Annex C

Companion Policy 43-101 Standards of Disclosure for Mineral Projects

Table of Contents

GENERAL GUIDANCE

A.	GUIDANCE TO THE INSTRUMENT

PART 1	DEFINITIONS	INTERPRETATIO	N AND APPLICA	ATION
1 / 11 / 1				

- 1. Definitions
- 3. Independence

PART 2 DISCLOSURE REQUIREMENTS

- 5. All disclosure
- 6. Disclosure of mineral resources or mineral reserves
- 7. Restricted disclosure
- 8. Historical estimates
- 9. Limitation on disclaimers

PART 3 ADDITIONAL REQUIREMENTS FOR WRITTEN DISCLOSURE

14. Exception for written disclosure already filed

PART 4 OBLIGATION TO FILE TECHNICAL REPORT

- 16. In connection with mineral project disclosure
- 17. Royalty or similar interest

PART 5 PREPARATION OF TECHNICAL REPORT

- 18. Required form
- 19. Addressed to issuer
- 20. All relevant data
- 21. Current personal inspection
- 22. Execution
- 23. Independent technical report

PART 6 CERTIFICATES AND CONSENTS

- 24. Certificate of qualified person
- 25. Consent of qualified person

B. GUIDANCE TO THE FORM

GENERAL INSTRUCTIONS

APPENDICES

ALL HEADINGS UNDER THE FORM

TITLE PAGE

DATES AND SIGNATURES

- Item 1 Summary
- Item 3 Reliance on Other Experts
- Item 4 Mineral Project Description and Location
- Item 5 Accessibility, Local Resources, Infrastructure and Physiography
- Item 6 History
- Item 7 Geological Setting and Mineralization
- Item 9 Exploration
- Item 10 Drilling
- Item 12 Data Verification
- Item 13 Metallurgical Testing
- Item 14 Mineral Resource Estimates
- Items 16 to 22
- Item 16 Mining Methods
- Item 19 Market Studies and Contracts
- Item 20 Environmental Studies, Permitting and Regional or Local Impact
- Item 21 Capital and Operating Costs
- Item 22 Economic Analysis
- Item 23 Current Personal Inspection
- Item 26 Recommendations

C. APPENDICES

 $Appendix\ A-Acceptable\ For eign\ Associations\ and\ Membership\ Designations$

 $Appendix \ B-Example \ of \ Consent \ of \ Qualified \ Person$

Proposed Companion Policy 43-101 Standards of Disclosure for Mineral Projects

The purpose of this Companion Policy is to explain how the securities regulatory authorities or regulators (we or us) interpret or apply certain provisions of National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (the Instrument), including Form 43-101F1 *Technical Report* (the Form).

GENERAL GUIDANCE

- (1) Application of the Instrument The Instrument establishes standards for disclosure of scientific and technical information regarding mineral projects and requires that the disclosure be based on a technical report or other information prepared by or under the supervision of a qualified person. The Instrument does not apply to disclosure concerning petroleum, natural gas, helium, bituminous sands or shales, groundwater, coal bed methane, or other substances that do not fall within the meaning of the term "mineral project" in section 1 of the Instrument. We consider that solid minerals extracted from brines are captured under the term "mineral project".
- (2) Supplements other requirements The Instrument supplements other continuous disclosure requirements of securities legislation that apply to reporting issuers in all business sectors.
- (3) Forward-looking information Part 4 of National Instrument 51-102 *Continuous Disclosure Obligations* (NI 51-102) sets out the requirements for disclosing forward-looking information. Frequently, scientific and technical information about a mineral project includes or is based on forward-looking information. A mining issuer that is a reporting issuer must comply with the requirements of Part 4A of NI 51-102, including only disclosing forward-looking information for which the issuer has a reasonable basis, identifying material forward-looking information, stating material factors and assumptions used, and providing the required cautions. Examples of forward-looking information include metal price assumptions, cash flow forecasts, projected capital and operating costs, metal or mineral recoveries, mine life and production rates, and other assumptions used in a scoping study, pre-feasibility study or feasibility study.
- (4) Materiality An issuer should determine materiality in the context of the issuer's overall business and financial condition considering qualitative and quantitative factors, assessed in respect of the issuer as a whole. In making materiality judgments, an issuer should consider a number of factors that cannot be captured in a simple bright-line standard or test, including the potential effect on both the market price and value of the issuer's securities considering the current market activity. An assessment of materiality depends on the context. Information that is immaterial today could be material tomorrow; an item of information that is immaterial alone could be material if it is aggregated with other items.

- (5) Mineral project material to the issuer An actively trading issuer, in most circumstances, will have at least one material mineral project. Some issuers may hold multiple mineral projects at similar stages of development and will need to assess whether all mineral projects are material. We will assess an issuer's view of the materiality of a mineral project based on its disclosure record, its deployment of resources, and other indicators. For example, we will likely conclude that a mineral project is material if any of the following apply:
 - (a) the issuer's disclosure record is focused on the mineral project;
 - (b) the issuer's disclosure record indicates or suggests the results are significant or important;
 - (c) the cumulative and projected acquisition costs or proposed exploration expenditures are significant compared to the issuer's other mineral projects; or
 - (d) the issuer is raising significant money or devoting significant resources to the exploration and development of the mineral project.

In determining if a mineral project is material, the issuer should consider how important or significant the mineral project is to its overall business, and in comparison to its other mineral projects. For example:

- (a) mineral projects with mineral resources, economic analyses, mineral reserves, or in production, in most cases, will be more likely to be material than mineral projects without these;
- (b) historical expenditures or book value might not be a good indicator of materiality for an inactive mineral project if the issuer is focussing its resources on new mineral projects;
- (c) a small interest in a sizeable mineral project might, in the circumstances, not be material to the issuer;
- (d) a royalty or similar interest in a mineral project with mineral resources, economic analyses, mineral reserves, or in production could be material to the issuer in comparison to its active mineral projects; or
- (e) several non-material mineral tenures in an area or region, when taken as a whole, could be a material mineral project of the issuer.
- (6) Use of plain language An issuer and qualified person should apply plain language principles when preparing disclosure regarding mineral projects, keeping in mind that the investing public are often not mining experts. Written disclosure should be presented in an easy-to-read format using clear and unambiguous language and, wherever possible, should present data in table format. This includes information in the technical report, to

the extent possible. We recognize that the technical report does not always lend itself well to plain language and therefore the issuer might want to consult the responsible qualified person when restating the data and conclusions from a technical report in its public disclosure.

(7) Industry practice guidelines – While the Instrument sets standards for disclosure of scientific and technical information about a mineral project, the standards and methodologies for collecting, analysing and verifying this information are the responsibility of the qualified person. CIM has published and adopted several industry practice guidelines to assist qualified persons and other practitioners. These guidelines, as amended and supplemented, are posted on https://mrmr.cim.org/ and include Exploration, Estimation of Mineral Resources / Mineral Reserves, Mineral Processing, Environmental Social and Governance, and others.

The Instrument does not require a qualified person to follow CIM practice guidelines. However, we think that a qualified person, acting in compliance with the professional standards of competence and ethics established by their professional association, will use procedures and methodologies that are consistent with industry standard practices, as established by CIM or similar organizations in other jurisdictions. Issuers that disclose scientific and technical information that does not conform to industry standard practices could be making misleading disclosure, which is an offence under securities legislation.

