technical reports and supplemented by other disclosure documents. Such an allowance is particularly relevant to issuers that have advanced mineral projects where the current report focus is on the mineral reserves, the mine plans, processing methods, cost estimates, economic analyses, and environmental and permitting issues.

## **Question G-24**

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

Wood's response:

In Wood's view, Section 3.3 content requirements are sufficiently clear on the type of information that is required to be disclosed, but not the level of detail, and whether the detailed information must be provided with every update of exploration information that is disclosed.

Wood recommends CSA staff allow the Qualified Person to decide the level of summary that is appropriate, and to provide issuers more guidance on the allowance in Section 3.5 of NI 43-101 to rely on previously filed documents that already contain the information required under Section 3.3.

## **Subsection H: Mineral Resource/Mineral Reserve Estimation**

*In CSA Staff Notice 43-311 published in June 2020, a comprehensive review of disclosure in technical reports identified several areas of inadequate disclosure of mineral resource estimates.*

Wood's response:

Wood is concerned by the approach taken by CSA staff in their assessment of quality, clarity, and compliance of disclosure that was reported in CSA Staff Notice 43-311. It appears that CSA staff are using CIM practice documents as an extension of the NI 43-101 rules. Wood questions whether the summary content in a technical report is a fair presentation of the mineral resource estimation practices conducted. Wood also questions whether it is reasonable to conclude that "*non-standard estimation practices*" were being used when the CIM guidance document used as the standard was: CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines dated November 23, 2003. There have been significant advances by the mining industry in their mineral resource estimation practices since 2003, as evidenced in part by the



substantial changes made to the 2003 document in the November 29, 2019 CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines update.

Instructions to the Form 43-101F1 direct the Qualified Persons to simplify and summarize the technical report content to what would be understandable to a reasonable investor, rather than their peers in the mining industry. An unintended consequence of the type of CSA staff reviews presented in CSA Staff Notice 43-311 is that it will encourage the Qualified Person authors of the technical report to err on the side of caution and include excess, and overly detailed information in the technical report that will not be comprehensible to the intended audience. It will unnecessarily increase the cost of the report preparation, and could require more than the 45 day allowance for technical report preparation and filing.

## Question H-25

*Reasonable prospects for eventual economic extraction*

*CIM Definition Standards guidance states that a Qualified Person should clearly state the basis for determining the mineral resource estimate and that assumptions should include metallurgical recovery, smelter payments, commodity price or product value, mining and processing method, and mining, processing and general and administrative costs. Revisions to the CIM Definition Standards in 2014 and CIM Best Practices Guidelines in 2019 emphasized the requirement for the practitioner to clearly articulate these assumptions and how the estimate was developed.*

*Mining Reviews provide evidence of technical reports that lack adequate disclosure on metal recoveries, assumed mining and processing methods and costs, and constraints applied to prepare the mineral resource estimate to demonstrate that the mineralized material has reasonable prospects for eventual economic extraction.*

*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.*

Wood's response:

Wood considers the current requirements under Item 14 of Form 43-101F1 adequate to allow a Qualified Person to determine what summary of information would be sufficient for a reasonably informed investor to understand the basis of the mineral resource estimate and how it was generated.

Wood recommends CSA staff do not create prescriptive requirements for additional disclosure regarding reasonable prospects of eventual economic extraction. It will be a difficult exercise to construct Item 14 requirements that would capture the critical elements for the wide range of mineral deposits, commodity types, and all of the technical, economic, environmental, legal title, taxation, socio-economic, marketing, political, or other relevant factors that may apply. This is best left to the judgment of the Qualified Person in the context of that project.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA's preamble to the question may be leading by the inclusion of the phrases: "... a comprehensive review of disclosure in technical reports identified several areas of inadequate disclosure of mineral resource estimates", "Mining Reviews provide evidence of technical reports

*that lack adequate disclosure ...". The industry responses may be biased by the preamble to the question and a different response may have been elicited by respondents if the preamble had been phrased objectively.*

