



Canadian Securities Administrators

Notice and Request for Comment

Proposed Repeal and Replacement of National Instrument 43-101 *Standards of Disclosure for Mineral Projects*, Form 43-101F1 *Technical Report*, and Companion Policy 43-101CP

April 23, 2010

Introduction

We, the Canadian Securities Administrators (CSA), are publishing for a 90-day comment period the following proposed documents:

- National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (the Amended Instrument)
- Form 43-101F1 *Technical Report* (the Amended Form)
- Companion Policy 43-101CP (the Amended Companion Policy)

(together, the Amended Mining Rule), and

consequential amendments to

- National Instrument 44-101 *Short Form Prospectus Distributions* (NI 44-101)
- Form 51-102F1 *Management's Discussion and Analysis* (MD&A)
- Form 51-102F2 *Annual Information Form*
- National Instrument 45-106 *Prospectus and Registration Exemptions*
- National Instrument 45-101 *Rights Offerings*

(together, the Consequential Amendments).

The Amended Mining Rule would replace current National Instrument 43-101 *Standards of Disclosure for Mineral Projects* (the Current Instrument), current Form 43-101F1 (the Current Form), and current Companion Policy 43-101CP (the Current Companion Policy) (together, the Current Mining Rule), which came into effect in all CSA jurisdictions on December 30, 2005.

Concurrently with this Notice, we are publishing the Amended Mining Rule, blacklines showing all changes from the Current Instrument and the Current Form, and the Consequential Amendments. These documents are also available on the websites of CSA members, including the following:

- www.bcsc.bc.ca
- www.albertasecurities.com
- www.sfsc.gov.sk.ca
- www.osc.gov.on.ca
- www.lautorite.qc.ca
- www.nbsc-cvmnb.ca

Substance and Purpose of the Amended Mining Rule

We have been monitoring the Current Mining Rule since we adopted it. In the spring of 2009, CSA members in British Columbia, Ontario, and Quebec carried out focus group discussions with market participants from various sectors, and consulted with their advisory committees, concerning a range of issues related to the Current Mining Rule. These CSA members, as well as CSA members in Alberta and Saskatchewan, also solicited written comments from market participants. The proposed changes in the Amended Mining Rule reflect our analysis of the results of these consultations and our own experiences with the Current Mining Rule.

The proposed changes in the Amended Mining Rule and the Consequential Amendments

- eliminate or reduce the scope of certain requirements
- provide more flexibility to mining issuers and qualified persons in certain areas
- provide more flexibility to accept new foreign professional associations, professional designations, and reporting codes as they arise or evolve
- reflect changes that have occurred in the mining industry, and
- clarify or correct areas where the Current Mining Rule is not having the effect we intended

Summary of Key Proposed Changes

This section describes the key changes in the Amended Mining Rule. It is not a complete list of all the changes.

Amended Instrument

Part 1 Definitions and Interpretation

We have:

- added a definition of “acceptable foreign code”, and amended the definitions of “professional association” and “qualified person”, to replace prescriptive lists with objective tests that will accommodate changes without formal amendment
- amended the definition of “historical estimate” to permit disclosure of third party estimates made after 2001
- expanded the definition of “preliminary economic assessment” to include preliminary economic analyses after the completion of a pre-feasibility or feasibility study

Part 2 Requirements Applicable to All Disclosure

We have:

- clarified restricted disclosure in paragraphs 2.3(1)(b), (c), and (d) to reflect our interpretation of the current provisions
- added paragraph 2.3(3)(c) to require disclosure of the impact of a preliminary economic assessment completed after a pre-feasibility or feasibility study
- expanded section 2.4 to consolidate the existing disclosure requirements for historical estimates (sections 3.4 and 4.2(2) of the Current Instrument) and to require comment on the work needed to verify the historical estimates

Part 3 Additional Requirements for Written Disclosure

We have expanded section 3.1 to allow an issuer to name the qualified person who approved the disclosure of the scientific and technical information, as an alternative to naming the qualified person who prepared or supervised the preparation of the information.

Part 4 Obligation to File a Technical Report

We are requesting specific comment on whether to keep or eliminate the technical report trigger in paragraph 4.2(1)(b) for a short form prospectus (see the discussion below under **Request for Comment on the Amended Mining Rule and Consequential Amendments**).

In addition, we have:

- expanded the technical report trigger in paragraph 4.2(1)(j) to include any first time written disclosure of mineral resources, mineral reserves, or preliminary economic assessments
- amended subsection 4.2(5) to require the issuance of a news release disclosing the filing of the technical report in all circumstances where the filing delay applies, to alert the market that the technical report has been filed
- added a new exemption in subsection 4.2(7) that allows a conditional 6-month filing delay for a technical report supporting mineral resources, mineral reserves, or a preliminary economic assessment, if these estimates are supported by a current technical report filed by another issuer
- removed the requirement in subsection 4.2(8) to file updated certificates and consents of qualified persons, and clarified that the previously filed technical report must meet any independence requirements for the subsequent trigger

Part 5 Author of Technical Report

Subsection 5.3(2) provides a new exemption for producing issuers whose securities trade on a specified exchange, from the independence requirement in relation to a technical report filed only as a result of the producing issuer becoming a reporting issuer in Canada.