- (8) Objective standard of reasonableness Where a determination about the definitions or application of a requirement in the Instrument turns on reasonableness, the test is objective, not subjective. It is not sufficient for an officer of an issuer or a qualified person to determine that they personally believe the matter under consideration. The individual must form an opinion as to what a reasonable person would believe in the circumstances.
- (9) Improper use of terms in the French language For an issuer preparing its disclosure using the French language, the words "gisement" and "gîte" have different meanings and using them interchangeably or in the wrong context may be misleading. The word "gisement" means a mineral deposit that is a continuous, well-defined mass of material containing a sufficient volume of mineralized material that can be or has been mined legally and economically. The word "gîte" means a mineral deposit that is a continuous, defined mass of material, containing a volume of mineralized material that has had no demonstration of economic viability.
- (10) Improper use of terms "NI 43-101 compliant" or "NI 43-101 non-compliant" Issuers should not refer to their exploration results, mineral resource estimates, mineral reserve estimates, or mining study as being "NI 43-101 compliant" or "NI 43-101 non-compliant" as these phrases are potentially misleading as we do not provide issuers with this determination. Issuers should instead characterize their results, estimates, or mining study as being "reported in accordance with NI 43-101" and should refer to a technical report as being "prepared in accordance with NI 43-101."

A. GUIDANCE TO THE INSTRUMENT

PART 1 DEFINITIONS, INTERPRETATION AND APPLICATION

Section 1 Definitions

- (a) "effective date" This is the cut-off date for the scientific and technical information included in the disclosure. Under section 24 of the Instrument, the qualified person must provide their certificate as at the effective date of the technical report and specify this date in their certificate. The effective date can precede the date of signing the technical report but if there is too long a period between these dates, the issuer is exposed to the risk that new material or relevant information could become available, and the technical report would then not be current. Please see additional guidance in Part B. Guidance to the Form: *Dates and Signatures* of this Companion Policy.
- (b) "mineral project" We consider a mineral project to include multiple mineral tenures that are contiguous or in such close proximity that any underlying mineral deposits would likely be developed using common infrastructure. If an issuer discovers or acquires a mineral deposit that may benefit from shared infrastructure or synergies with other mineral deposits, we will consider all underlying mineral deposits to be part of a single mineral project for the purpose of a technical report.

We do not consider the definition of mineral project to include standalone roasters, smelters, refineries, process plants, or other facilities that are not developed in conjunction with a specific deposit, mineral resource or mineral reserve.

(c) "professional association" – Paragraph (a) (ii) of the definition of "professional association" in the Instrument includes a test for determining what constitutes an acceptable foreign association. In assessing whether a foreign organization is a professional association, we will consider the reputation of the association and whether it is substantially like a professional association in a jurisdiction of Canada.

Appendix A to this Companion Policy provides a list of the foreign associations that we consider to be professional associations as of the effective date of the Instrument. The listing of a professional association on Appendix A is only for purposes of the Instrument and does not supersede or alter local requirements where geoscience or engineering is a regulated profession.

An issuer that wishes to rely on a qualified person that is a member of a professional association not included in Appendix A, but which the issuer believes meets the tests in the Instrument, may make submissions to have the association added to Appendix A. Submissions should include appropriate supporting documentation. The issuer should allow sufficient time for its submissions to be considered before naming the qualified person in connection with its disclosure or filing any technical report signed by the qualified person.

(d) "qualified person" – The definition of "qualified person" in the Instrument does not include engineering or geoscience technicians, engineers or geoscientists in training, or any designation that restricts an individual's scope of practice or requires the individual to practise under the supervision of a professional engineer, professional geoscientist, or equivalent.

The obligation of a qualified person to take responsibility for disclosure in the Instrument should be interpreted as requiring the qualified person to have read the Instrument and Form, and to be able to demonstrate their understanding of standards of disclosure for mineral projects.

Paragraph (a) of the definition requires 5 years of professional experience, which must be gained after the individual becomes registered as a professional geoscientist, professional engineer, or equivalent. The 5 years of professional experience can be from Canadian or foreign professional registration or a combination thereof.

Paragraph (b) of the definition requires a qualified person to have appropriate experience relevant to the subject matter of the mineral project, which we interpret to mean a level of experience sufficient to be able to identify with substantial confidence valid assumptions, risks and any problems that could affect the reliability of data related to the mineral project. This includes relevant experience acquired before or after the completion of any related professional registration. Relevance to the subject matter of the mineral project is not restricted to commodity type but may include deposit type and style of mineralization, as well as the specific type of activity being undertaken by the individual which often relates to the development stage of the mineral project and the individual's area of practice. An individual acting as a qualified person should be clearly satisfied that they could face their peers and demonstrate competence and relevant experience within their area of practice.

Paragraphs (c) and (d) of the definition refer to the Canadian and foreign professional registration requirements that are treated similarly.

Paragraph (c) of the definition requires a qualified person to be "in good standing", this includes satisfying any related registration, licensing or other requirements of the professional association. Individual Canadian provincial and territorial legislation may require a qualified person to be registered if practising in that jurisdiction of Canada. It is the responsibility of the qualified person, in compliance with their professional association's code of ethics, to comply with any laws requiring licensure of geoscientists and engineers.

Paragraph (d) of the definition includes a test for what constitutes an acceptable membership designation in a foreign professional association. Appendix A to this Companion Policy provides a list of the membership designations that we think meet this test as of the effective date of the Instrument. In assessing whether we

think a membership designation meets the test, we will consider whether it is substantially like a membership designation in a professional association in a jurisdiction of Canada.

We interpret the reference to demonstrated prominence or expertise in subparagraph (d) (ii) (B) to mean having the membership designation equivalent to Canadian professional registration requirements. This includes at least 5 years of professional experience and satisfying an additional entrance requirement relating to level of responsibility. Some examples of such a requirement are:

- (i) at least 3 years in a position of responsibility where the individual was depended on for significant participation and decision-making;
- (ii) experience of a responsible nature and involving the exercise of independent judgment in at least 3 of those years; or
- (iii) at least 5 years in a position of major responsibility, or a senior technical position of responsibility.
- (e) "technical report" We expect a technical report to include a summary of all relevant information about the mineral project. The qualified person is responsible for preparing the technical report. Therefore, it is the qualified person, not the issuer, who has the responsibility of determining the relevance of the scientific or technical information to be included in the technical report.

A report may constitute a "technical report" as defined in the Instrument, even if prepared before the date the technical report is required to be filed, provided the information in the technical report remains accurate and complete as at the required filing date. However, a report that an issuer files that is not required under the Instrument will not be considered a technical report until such time as the Instrument requires the issuer to file it and the issuer has filed all certificates and consents of qualified persons required under the Instrument.

Section 3 Independence

When an independent qualified person is required, an issuer and a qualified person should apply the test in section 3 of the Instrument to confirm that the requirement is met. The below is a non-exhaustive list of circumstances when we would consider that a qualified person is not independent for the purposes of the Instrument. There may be other circumstances when an individual would not be considered independent.

We consider that a qualified person is not independent if the individual:

- (a) is or expects to be an employee, insider or director of the issuer;
- (b) is or expects to be an employee, insider or director of a related party of the issuer;

- (c) is or expects to be a partner of a person or company in paragraph (a) or (b);
- (d) holds or expects to hold securities, either directly or indirectly, of the issuer or a related party of the issuer, as defined in securities legislation;
- (e) holds or expects to hold securities, either directly or indirectly, in another issuer that has a direct or indirect interest in the mineral project that is the subject of the technical report or in a neighbouring mineral project;
- (f) is or expects to be an employee, insider or director of another issuer that has a direct or indirect interest in the mineral project that is the subject of the technical report or in a neighbouring mineral project; or
- (g) has or expects to have, directly or indirectly, an ownership, royalty or other interest in the mineral project that is the subject of the technical report or a neighbouring mineral project.