## **Question H-26(a)**

### *Data verification*

*Disclosure of a mineral resource estimate is a significant milestone for an issuer. CSA Staff Notice 43-311 noted that disclosure of data verification procedures and results was one of the weakest areas in the mineral resource estimate review, stating that in technical reports reviewed by CSA staff, more than 20% had incomplete disclosure concerning the Qualified Person's data verification procedures and results.*

*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?*

Wood's response:

Wood has provided its opinion in its comments on the preamble, and answers to questions posed in Subsection B: Data Verification Disclosure Requirements. Wood has expressed its concerns in its comments on whether:

- The summary disclosure in a technical report written with the target audience in mind, is a fair representation of the Qualified Person's process for verifying data in the technical report.
- CSA staff position is reasonable on what CSA consider acceptable data verification procedures and results

Wood questions whether the high failure rate of data verification disclosure was more a reflection of the summary nature of the document being reviewed, and the judgment of the Qualified Person on what a reasonable investor would need to understand.

Wood recommends the CSA exercise caution when assessing the industry responses to the questions posed on this topic as wording used in the CSA's preamble to the question may be leading by the inclusion of the phrases: *"... disclosure of data verification procedures and results was one of the weakest areas in the mineral resource estimate review", "more than 20% had incomplete disclosure concerning the qualified person's data verification procedures and results"*. The industry responses may be biased by the preamble to the questions and a different response may have been elicited by respondents if the preamble had been phrased objectively.

## Question H26(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?*

Wood's response:

Wood questions whether the Qualified Person responsible for the mineral resource estimate should be expected to “*accept responsibility for legacy data used to support the mineral resource estimate*”. It is unreasonable to hold the Qualified Person responsible for the type and amount of drilling done, the location, orientation and depth of the drillholes, the logging and sampling procedures, design of the QA/QC program, and the analytical procedures used over the history of the property by various operators. Perhaps it was just a poor choice of words in the question, but words matter when it comes to soliciting feedback in a consultation paper.

Wood believes the Qualified Person for the mineral resource estimate should take responsibility for their opinion on the adequacy of the legacy data for the purposes used in the technical report. However, the adequacy of the data is the responsibility of the previous operators who collected it. The opinion of the Qualified Person on suitable uses of legacy data should be based on the sampling, analytical, and QA/QC information that is available, and the steps that can be taken to find other means of verifying the legacy data if that information is not available.

## Question H27

*Risk factors with mineral resources and mineral reserves*

*Paragraph 3.4(d) of NI 43-101 requires issuers to identify any known legal, political, environmental and other risks that could materially affect the potential development of the mineral resources or mineral reserves. In addition, Items 14(d) and 15(d) of the Form require the Qualified Person to provide a general discussion on the extent to which the mineral resource or mineral reserve estimate could be materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors.*

*Many technical reports only provided boilerplate disclosure about potential risks and uncertainties that are general to the mining industry. Failure to set out meaningful known risks specific to the mineral project make mineral resource and mineral reserve disclosure potentially misleading. How can we enhance project specific risk disclosure for mining projects and estimation of mineral resources and mineral reserves?*

Wood's response:

Wood considers compliance with Paragraph 3.4(d) of NI 43-101 to be mostly the responsibility of the issuer and its officers and directors. The issuer's management has different means to inform investors of the general industry risks faced by the mining industry, and can update the disclosure of risks on a timely basis. Common risks for most mining projects include: changes to commodity prices, capital or operating costs; changes to the market for their product; delays to permit

applications, construction delays or mine operations interrupted by labour disputes or community action; and competition for skilled employees, and political risks (changes to mining legislation, taxes, or restrictions on exporting mine production). Other risks common to most types of mining projects include: changes to the interpretation of the geological model supporting the mineral resource estimate (usually the changes are from a simpler model to a more complex model with better, more detailed drilling); insufficient geotechnical and metallurgical data such that local variability in the deposit is not recognized, which poses a risk to mine plans, production schedules, and estimated capital and operating costs; process, to name just a few.

Wood believes the issuer's management are the appropriate individuals to identify these risks that are general to the mining industry, and discuss any steps that may be taken to mitigate these risks in the context of the risk tolerance of the various projects that the issuer holds an interest, and the issuer's management's assessment of the risk tolerance of their investors.