In subsection 5.3(3), we have expanded the current exemption for producing issuers from the independence requirement in relation to a technical report filed under section 4.2, to include all triggers under section 4.2.

Part 6 Preparation of Technical Report

Although the limitation on disclaimers in section 6.4 is unchanged, we have amended the permitted disclaimers in Item 3 of the Amended Form (see the discussion below under **Amended Form**).

Part 7 Use of Foreign Code

We have removed the prescriptive list of acceptable foreign codes and the requirement for issuers to reconcile foreign resource and reserve categories to current categories as defined by the Canadian Institute of Mining, Metallurgy and Petroleum.

Part 8 Certificates and Consents of Qualified Persons for Technical Reports

We have provided a new exemption, in subsections 8.3(2) and (3), from including certain statements in the consents of qualified persons for technical reports filed only as a result of the issuer becoming a reporting issuer in Canada.

Part 9 Exemptions

Subsection 9.2(1) provides a new exemption to royalty holders from the requirement to file a technical report, if the operator of the mineral project is subject to the Amended Instrument or its securities trade on a specified exchange and certain other conditions are met.

Amended Form

We developed the Amended Form with the assistance of a subcommittee of CSA's Mining Technical Advisory and Monitoring Committee.

We have substantially amended the Current Form to make it less prescriptive and more adaptable for advanced stage and producing properties. These changes will allow the qualified person more discretion regarding the amount of information and level of detail required under each section, based on their assessment of the relevance and significance of the information in the overall context and stage of development of the property.

In addition, we have:

- broadened Item 25 of the Current Form to apply to all advanced stage properties and replaced it with eight new items that reflect the major components or topics of a preliminary economic assessment, pre-feasibility study, or feasibility study
- amended *Reliance on Other Experts* to allow the qualified person to rely on and disclaim responsibility for certain information provided by the issuer and certain pricing and valuation information provided by experts who are not qualified persons
- amended Instruction (5) to allow qualified persons to refer to any information in previously filed technical reports, to the extent that it is still current, but require them to summarize or quote this information in the current technical report so the reader does not have to find and read multiple reports
- under *Data Verification*, added a requirement for the qualified person to comment on the adequacy of the data

- amended *Mineral Processing and Metallurgical Testing* to be more specific about the information required and to add a requirement to discuss any potential processing factors or deleterious elements
- exempted producing issuers from the requirement to include information under *Economic Analysis* for their producing properties

Amended Companion Policy

We have structured the Amended Companion Policy so that it tracks the sections of the Amended Instrument to which the guidance applies. We have also updated and streamlined much of the guidance in the Current Companion Policy, and eliminated guidance that is no longer useful.

In addition, we have:

- under General Guidance, added guidance on forward-looking information, and a property material to the issuer
- in section 1.1, added guidance on certain definitions in the Amended Instrument, including the new definition of “acceptable foreign code”, the revised definitions of “professional association” and “qualified person”, and our interpretation of “property”
- incorporated and updated Appendix A as guidance on recognized acceptable foreign associations (now in the Current Instrument)
- in subsections 2.3(3) and 2.4(1), expanded the guidance on the use of cautionary language, including our interpretation of “equal prominence”
- in section 4.2, added guidance on certain technical report triggers in the Amended Instrument, and on related issues including property acquisitions, production decisions, shelf life of technical reports, preliminary economic assessments, and the filing of technical reports not required by the Amended Instrument
- in subsection 4.2(13), proposed guidance on the impact of removing the short form prospectus trigger for a technical report, which will only be adopted if we decide to eliminate the trigger (see the discussion below under **Request for Comment on the Amended Mining Rule and Consequential Amendments**)
- in Part 5, clarified certain issues regarding qualified persons, including relevant experience requirements for supervising qualified persons, the involvement of non-independent qualified persons in preparing independent technical reports, and taking responsibility for information incorporated from other reports
- in section 5.3, added guidance on the independence requirement and what constitutes a 100 percent or greater change to a mineral resource or mineral reserve
- in Part 8, added guidance on certificates and consents, including consents for technical reports not required by the Amended Instrument

Consequential Amendments

The Consequential Amendments, as summarized below, are contained in Appendices A to D of this Notice.

NI 44-101 amendment

This proposed amendment permits an issuer that is required to obtain an expert consent from a qualified person, in connection with a previously filed technical report, to obtain the expert consent from the firm that employed the qualified person at the date of signing the technical report, rather than from the qualified person. This would ease the situation faced by an issuer filing a short form prospectus when the qualified person who authored the technical report is no longer available or able to provide the required consent.

Two conditions apply. First, the firm's principal business must be providing engineering or geoscientific services. Second, the person signing the consent on behalf of the firm must be both an authorized signatory of the firm and a person who satisfies the conditions in paragraphs (a) and (c) of the definition of qualified person.