As well, in some cases, it might be reasonable to consider that independence is not compromised even though the qualified person holds an interest in the issuer's securities, the securities of another issuer with an interest in the subject mineral project, or in a neighbouring mineral project. The issuer needs to determine whether a reasonable person would consider such interest would interfere with the qualified person's judgment regarding the preparation of the technical report.

PART 2 DISCLOSURE REQUIREMENTS

Section 5 All disclosure

(a) **Disclosure is the responsibility of the issuer** – Primary responsibility for public disclosure remains with the issuer and its directors and officers. 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. 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 onus is on the issuer and its directors and officers and, in the case of a filed document, each signatory to the document, to ensure that disclosure in the document is consistent with the related technical report or technical advice or opinion. An issuer should consider having the qualified person review disclosure that summarizes or restates the technical report or the technical advice or opinion to ensure that the disclosure is accurate.

(b) Material information not confirmed by a qualified person – Securities legislation requires an issuer to disclose material facts and to make timely disclosure of material

changes. We recognize that there can be circumstances in which an issuer expects that certain information concerning a mineral project may be material notwithstanding the fact that a qualified person has not prepared or supervised the preparation of the information. In this situation, the issuer may file a confidential material change report concerning this information while a qualified person reviews the information. Once a qualified person has confirmed the information, the issuer can issue a news release and the basis of confidentiality will end.

During the period of confidentiality, persons in a special relationship to the issuer are prohibited from tipping or trading until the information is disclosed to the public. National Policy 51-201 *Disclosure Standards* provides further guidance about materiality and timely disclosure obligations.

- (c) Making information available to the public Issuers should consider broadly the various instances when information about mineral projects is made available to the public and whether the requirement in section 5 of the Instrument has been satisfied. This applies to a broad range of disclosure including, but not limited to, the following:
 - public speeches, presentations or social media posts made by or shared by representatives of the issuer or on behalf of the issuer;
 - interviews involving representatives of the issuer or made on behalf of the issuer, where a transcript is not immediately available to the viewer;
 - information contained in a continuous disclosure filing required under securities legislation;
 - information contained in any written disclosure that is published by the issuer or a representative of the issuer in a manner which effectively reaches the public, whether or not filed with us;
 - information contained in written disclosure made in connection with a distribution of securities;
 - information contained in a presentation slide deck presented by a representative of the issuer or on behalf of the issuer; and
 - all forms of electronic transmission, including information contained in video or video transcripts, whether or not automatically generated, that are available to the public.

Section 6 Disclosure of mineral resources or mineral reserves

Section 6 of the Instrument requires that an issuer disclosing mineral resources or mineral reserves use only the terms and categories in the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council (CIM Definition Standards) as set out in section 2 of the Instrument. For mineral resources or mineral reserves estimated to another code, template or standard, these estimates of quantity and grade must be reported using the current CIM Definition Standards. Any differences or changes to comply with the CIM Definition Standards should be clearly explained. If an issuer wishes to announce an acquisition or proposed acquisition of a mineral project that contains estimates of quantity and grade that are not in accordance with the CIM Definition Standards, the issuer might be able to disclose the estimate as an historical estimate, in compliance with section 8 of the Instrument. However, it

might be more appropriate for the issuer to disclose the estimate as an exploration target in compliance with subsection 7 (2) of the Instrument if the supporting information for the estimate is not well-documented.

Section 7 Restricted disclosure

- (a) **Use of term "ore"** The use of the word "ore" in the context of mineral resource estimates is potentially misleading because "ore" implies technical feasibility and economic viability that should only be attributed to mineral reserves.
- (b) **Economic analysis** Subject to subsection 7 (3) of the Instrument, paragraph 7 (1) (b) of the Instrument prohibits disclosure of the results of an economic analysis unless the disclosure is based on the results of a pre-feasibility study, feasibility study, or life of mine plan as set out in section 2 of the Instrument and defined by CIM. Results of an economic analysis provide forward-looking information such as projected capital and operating costs, cash flow forecasts, production rates, net present value, internal rate of return, payback period and mine life. Disclosing results of an economic analysis not based on the results of a pre-feasibility study, feasibility study, or life of mine plan may be potentially misleading as the results of the economic analysis may not have a reasonable basis. For example, CIM considers the level of geologic knowledge and confidence in inferred mineral resources is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure.

Despite paragraph 7 (1) (b) of the Instrument, subsection 7 (3) of the Instrument permits an issuer to disclose the results of an economic analysis from a scoping study, as set out in section 2 of the Instrument and defined by CIM. A scoping study may include or be based on inferred mineral resources provided the issuer complies with all the requirements of subsection 7 (3) of the Instrument. The issuer must also include the cautionary statement under paragraph 13 (e) of the Instrument, which applies to disclosure of all economic analyses of mineral resources, to further alert investors to the limitations of the information. The exception under subsection 7 (3) of the Instrument does not allow an issuer to disclose the results of an economic analysis using an exploration target, an historical estimate, or by-product commodities not included in the mineral resource estimate as these do not have a reasonable basis for forward looking information.

- (c) Gross value of metal or mineral We interpret gross metal value or gross mineral value to include any representation of the potential monetary value of the metal or mineral in the ground that does not take into consideration the costs, recoveries and other relevant factors associated with the extraction and recovery of the metal or mineral. We consider this type of disclosure to be misleading because it overstates the potential value of the mineral deposit.
- (d) **Metal equivalents** As there is no standard equation for metal or mineral equivalents, an issuer may disclose metal equivalents provided they comply with the conditions of paragraph 7 (1) (d) of the Instrument. The metal chosen for reporting on an equivalent

basis should be the metal that contributes most to the metal equivalent grade. An issuer may satisfy the requirement to disclose metallurgical recoveries through the results of metallurgical test work. If metallurgical test work is not available, an issuer may include reasonable assumptions for recoveries from analogue deposits. For mineral projects where metallurgical recoveries cannot be assumed with reasonable confidence, reporting of metal equivalents may be misleading.

We consider disclosure of metal equivalents without considering metallurgical recoveries or other relevant factors misleading because it overstates the amount of metal that may eventually be obtained. Similarly, all elements included in the metal equivalent should have a reasonable potential to be recovered and sold.

If an issuer discloses metal equivalents calculated entirely by price-weighting, we consider this type of disclosure to be misleading because it is indistinguishable from a gross metal value, which is restricted under paragraph 7 (1) (c) of the Instrument.

- (e) **Exploration target** Potential quantities and grades of an exploration target are conceptual in nature. However, disclosure under subsection 7 (2) of the Instrument should be based on analytical results to date. Exploration targets that are based on limited or no real assessment of the mineral project are without foundation, and not suitable for disclosure.
- (f) Impact of scoping study on previous feasibility or pre-feasibility study An issuer may disclose the results of a scoping study that includes inferred mineral resources, after it has completed a feasibility study or pre-feasibility study that establishes mineral reserves, if the disclosure complies with subsection 7 (3) of the Instrument. Under paragraph 7 (3) (d) of the Instrument, the issuer must discuss the impact of the scoping study on the mineral reserves and feasibility study or pre-feasibility study. This means considering and disclosing whether the existing mineral reserves and feasibility study or pre-feasibility study are still current and valid considering the key assumptions and parameters used in the scoping study.