Wood recommends that only project specific risks, and not those general risks common to the mining industry be discussed in the technical report by the Qualified Person authors. These should be risks that are known to the Qualified Person authors at the time of the technical report preparation. These may be quite specific to certain aspects of the mineral project such as: source of power to the proposed or existing mine; ability to attract skilled labour for the project or the mine; uncertainties with regard to acid rock drainage; delays or ability to permit specific aspects of the mine design such as waste storage, tailings management, or access to local water supplies; unrecognized geotechnical issues that can affect surface infrastructure plans, mining method, ore dilution, mining costs, and mine development plans. Other project specific risks could be due to unrecognized variations in the geological model, including the continuity and geometry of the mineralized zones that make up the orebody that can affect the mine plan, dilution, ore loss, equipment selection, and costs.

Wood recommends any changes to the technical report Form consider including instructions that only project specific risks need to be discussed by the various Qualified Persons for their sections of the technical report. General industry risks should not be included in the technical report as these are better presented by the issuer in other disclosure documents that can be updated on a more-timely basis, and many are outside of the expertise of the Qualified Persons authoring the technical report (e.g. legal, political, social, governmental, tax changes, terrorism, war).

## **Subsection I: Environmental and Social Disclosure**

*In recent years, CSA staff have seen an increase in public and investor awareness of environmental and social issues impacting mineral projects. Item 4: Property Description and Location and Item 20: Environmental Studies, Permitting and Social or Community Impact of the Form allow for disclosure of relevant environmental and social risk factors for the mineral project. However, these disclosure requirements related to environmental and social issues have remained largely unchanged since NI 43-101 was adopted in 2001.*

## Question I-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?*

Wood's response:

Wood does not believe that investors should rely solely on the environmental content of a technical report to make informed investment decisions regarding an issuer. The technical report can include a reasonable summary of environmental information known at the time of the preparation of the technical report. However, environmental content is usually prepared by "other experts" and the Qualified Person is generally able to disclaim responsibility for this content. Technical reports may not be updated for several years depending on the pace of activities with the project. Investors should be able to access more up to date environmental information on a particular mineral project from other documents filed by the issuer, and from information posted on the issuer's website.

Wood considers the current requirements under Item 4 and Item 20 of the Form to be adequate for the purposes of including a summary of environmental information that are specific to, and generally supportive of the mineral project that is the subject of the technical report. The Qualified Persons should rely on the issuer and their subject matter experts that are addressing the environmental component of the mineral project. If the environmental experts are not able to be recognized as Qualified Persons, they should be identified as "other experts" under Item 3 of the Form. The Qualified Person authors of the technical report should not be responsible for including environmental information that a reasonable investor would need to know in order to make an informed investment decision. Other disclosure documents such as the issuer's Management's Discussion and Analysis, the Annual Information Form, investor presentations on the issuer's website, and news releases would be better sources of timely environmental information for investors.

## Question I-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?*

Wood's response:

Wood does not believe that investors should rely solely on the social content of a technical report to make informed investment decisions. The technical report can include a reasonable summary of social information known at the time of the preparation of the technical report. However, this content is usually prepared by "other experts" and the Qualified Person is generally able to disclaim responsibility for this content. Technical reports may not be updated for several years depending on the pace of activities with the project. Investors are much better served by accessing more up to date social information on a particular mineral project from other documents filed by the issuer, and from information posted on the issuer's website.

Wood considers the current requirements under Item 4 and Item 20 of the Form are adequate for the purposes of including a summary of social information that is specific to, and generally supports, the mineral project that is the subject of the technical report. Wood recommends the CSA allow the Qualified Person authoring those sections of the technical report to be able to rely

on the issuer and their subject matter experts that are addressing the social aspects of the mineral project. These experts should be identified under Item 3 of the Form. The Qualified Person authors of the technical report should not be responsible for including social information that a reasonable investor would need to know in order to make an informed investment decision. Other disclosure documents such as the issuer's Management's Discussion and Analysis, the Annual Information Form, investor presentations on the issuer's website, and news releases would be better sources of timely social information for investors on each material mineral property.