If a scoping study considers the potential economic viability of a satellite deposit or of an alternate case, such as an expansion in conjunction with the main development of the mineral project, then the existing mineral reserves in the main study or production scenario could still be current. However, if the incorporated scoping study significantly modifies the key variables in the main study, including metal prices, mine plan and costs, the main study and mineral reserves may no longer be current. Mineralization treated as a mineral reserve in the pre-feasibility study or feasibility study cannot be re-used as a mineral resource in the incorporated scoping study. An author may consider disclosing these results separately under Item 24 of the Form.

(g) Cautionary language and explanations – The requirements of subsections 7 (2) and 7 (3), and paragraph 13 (e) of the Instrument mean that the issuer must include the required cautionary statements and explanations each time it makes the disclosure permitted by these exceptions. These provisions also require the cautionary statements to have equal

prominence with the rest of the disclosure. We interpret this to mean equal size, type and proximate location. The issuer should consider including the cautionary language and explanations in the same paragraph as, or immediately following, the disclosure permitted by these exceptions.

Section 8 Historical estimates

- (a) **Required disclosure** An issuer may disclose an estimate of resources or reserves made before it entered into an agreement to acquire an interest in the mineral project, provided the issuer complies with the conditions set out in section 8 of the Instrument. The issuer must provide the required disclosure each time it discloses the historical estimate, until the issuer has verified the historical estimate as a current mineral resource or mineral reserve. The required cautionary statements must also have equal prominence, as discussed further in subsection 7 (g) of this Companion Policy.
- (b) **Source and date** Under paragraph 8 (a) of the Instrument, the issuer must disclose the source and date of the historical estimate. We apply this to mean the original source and date of the estimate, not third-party documents, databases or other sources, including government databases, which may also report the historical estimate.
- (c) **Suitability for public disclosure** In determining whether to disclose an historical estimate under section 8 of the Instrument, an issuer should consider whether the historical estimate is suitable for public disclosure considering the stage of development of the mineral project.
- (d) **Technical report trigger** The disclosure of an historical estimate will not trigger the requirement to file a technical report under paragraph 16 (1) (h) of the Instrument if the issuer discloses the historical estimate in accordance with section 8 of the Instrument, including the cautionary statements required under paragraph (g) of that section.

An issuer could trigger the filing of a technical report under paragraph 16 (1) (h) of the Instrument if it discloses the historical estimate in a manner that suggests or treats the historical estimate as a current mineral resource or mineral reserve. We will consider that an issuer is treating the historical estimate as a current mineral resource or mineral reserve in its disclosure if, for example, the issuer:

- (i) uses the historical estimate in an economic analysis or as the basis for a production decision;
- (ii) states it will be adding on or building on the historical estimate; or
- (iii) adds the historical estimate to current mineral resource or mineral reserve estimates.

Section 9 Limitation on disclaimers

An issuer may not include any statement that disclaims responsibility for any information prepared, supervised, or approved by a qualified person. We interpret this to include the modification of cautionary statements required with certain disclosures to apply to other elements of disclosure about a mineral project. For example, the statements required by paragraph 8 (g) of the Instrument may not be adapted to disclaim old or legacy exploration information not collected by the issuer.

PART 3 ADDITIONAL REQUIREMENTS FOR WRITTEN DISCLOSURE

Section 14 Exception for written disclosure already filed

The Instrument provides that the disclosure requirements of sections 11 and 12 and paragraphs 13 (a), (c) and (d) of the Instrument may be satisfied by referring to a previously filed document that includes the required disclosure. However, the disclosure must be factual, complete, balanced and not present or omit information in a manner that is misleading.

PART 4 OBLIGATION TO FILE TECHNICAL REPORT

Section 16 In connection with mineral project disclosure

- (1) Information circular trigger in paragraph 16 (1) (c)
 - (a) The requirement for "prospectus-level disclosure" in an information circular does not make this document a "prospectus" such that the prospectus trigger applies. The information circular is a separate trigger that applies only in certain situations specified in the Instrument.
 - (b) Paragraph 16 (1) (c) of the Instrument requires the issuer to file technical reports for mineral projects that will be material to the resulting issuer. Often the resulting issuer is not the issuer filing the information circular. In determining if it must file a technical report on a particular mineral project, the issuer should consider if the mineral project will be material to the resulting issuer after the completion of the proposed transaction.
 - (c) Our view is that the issuer filing the information circular does not need to file a technical report on its SEDAR+ profile if:
 - (i) the other party to the transaction has filed the technical report;
 - (ii) the information circular refers to the other party's SEDAR+ profile; and
 - (iii) on completion of the transaction, technical reports for all material mineral projects are filed on the resulting issuer's SEDAR+ profile or the SEDAR+ profile of a wholly owned subsidiary.

- (2) **Take-over bid circular trigger in paragraph 16 (1) (g)** For purposes of the take-over bid circular trigger, the issuer referred to in the introductory language of subsection 16 (1) of the Instrument and the offeror referred to in paragraph (g) of that subsection are the same entity. Since the offeror is the issuer that files the circular, the technical report trigger applies to mineral projects that are material to the offeror.
- (3) **First time disclosure trigger in subparagraph 16 (1) (h) (i)** In most cases, first time disclosure of mineral resources, mineral reserves, or the results of an economic analysis on a mineral project material to the issuer will constitute a material change in the affairs of the issuer.

The results of an economic analysis may refer to those found in a scoping study, prefeasibility study, feasibility study or life of mine plan such as projected capital costs, operating costs, cash flow forecasts, production rates, net present value, internal rate of return, payback period, or mine life.

- (4) Mineral project acquisitions 45-day filing requirement Subsection 16 (5) of the Instrument requires an issuer in certain cases to file a technical report within 45 days to support first time disclosure of mineral resources, mineral reserves, or the results of an economic analysis on a mineral project material to the issuer. Mineral project materiality is not contingent on the issuer having acquired an actual interest in the mineral project or having formal agreements in place. In many cases, the mineral project will become material at the letter of intent stage, even if subject to conditions such as the approval of a third party or completion of a due diligence review. In such cases, the 45-day period will begin to run from the time the issuer first discloses the mineral resources, mineral reserves, or results of an economic analysis.
- (5) Mineral project acquisitions alternatives for disclosure of previous estimates If an issuer options or agrees to buy a mineral project material to the issuer, any previous estimates of mineral resources or mineral reserves on the mineral project will be in most cases material information that the issuer must disclose.

The issuer has a number of options available for disclosing the previous estimate without triggering a technical report within 45 days. If the previous estimate is not well-documented, the issuer may choose to disclose this information as an exploration target, in compliance with subsection 7 (2) of the Instrument. Alternatively, the issuer may be able to disclose the previous estimate as an historical estimate, in compliance with section 8 of the Instrument. Both these options require the issuer to include certain cautionary language and restrict the issuer from using the previous estimates in an economic analysis.

In circumstances where the previous estimate is supported by a technical report prepared for another issuer, the issuer may be able to disclose the previous estimate as a mineral resource, mineral reserve or results of an economic analysis, in compliance with subsection 16 (6) of the Instrument. In this case, the issuer will still be required to file a technical report. However, it has up to 180 days to do so.

(6) **Production decision** – The Instrument does not require an issuer to file a technical report to support a production decision because the decision to put a mineral project into production is the responsibility of the issuer. The development of a mining operation typically involves large capital expenditures and a high degree of risk and uncertainty. To reduce this risk and uncertainty, the issuer typically makes its production decision based on a pre-feasibility or feasibility study of established mineral reserves.

We recognize that there might be situations where the issuer decides to put a mineral project into production without first establishing mineral reserves. Historically, such developments have a much higher risk of economic or technical failure. To avoid making misleading disclosure, the issuer should disclose that it is not basing its production decision on a pre-feasibility or feasibility study supporting mineral reserves demonstrating economic and technical viability and should provide adequate disclosure of the increased uncertainty and the specific economic and technical risks of failure associated with its production decision. Providing disclosure related to the increased uncertainty and risks related to the production decision does not preclude the requirement to file a technical report if an issuer discloses the results of an economic analysis.

Under paragraph 1.4 (e) of Part 2 of Form 51-102F1 *Management's Discussion & Analysis*, an issuer must also disclose in its MD&A whether a production decision or other significant development is based on a technical report.

- (7) **Shelf life of technical reports** Economic analyses in technical reports are based on commodity prices, costs, sales, revenue and other assumptions and projections that can change significantly over short periods of time. As a result, economic information in a technical report can quickly become outdated. Continued reference to outdated technical reports or economic projections without appropriate context and cautionary language could result in misleading disclosure. Where an issuer has triggered the requirement to file a technical report under subsection 16 (1) of the Instrument it should consider the current validity of economic assumptions in its existing technical report to determine if the technical report is still current. An issuer might be able to extend the life of a technical report by having a qualified person include appropriate sensitivity analyses of the key economic variables.
- (8) **Technical reports must be current and complete** Any time an issuer is required to file a technical report, that report should be complete and current. There should only be one current technical report on a mineral project at any point in time. When an issuer files a new technical report, it will replace any previously filed technical report as the current technical report on that mineral project. This means the new technical report will include any material information documented in a previously filed technical report, to the extent that this information is still current and relevant.

If an issuer gets a new qualified person to update a previously filed technical report prepared by a different qualified person, the new qualified person must take responsibility for the entire technical report, including any information referenced or summarized from a previous technical report.

(9) Exception from requirement to file technical report if information included in a previously filed technical report – Subsection 16 (7) of the Instrument provides an exemption from the technical report filing requirement if the disclosure document does not contain any new material scientific or technical information about a mineral project that is the subject of a previously filed technical report.

In our view, a change to mineral resources or reserves due to mining depletion from a producing mineral project will not constitute new material scientific or technical information as the change should be reasonably predictable based on an issuer's continuous disclosure record.

(10) **Reports not required by the Instrument** – The securities regulatory authorities in most jurisdictions of Canada require a reporting issuer to file, if not already filed with them, any record or disclosure documents that the issuer files with any other securities regulator, including geological reports filed with stock exchanges. In other cases, an issuer might wish to file voluntarily a report in the form of a technical report. The Instrument does not prohibit an issuer from filing such reports in these situations. However, any document purporting to be a technical report must comply with the Instrument and Form.

When an issuer files a report in the form of a technical report that is not required to be filed by the Instrument, the issuer is not required to file a consent of qualified person that complies with subsection 25 (1) of the Instrument. The issuer should consider filing a cover letter with the report explaining why the issuer is filing the report and indicating that it is not filing the report as a requirement of the Instrument. Alternatively, the issuer may consider filing a modified consent with the report that provides the same information.

(11) **Preliminary short form prospectus** – Under paragraph 16 (1) (b) of the Instrument, an issuer must file a technical report with a preliminary short form prospectus if the prospectus discloses for the first time mineral resources, mineral reserves, or the results of an economic analysis that constitute a material change in relation to the issuer, or a change in this information, if the change constitutes a material change in relation to the issuer.

If this information is not disclosed for the first time in the preliminary short form prospectus itself but is repeated or incorporated by reference into the preliminary short form prospectus, the technical report must still be filed at the same time as the preliminary short form prospectus. Subsections 16 (5) and (6) of the Instrument, in certain limited circumstances, permit the delayed filing of a technical report. For example, an issuer normally has 45 days, or in some cases 180 days, to file a technical report supporting the first-time disclosure of a mineral resource. However, if a preliminary short form prospectus that includes the prescribed disclosure is filed

- during the period of the delay, subparagraphs 16 (5) (a) (i) and 16 (6) (c) (i) of the Instrument require the technical report to be filed on the date of filing the preliminary short form prospectus.
- (12) **Triggers with thresholds** The technical report triggers in paragraphs 16 (1) (b), (g) and (h) of the Instrument only apply if the relevant disclosure meets certain thresholds and the mineral project is material to the issuer.
- (13) **Triggers with permitted filing delays** Subsections 16 (5) and (6) of the Instrument allow technical reports in certain circumstances to be filed later than the disclosure documents they support. In these cases, once the requirement to file the technical report has been triggered, the issuer remains subject to the requirement irrespective of subsequent developments relating to the mineral project, including, for example, the sale or abandonment of the mineral project.

Section 17 Royalty or similar interest

- (1) **Royalty or similar interest** We consider a "royalty or similar interest" to include a gross overriding royalty, net smelter return, net profit interest, free carried interest and a product tonnage royalty. We also consider a "royalty or similar interest" to include an interest in a revenue or commodity stream from a proposed or current mining operation, such as the right to purchase certain commodities produced from the operation.
- (2) **Limitation on exemptions** The term "royalty or similar interest" does not include a participating or carried interest. These exemptions do not apply where the issuer also has a participating or carried interest in the mineral project or the mining operation, either direct or indirect.

PART 5 PREPARATION OF TECHNICAL REPORT

Section 18 Required form

(1) **Filing other scientific and technical reports** – An issuer may have other reports or documents containing scientific or technical information, prepared by or under the supervision of a qualified person, which are not in the form of a technical report. We consider that filing such information on SEDAR+ as a technical report could be misleading. An issuer wishing to provide public access to these documents should consider posting them on its website, and prior to posting the issuer must ensure that the scientific or technical information complies with the Instrument.

(2) **Prepared by a qualified person**

(a) **Selection of qualified person** – It is the responsibility of the issuer and its directors and officers to retain a qualified person who meets the criteria listed under the definition of qualified person in the Instrument, including having the relevant experience and competence for the subject matter of the technical report.

- (b) Assistance of non-qualified persons A person who is not a qualified person may work on a mineral project. If a qualified person relies on the work of a non-qualified person to prepare a technical report or to provide information or advice to the issuer, the qualified person must take responsibility for that work, information or advice by taking whatever steps are appropriate, in their professional judgment, to ensure that the work, information, or advice that they rely on is sound.
- (c) More than one qualified person Paragraph 18 (a) of the Instrument provides that one or more qualified persons must prepare or supervise the preparation of a technical report. Some technical reports, particularly for more advanced mineral projects, could require the involvement of several qualified persons with different areas of expertise. In that case, each qualified person taking responsibility for particular sections or items of the technical report must sign the technical report and provide a certificate and consent under Part 6 of the Instrument.
- A qualified person is responsible for all items of technical report –
 Paragraph 18 (a) of the Instrument requires a technical report to be
 prepared by or under the supervision of one or more qualified persons.
 This means that at least one qualified person must take responsibility for
 each section or item of the technical report, including any information
 incorporated from a previously filed technical report, and specifically
 including a mineral resource or mineral reserve estimate prepared by
 another qualified person.

If two or more qualified persons indicate they are jointly responsible for a particular section or item of the technical report, this means that each of the qualified persons indicated are equally responsible for the entire section or item. For example, if qualified person "A" and qualified person "B" indicate they are jointly responsible for section 1, both A and B are equally responsible for the entirety of section 1. Joint responsibility cannot be used as a disclaimer to renounce responsibility for certain portions of a section or item.