## **Question I-30**

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

Wood's response:

Wood considers this to be a sensitive subject that requires a careful strategy by the issuer for communicating to its investors the process for, and the status of, community consultations. The Qualified Persons are generally not subject matter experts on social issues and should not be required to provide an opinion on social issues that may impact the project. There is a significant risk a Qualified Person could mischaracterize the community consultations, their status, or the risks or opportunities the results of the consultations represent to the project. It is not clear in Item 3 of the Form whether community consultations can be a type of "other expert information" that a Qualified Person can rely on and disclaim responsibility for the content. Wood recommends that the CSA clarify Item 3 to make it clear that the Qualified Person to rely on the issuer and its experts for this information and only include general summary information prepared by those experts in Section 20 (Item 20) of the technical report. The issuer and its subject matter experts on social or community impacts of mining projects should be providing timely disclosure to investors in periodic filings, investor presentations, and news releases. This approach to keeping investors informed should be followed for all stages of mineral project development, including early-stage projects, since that is when early relationships and trust with local communities can be made or broken.

## **Subsection J: Rights of Indigenous Peoples**

*We recognize Indigenous Peoples to include First Nations, Inuit and Métis Peoples in Canada. We also recognize that issuers have projects in jurisdictions outside of Canada, and those jurisdictions will have Indigenous Peoples.*

*The unique legal status of Indigenous Peoples has received national and international recognition. For many projects, the rights of Indigenous Peoples overlap with legal tenure, property rights and governance issues. We believe that disclosure of these rights, and the Indigenous Peoples that hold them, forms an essential part of an issuer's continuous disclosure obligations.*

*Item 4 of the Form requires disclosure of the nature and extent of surface rights, legal access, the obligations that must be met to retain the property, and a discussion of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the property. We are interested in hearing whether other disclosures should be included in the Form, or the issuer's other continuous disclosure documents, that relate to the relationship of the issuer with Indigenous Peoples whose traditional territories underlie the property.*

### **Question J-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?*

Wood's response:

Wood considers this to be a sensitive subject that requires a careful strategy by the issuer for communicating to its investors the process for consultation with indigenous communities. Most Qualified Persons are not subject matter experts on this topic, and there is a significant risk a Qualified Person could mischaracterize the indigenous community consultations, their status, or even provide inappropriate comments on the risks or opportunities that the consultations represent to the project. It is not clear in Item 3 of the Form whether indigenous community consultations can be a type of "other expert information" that a Qualified Person can rely on another expert and disclaim responsibility for the content. Wood recommends that the CSA allow Qualified Person authors of the technical report to rely on other experts named in Section 3 (Item 3) of the technical report for summary information that may be included in Section 20 (Item 20) of the technical report if the information on rights of Indigenous Peoples with respect to the mineral project is considered relevant or material. Wood recommends that the CSA consider the issuer and its expert advisors on the rights of Indigenous Peoples be the appropriate sources of this information, which should be communicated to investors through periodic filings, investor presentations, and news releases.

### **Question J-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?*

Wood's response:

See our answer to Question J-31. Investors should not be relying on content in a technical report prepared by Qualified Persons for information on these matters.

### **Question J-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.*

Wood's response:

No. Most Qualified Person authors of technical reports are not subject matter experts on this topic and they should not be expected to provide an opinion on it.

## Subsection K: Capital and Operating Costs, Economic Analysis

*Capital and operating costs assumptions are integral to the financial and economic analysis of mineral projects. We see longstanding evidence, including industry-based case studies, of significant variance between disclosed cost estimates in technical reports and actual costs as projects are developed. This variance can have negative impacts on investors who rely on financial disclosure in technical reports.*

Wood's response:

Wood believes investors are not well informed about the changes that are made to a mine design through each iteration of the mining studies and throughout mine development. There appears to be an unreasonable expectation that the forward-looking information in mining studies will not be affected by constant changes to information on the property as the project advances. Changes to the project information include: infill and expansion drilling of the mineral resource; variability testing of the metallurgical characteristics of the deposit; geotechnical drilling to support surface facilities and rock mechanics to support mine design; changes to mining method and equipment selection in response to new geotechnical data and mineral resource updates; risk mitigation measures brought into the mine design; permitting activities and responses to community engagement; better understanding of the access routes and upgrades of infrastructure to service the mine; increased percentage of engineering definition providing more detailed basis for the cost estimates; and cost escalation. It would be naïve to expect no significant variance between disclosed cost estimates in technical reports and actual costs as projects are developed. Wood recommends the CSA support efforts to better educate investors in the mining industry about the limitations of the different types of mining studies, and how the understanding of the mineral project evolves with each iteration of mining study. Wood believes better education of investors will help manage their expectations towards mining studies, and help reduce the negative impacts on investors caused by differences between disclosed cost estimates in technical reports and actual costs as projects are developed.

### Question K-34

*Capital and operating costs*

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

Wood's response:

Wood considers the current requirements for capital and operating cost estimates in Item 21 of the Form is adequate. The requirements are not prescriptive and they allow the Qualified Persons to use their judgment on the type of information required to meet Item 21 and the level of detail necessary.



## Question K-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?*

Wood's response:

No. The selection of the cost estimation classification system used should be a decision made by the Qualified Person in consultation with the issuer. The Item 21 of the Form requirements for the Qualified Person to "*Explain and justify the basis for the cost estimates*" should prompt the Qualified Person to provide sufficient information for a reasonable investor without getting into details of what is required under a specific cost estimate classification system.

## Question K-36

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

Wood's response:

Yes, Wood considers there is sufficient opportunities for disclosure of risks to the capital and operating cost assumptions in:

- Item 15(d) when discussing relevant factors that could materially affect the mineral reserve estimates
- Item 22(e) when discussing the sensitivity of the project to capital and operating costs, and
- Item 25 when discussing any significant risks and uncertainties that could reasonably be expected to affect the projected economic outcomes.
- 

## Question K-37

*Economic analysis*

*As stated above, a core principle of NI 43-101 is to require disclosure that will allow investors to be able to confidently compare the disclosure between different projects by the same or different issuers. Standardized disclosure is fundamental to this principle.*

*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?*

Wood's response:

Wood considers it an unreasonable expectation that investors will "*be able to confidently compare the disclosure between different projects*". There are too many differences between projects to allow an "apples to apples" comparison. The different approach to mine design by the project owners, differences in deposit type, mining and processing methods, project location, stage of

development, etc. will result in a wide range of differences between two projects. The selection of the base case discount rate for the project should be the decision of the Qualified Person in discussion with the project owner

## Subsection L: Other

### Question L38

*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?*

Wood's response:

Wood recommends the CSA:

- Rely on CIM as the keeper of the standard definitions and any guidance around them. This will provide timely updates to the standard definitions and more flexibility in providing guidance to issuers and Qualified Persons meeting the definitions.
- Provide clarity in the Companion Policy that the practice guidance provided by CIM and other industry standards setters is the judgment call of the Qualified Person.
- Avoid including new prescriptive requirements in NI 43-101 or the Form as they limit the flexibility of the Qualified Person in meeting the requirements.
- Avoid adding new NI 43-101 rules to deal with bad actors in the capital markets favoured by the mining industry. Those companies that operate in the fringes are unlikely to be persuaded to improve their disclosure by new rules if they are already ignoring the existing rules.
- Only raise material deficiencies in the CSA comment letters when reviewing an issuer's disclosure file. Wood has seen many CSA staff comments on grey areas of interpretation around accepted industry practice. The uncertainty of reporting mining issuers in Canada being able to determine whether their technical reports will be judged compliant by CSA staff and potentially derail an important finance could drive participants in the Canadian capital markets elsewhere. Australia has already exceeded Canada in the number of new mining listings and equity finance raised.
- Be extra vigilant about maintaining and improving the support of the mining industry for the CSA's efforts to keep the investment marketplace fair, honest and resilient. Avoid judging the entire industry by the actions of a few bad actors.

Signed on behalf of Wood Canada Limited,

*"signed"*

Greg Gosson, P.Geo.  
Technical Director, Geology & Compliance  
Wood Canada Limited