(3) **Preparation in English or French** – Paragraph 18 (b) of the Instrument requires a technical report to be prepared in English or French. Reports prepared in a different language and translated into English or French are not acceptable due to the highly technical nature of the disclosure and the difficulties of ensuring accurate and reliable translations.

Section 19 Addressed to issuer

We consider that the technical report is addressed to an issuer if the issuer's name appears on the title page as the party for which the qualified person prepared the technical report. We also consider that the technical report is addressed to the issuer filing the technical report if it is

addressed to an issuer that is or will become a wholly owned subsidiary of the issuer filing the technical report.

Section 20 All relevant data

Section 1 (e) of this Companion Policy provides that a technical report is a report that provides a summary of all relevant scientific and technical information about a mineral project. The Form includes similar language. The target audience for technical reports are members of the investing public, many of whom have limited geological and mining expertise. To avoid misleading disclosure, technical reports must provide sufficient detail for a reasonable person to understand the nature and significance of the results, interpretation, conclusions and recommendations presented in the technical report.

However, we do not think that technical reports need to be a repository of all technical data and information about a mineral project or include extensive geostatistical analysis, charts, data tables, assay certificate, drill logs, appendices or other supporting technical information.

Section 21 Current personal inspection

- (1) **Meaning** The current personal inspection referred to in section 21 of the Instrument is the most recent personal inspection of the mineral project, provided there is no new relevant scientific or technical information about the mineral project since that personal inspection. A personal inspection may constitute a current personal inspection even if the qualified person conducted the personal inspection considerably before the filing date of the technical report, if there is no new relevant scientific or technical information about the mineral project at the filing date. However, since the qualified person is certifying that the technical report contains all relevant information about the mineral project, the qualified person should consider taking the necessary steps to verify independently that there has been no additional work done on the mineral project since their last personal inspection.
- (2) Importance of personal inspection We consider a current personal inspection under section 21 of the Instrument to be particularly important because it will enable qualified persons to become familiar with conditions on the mineral project. A qualified person can observe the geology and mineralization, verify work done and, on that basis, design or review and recommend to the issuer an appropriate exploration or development program. A current personal inspection is required even for mineral projects with poor exposure. In such cases, it could be relevant for a qualified person to observe the depth and type of the overburden and cultural effects that could interfere with the results of the geophysics. A current personal inspection also allows for a qualified person to observe the access, limitations, environmental setting and the overall nature of the mineral project, which may or may not impact the ability to conduct further work or development.

It is the responsibility of the issuer to arrange its affairs so that a qualified person can carry out a current personal inspection. A qualified person, or where required, an independent qualified person, must visit the site and cannot delegate the personal

inspection requirement. For example, we consider a current personal inspection to be delegated when a qualified person only takes responsibility for Item 23 of a technical report.

(3) **More than one qualified person** – Section 21 of the Instrument requires at least one qualified person who is responsible for preparing or supervising the preparation of the technical report to inspect the mineral project. This is the minimum standard for a current personal inspection. There could be cases on more advanced mineral projects where it is necessary for more than one qualified person to conduct current personal inspections of the mineral project, taking into account the nature of the work on the mineral project and the different expertise required to prepare various elements of the technical report.

Please see additional guidance in Part B. Guidance to the Form: Item 23 – Current Personal Inspection.

Section 22 Execution

Section 22 and subsections 24 (1) and 25 (1) of the Instrument require the qualified person to date, sign, and if the qualified person has a seal, seal the technical report, certificate and consent. If a qualified person's name appears in an electronic document with (signed by) or (sealed) next to their name or there is a similar indication in the document, we will consider that the person has signed and sealed the document.

Section 23 Independent technical report

- (1) **Independent qualified persons** Subsection 23 (1) of the Instrument requires that one or more independent qualified persons prepare or supervise the preparation of the independent technical report. This subsection does not preclude non-independent qualified persons from assisting in the preparation of the technical report. However, to meet the independence requirement, the independent qualified persons must assume overall responsibility for all items of the technical report.
- (2) One hundred percent or greater change Subparagraph 23 (1) (c) (ii) of the Instrument requires the issuer to file an independent technical report to support disclosure of a 100 percent or greater change in total mineral resources or total mineral reserves or the results of an economic analysis.

We interpret this to mean a 100 percent or greater change in either the total tonnage or volume, or total contained metal or mineral content, of the mineral resource or mineral reserve. We also interpret the 100 percent or greater change to apply to mineral resources and mineral reserves separately. Therefore, a 100 percent or greater change in mineral resources on a material mineral project will require the issuer to file an independent technical report regardless of any changes to mineral reserves, and vice versa.

- In addition, this requirement applies when there is a 100 percent or greater change in the net present value, internal rate of return, or any metric relied upon in the results of an economic analysis of a mineral project.
- (3) **Objectivity of author** We could question the objectivity of the author based on our review of a technical report. To preserve the requirement for independence of the qualified person, we could ask the issuer to provide further information, additional disclosure, or the opinion or involvement of another qualified person to address concerns about possible bias or partiality on the part of the author of a technical report.

PART 6 CERTIFICATES AND CONSENTS

The Instrument requires certificates and consent of qualified persons, prepared in accordance with sections 24 and 25 of the Instrument to be filed at the same time as the technical report. The Instrument does not specifically require the issuer to file the certificate of qualified person as a separate document. It is generally acceptable for the qualified person to include the certificate in the technical report and to use the certificate as the date and signature page.

Section 24 Certificate of qualified person

- (1) **Certificates apply to the entire technical report** Subsection 24 (1) of the Instrument requires certificates that apply to the entire technical report, including any sections that refer to information in a previously filed technical report. At least one qualified person must take responsibility for each item required by the Form.
- (2) **Deficient certificates** Certificates must include all the statements required by subsection 24 (1) of the Instrument. An issuer that files certificates with required statements that are missing or altered to change the intended meaning has not complied with the Instrument.
- (3) **Summary of relevant experience** We consider it insufficient to simply state the number of years working in the industry for paragraph 24 (1) (c) of the Instrument. The certificate must provide a sufficient summary of the qualified person's relevant experience in the specific subject matter of the technical report such that the investing public can understand how the qualified person determined they have the appropriate relevant experience to act as a qualified person for the items in the technical report for which they are responsible.
- (4) **Professional registration** The certificate should also provide the year which the qualified person was registered with their stated professional association and any previous registration with another professional association that contributes to their 5 years of professional experience.

Section 25 Consent of qualified person

(1) **Consent of experts** – If the technical report supports disclosure in a prospectus, the qualified person will likely have to provide an expert consent under the prospectus

rules (section 10.1 of National Instrument 41-101 *General Prospectus Requirements* and paragraph 4.2 (a) (vii) of National Instrument 44-101 *Short Form Prospectus Distributions*), in addition to any consent of qualified person required under the Instrument.

- (2) **Deficient consents** Consents must include all the statements required by subsection 25 (1) of the Instrument. An issuer that files consents with required statements that are missing or altered to change the intended meaning has not complied with the Instrument. Appendix B to this Companion Policy provides an example of an acceptable consent of a qualified person.
- (3) **Modified consents under subsection 25 (2)** Subsection 25 (1) of the Instrument requires the qualified person to identify and read the disclosure that the technical report supports and confirm that the disclosure accurately represents the information in the technical report. We recognize that an issuer can become a reporting issuer in a jurisdiction of Canada without the requirement to file a disclosure document listed in subsection 16 (1) of the Instrument. In these cases, the issuer has the option of filing a modified consent under subsection 25 (2) of the Instrument that excludes the statements in paragraphs 25 (1) (b), (c) and (d).
- (4) **Filing of full consent required** If an issuer files a modified consent under subsection 25 (2) of the Instrument, it must still file a full consent the next time it files a disclosure document that would normally trigger the filing of a technical report under subsection 16 (1) of the Instrument. This requirement is set out in subsection 25 (3) of the Instrument.
- (5) Filing of consent for technical reports not required by the Instrument Where an issuer files a technical report voluntarily or as a requirement of a Canadian stock exchange, and the filing is not also required under the Instrument, the report is not a "technical report" subject to the consent requirements under subsection 25 (1) of the Instrument. Therefore, when the issuer subsequently files a disclosure document that would normally trigger the filing of a technical report under subsection 16 (1) of the Instrument, the issuer must file the consents of qualified persons in accordance with subsection 25 (1) of the Instrument.

If an issuer files a filing statement or other prospectus-level disclosure document with a Canadian stock exchange, and the filing is not also required under the Instrument, the issuer may choose or be required by the stock exchange to file a full consent that includes paragraphs 25 (1) (b), (c) and (d) of the Instrument as they relate to the filing statement or other disclosure document.

B. GUIDANCE TO THE FORM

GENERAL INSTRUCTIONS

A technical report is a summary document of relevant scientific and technical information concerning mineral exploration, development and production activities on a mineral project that is material to an issuer.

A technical report is intended to offer clear and consistent information that may be used to inform investment decisions. The intended audience is the investing public and their advisors who, in most cases, will not be mining experts. Authors should keep the intended audience in mind. Authors should also consider that the contents of a technical report are a snapshot in time of a mineral project's status.

While the Form mandates the headings and general format of the technical report, the qualified person preparing the technical report is responsible for determining the level of detail required under each item based on the qualified person's assessment of the relevance and significance of the information.

As noted in General Guidance (7) of this Companion Policy, the Instrument does not require a qualified person to follow CIM practice guidelines. However, we think that a qualified person, acting in compliance with the professional standards of competence and ethics established by their professional association, will use procedures and methodologies that are consistent with industry standard practices, as established by CIM or similar organizations in other jurisdictions.

APPENDICES

It is not necessary to include appendices with excessive information, such as assay certificates or extensive geological, geochemical, geophysical, other survey results or raw data. The limited use of an appendix may be appropriate in certain circumstances, for example an extensive list of land tenures.

ALL HEADINGS UNDER THE FORM

For mineral projects without information to disclose under any item, rather than providing disclosure that an item is "not applicable" or "n/a", the technical report should explain that there is no relevant information under those headings. For example:

- if metallurgical testing was not conducted at the effective date, the technical report should indicate that no metallurgical test work has been completed rather than "not applicable";
- if a mineral project does not have a mineral resource estimate, the technical report should indicate that there are no current mineral resources on the mineral project under Item 14.

We consider such information to be relevant to the mineral project, as such, it is not sufficient to only indicate "Not Applicable" under a heading.

TITLE PAGE

The Form requires issuers to provide the current stage of the mineral project on the first or front page of the technical report. Also, a stage or level of work completed on a mineral project should be clearly identified for the intended audience. Suitable stages include:

- "early" or "exploration" meaning without a mineral resource estimate;
- "resource" meaning with a mineral resource estimate but no economic analysis;
- "scoping study" within the meaning of the Instrument;
- "pre-feasibility study" within the meaning of the Instrument;
- "feasibility study" within the meaning of the Instrument;
- "life of mine plan" within the meaning of the Instrument.

DATES AND SIGNATURES

- (1) In addition to "effective date" which is a defined term in the Instrument, the following explains the most common dates associated with a technical report:
 - "date of signing" or "signature date" This is the date that a qualified person completes and signs the technical report; this does not have to be the same date as the effective date;
 - "filing date" There is no requirement to include the date on which a technical report is filed on SEDAR+. However, the effective date and signature date should not be after the date on which the document is filed;
 - "consent date" This is the date on which the consent of the qualified person is given, which may be after the signature date or effective date, or both, of the relevant technical report.
- (2) If the qualified person includes their certificate in the technical report, it is generally acceptable to use the certificate as the date and signature page.

Item 1 Summary

The Information summarized in this item should be consistent with the stage of development of the mineral project, although we do not specifically require every heading in the report to be duplicated in this item. The information summarized by Items 5.4 (2) through 5.4 (14) of Form 51-102F2 *Annual Information Form* are a suggested framework for the information to be included here.

Item 3 Reliance on Other Experts

Reliance on other experts is limited to specific areas: legal, political, environmental or tax matters. Authors are reminded that they may not rely on third parties for any scientific or technical information included in the technical report.

Item 4 Mineral Project Description and Location

- (1) Information required under Items 4 (d), (e), (g) and (h) may include the rights of Indigenous Peoples, as defined in the mineral project's jurisdiction. The information to be provided does not require the disclosure of confidential information about rightsholders, for example an agreement between an issuer and a rightsholder that is subject to confidentiality obligations.
- (2) The reference in Item 4 (c) to type of mineral tenure may include a claim, exclusive exploration right, licence, lease, concession, permit or tenement.
- (3) Item 4 (d) requires disclosure of who holds the surface rights associated with the mineral project, if any.

Item 5 Accessibility, Local Resources, Infrastructure and Physiography

We expect that the disclosure of sufficiency of surface rights to include a description of the surface rights necessary to further develop any potential mining operation under Item 5 (e).

Item 6 History

- (1) Historical information required under Item 6 (b) may be presented in tabular format, where appropriate. If a mineral project does not have extensive history to warrant such a table, a summary in paragraph format will generally be sufficient.
- (2) As historical work may have been conducted outside the current mineral project boundaries, the report should clearly distinguish this historical work from the work conducted on the mineral project area that is the subject of the technical report.

Item 7 Geological Setting and Mineralization

If disclosure under this item or any other item of the Form includes disclosure about a neighbouring or analogue mineral project, the disclosure should clearly distinguish between the information about such other mineral project and the issuer's mineral project, and the disclosure should not state or imply the issuer will obtain similar information from its own mineral project. The source of information for the other mineral project should also be clearly identified.

Item 9 Exploration

- (1) If the issuer has not conducted any exploration on the mineral project this should be clearly stated.
- (2) If, in addition to any exploration work by the issuer, the technical report includes exploration results from previous operators, clearly identify the work conducted from

previous operations. We consider it suitable to include work done by others if the issuer and the qualified person believe the work remains current.

Item 10 Drilling

- (1) If the issuer has not conducted any drilling on the mineral project this should be clearly stated.
- (2) The disclosure required under this item may include any underground sampling, drilling or test work.
- (3) For mineral projects with mineral resource estimates, the qualified person may meet the requirements under Item 10 (c) by providing a drill plan and representative drill sections through the mineral deposit.
- (4) If drill results from previous operators have been verified by the qualified person and are included in a mineral resource estimate and are therefore being treated as reliable, we expect that these drill results will be included under this Item. The report should clearly distinguish the results of drilling conducted by or on behalf of the issuer from those of previous operators.

Item 12 Data Verification

The appropriate qualified person should conduct data verification on any scientific and technical information included in the report. Data verification steps may be necessary for, but not limited to, parts or all of Items 9, 10, 11, 13, 14, 15 and 17, and any assumptions used in Items 21 and 22.

Technical report authors are reminded that simply referencing prior data verification conducted by others does not meet the requirements of this Item.

We remind issuers that a technical report disclosing mineral resources or mineral reserves under Items 14 and 15, respectively, must comply with the requirements set out in sections 6, 7 and 13 of the Instrument.

Item 13 Metallurgical Testing

Disclosure related to the amount and reliability of the metallurgical test work conducted on the mineral deposit should be appropriate and sufficient to support the stage of development of the mineral project.

Item 14 Mineral Resource Estimates

- (1) A statement of quantity and grade or quality is an estimate and should be rounded to reflect the fact that it is an approximation.
- (2) Where multiple cut-off grade scenarios are presented, the qualified person must identify

and highlight the base case or preferred scenario. All estimates resulting from each of the cut-off grade scenarios must meet the test of reasonable prospects requirements of mineral resources.

- (3) We do not interpret "relevant conversion factors" in Item 14 (c) related to metal equivalents to include the application of the modifying factors used in the conversion to mineral reserves.
- (4) Visual representations required under Item 14 (d) should clearly show the spatial continuity of the mineral resource, the confidence classifications and the constraining surfaces or shapes.
- (5) Each mineral project has its own set of risks and uncertainties, any of which could materially affect the mineral resource estimate. Disclosure under Item 14 (g) should be relevant to the particular mineral project. Failure to provide known risks specific to the mineral project may make the mineral resource estimate disclosure potentially misleading.
- (6) A mineral deposit is not a mineral resource unless it demonstrates the reasonable prospects requirements of mineral resources. Item 14 (b) requires the technical report to disclose the assumptions used to establish the reasonable prospects, which we interpret to include both economic and technical aspects.

The economic aspects may include the metallurgical recovery, cost assumptions, metal prices and any other factors that might impact the eventual mining of the mineral resource. And depending on the type of mining method, the technical aspects may include minimum widths, spatial continuity and the application of appropriate constraining surfaces, areas and volumes.

For example, a technical report disclosing a pit shell must also provide a description of the geological controls that are the basis for the geological model used to constrain the mineral resource estimation, including descriptions of the data and the criteria and methodology used to develop the model.

(7) If the issuer wishes to disclose a previous mineral resource estimate or previous mineral reserve estimate prepared by the issuer related to the mineral project, these estimates should be referred to as a previous estimate and not a historical estimate which is a defined term in the Instrument.

Items 16 to 22

Scoping studies, pre-feasibility studies, feasibility studies and life of mine plans generally analyse and assess the same geological, engineering and economic factors with increasing detail and precision. Therefore, the criteria for Items 16 to 22 can be used as a framework for reporting the results of all four studies. In situations where a mineral project does not have mineral resources or mineral reserves but the mineral project is in production, or was previously in production, we expect disclosure will be provided under Items 16 to 22, where applicable.

Item 16 Mining Methods

For a mineral project in production or operation, we expect the technical report to disclose the mining methods currently in place.

Item 19 Market Studies and Contracts

The discussion of market studies should clearly explain any impacts that the mineral project that is subject of the technical report may have on the market. Discussion under this item should also include identification of any circumstances unique to that market.

Item 20 Environmental Studies, Permitting and Regional or Local Impact

The information disclosed in this item should include the dates of any current (meaning in place at the effective date) reports, documents, studies, permits or permit status.

Along with the date, titles of any reports, documents, studies or permits should also be disclosed to ensure the intended audience can understand that these documents may have been superseded even if the remainder of the technical report remains current.

Item 21 Capital and Operating Costs

Disclosure under this item should be made, even if the mineral project in production does not have mineral resources or mineral reserves. A technical report for a mineral project in production (or operation) may disclose actual costs rather than estimates when available. If disclosing actual costs, consider reconciling to the most recent estimated costs such that the intended audiences may see differences between forecasts and actuals.

Item 22 Economic Analysis

- (1) The economic analysis in technical reports must include any applicable cautionary language required by subsection 7 (3) of the Instrument.
- (2) Discussion of how the risk-adjusted discount rate was selected should consider risks specific to the mineral project such as location, stage of development or type of commodity.

Item 23 Current Personal Inspection

- (1) The observations by the qualified person conducting the current personal inspection may include anything the intended audience might need to know that could impact further advancement of the mineral project.
- (2) We do not consider the sampling or testing done by the qualified person during the current personal inspection to be exploration activities of the issuer.

(3) We additionally note that it is considered acceptable that the current personal inspection may be assisted by, but not replaced by, remote technologies including drones.

Item 26 Recommendations

In some specific cases, the qualified person may not be in a position to make meaningful recommendations for further work. Generally, these situations will be limited to mineral projects under development or in production where material exploration activities and engineering studies have largely concluded. In such cases, the qualified person should explain why they are not making further recommendations.

In general, we do not expect recommendations as part of a life of mine plan.

Appendix A Acceptable Foreign Associations and Membership Designations

Foreign Association	Membership Designation
American Institute of Professional Geologists (AIPG)	Certified Professional Geologist (CPG)
The Society for Mining, Metallurgy and Exploration, Inc. (SME)	Registered Member
Mining and Metallurgical Society of America (MMSA)	Qualified Professional (QP)
Any state in the United States of America	Licensed or certified as a professional engineer
European Federation of Geologists (EFG)	European Geologist (EurGeol)
Institute of Geologists of Ireland (IGI)	Professional Member (PGeo)
Institute of Materials, Minerals and Mining (IMMM or IOM3)	Professional Member (MIMMM), Fellow (FIMMM), Chartered Scientist (CSci MIMMM), or Chartered Engineer (CEng MIMMM)
Geological Society of London (GSL)	Chartered Geologist (CGeol)
Australasian Institute of Mining and Metallurgy (AusIMM)	Fellow (FAusIMM) or Chartered Professional Member or Fellow (MAusIMM (CP), FAusIMM (CP))
Australian Institute of Geoscientists (AIG)	Member (MAIG), Fellow (FAIG) or Registered Professional Geoscientist Member or Fellow (MAIG RPGeo, FAIG RPGeo)
The Institution of Engineers Australia (Engineers Australia)	Chartered Professional Engineer (CPEng)
The Institution of Professional Engineers New Zealand (Engineers New Zealand, IPENZ)	Chartered Professional Engineer (CPEng)
The Southern African Institute of Mining and Metallurgy (SAIMM)	Fellow (FSAIMM)
South African Council for Natural Scientific Professions (SACNASP)	Professional Natural Scientist (Pr.Sci.Nat.)
Engineering Council of South Africa (ECSA)	Professional Engineer (Pr.Eng.) or Professional Certificated Engineer (Pr.Cert.Eng.)
Comisión Calificadora de Competencias en Recursos y Reservas Mineras (Chilean Mining Commission)	Registered Member

Appendix B Example of Consent of Qualified Person

[QP's Letterhead] or [Insert name of QP]
[Insert name of QP's company] [Insert address of QP or QP's company]

CONSENT OF QUALIFIED PERSON

I, [name of QP], consent to the public filing of the technical report titled [insert title of report] and dated [insert effective date of report] (the "Technical Report") by [insert name of issuer filing the report].

I also consent to any extracts from or a summary of the Technical Report in the [insert date and type of disclosure document (i.e. news release, prospectus, AIF, etc.)] of [insert name of issuer making disclosure].

I certify that I have read [date and type of document (i.e. news release, prospectus, AIF, etc.) that the report supports] being filed by [insert name of issuer] and that it fairly and accurately represents the information in the sections of the Technical Report for which I am responsible.

Dated this [insert date].	
	[Seal or Stamp]
Signature of Qualified Person	
Print name of Qualified Person	