MD&A amendment

This proposed amendment requires a resource issuer to disclose in its MD&A whether a significant milestone such as a production decision is based on a technical report filed under the Amended Instrument.

During our public consultations in the spring of 2009, participants generally agreed that an issuer should fully disclose the associated risks if its production decision is not based on a feasibility study or on mineral reserves. The proposed MD&A amendment, in conjunction with new guidance provided in subsection 4.2(5) of the Amended Companion Policy, would elicit this disclosure.

Other consequential amendments

The other proposed amendments eliminate outdated cross-references to the Current or Amended Instrument.

Anticipated Costs and Benefits

We are proposing the Amended Mining Rule and the Consequential Amendments because of issues identified through regulatory reviews, applications for exemptive relief, and public comment and consultation. We think the proposed changes represent more efficient and effective regulation that will reduce issuers' costs to comply with the Amended Mining Rule without compromising investor protection.

Some of the proposed changes codify current disclosure practices or improve drafting in the Current Mining Rule. In addition, we have identified the following specific changes for which we considered the anticipated costs and benefits to various stakeholders.

Updated certificates and consents (subsection 4.2(8) of the Amended Instrument)

The Amended Instrument eliminates the requirement to provide updated certificates and consents for a previously filed technical report that is still current. There is no requirement in the Current Instrument to provide updated certificates and consents related to annual information forms or short form prospectuses and this change treats other filings in the same manner.

Qualified persons often work in remote locations and can be unreachable on short notice. Alternatively, at the time an issuer is seeking an updated certificate and consent, the qualified person might not work for the same firm as when they wrote the technical report. For these reasons, it can be difficult or impossible for an issuer to obtain an updated certificate and consent. In addition, unless the qualified person recently worked on the mineral property, the issuer is in the best position to determine if there is new material scientific or technical information about the property. We think investors are still protected without this requirement due to the transparency of the issuer's determination that there is no material scientific or technical information about the property that is not contained in an existing technical report.

NI 44-101 amendment

As is the case with updated consents under the Current Instrument, issuers can have difficulties contacting qualified persons to provide expert consents necessary to complete a short form prospectus offering under NI 44-101. Issuers can therefore face an unpredictable delay or inability to obtain a prospectus consent, which might jeopardize completion of their offering.

The NI 44-101 amendment allows the consulting firm that employed the qualified person who prepared the issuer's technical report to consent, in place of the qualified person, to the use of the technical report in a short form prospectus. Allowing the consulting firm to provide a prospectus consent will eliminate this delay while ensuring a technically proficient person has reviewed the prospectus disclosure and consents to the use of the technical report. Moreover, the NI 44-101 amendment maintains the same liability regime for investors against the consulting firm in the event the prospectus contains materially misleading scientific or technical disclosure.

Comparable foreign standards

The Amended Instrument recognizes foreign standards for qualified persons and mining disclosure that are more consistent and comparable to standards in Canada and other international mining jurisdictions. For example, the Amended Instrument exempts a foreign producing issuer listed on a specified exchange from the requirement to have an independent qualified person prepare its technical report when it first becomes a reporting issuer. This exemption should facilitate additional Canadian listings by foreign producing issuers by recognizing that they already satisfy comparable foreign standards for scientific or technical disclosure.

Royalty holders (subsection 9.2(1) of the Amended Instrument)

The Current Instrument applies to issuers holding a royalty interest in a mineral project. Often the scientific or technical information on the mineral project underlying a royalty interest is material information about the issuer holding the royalty interest. However, because royalty holders have limited access to project data, their technical reports are often based on the scientific and technical information disclosed by the owner of the mineral project. This results in duplicative disclosure with no additional benefit to the users of the royalty holder's technical report.

The Amended Instrument exempts the royalty holder from the requirement to prepare a technical report if the information concerning the project is publicly available, and was prepared by an issuer that is subject to the Amended Instrument or a producing issuer listed on a specified exchange. This exemption will reduce the regulatory burden for royalty holders while providing investors with access to the same information currently available.

Property acquisitions (subsection 4.2(7) of the Amended Instrument)

We understand that in some cases when an issuer acquires a material property, the issuer's due diligence does not provide the necessary scientific and technical information to prepare a new independent technical report within the 45-day filing period. The Amended Instrument extends the deadline to file a technical report on a newly acquired property to six months if another issuer previously filed a technical report on the acquired property and that report is still current. We do not think this extension would compromise investor protection because investors would still have access to a current technical report on the acquired property.

Request for Comment on the Amended Mining Rule and Consequential Amendments

We invite comment on the Amended Mining Rule and the Consequential Amendments generally. In addition, we have the following specific questions for your consideration.

Short form prospectus trigger

We are considering whether to keep, modify or eliminate the short form prospectus trigger for a technical report (paragraph 4.2(1)(b) of the Amended Instrument). As well as soliciting comments, we are surveying certain issuers directly to assess the regulatory impact and costs associated with this requirement. Specifically, we are surveying issuers that filed a technical report solely to support disclosure in a preliminary short form prospectus, where the receipt was issued during the period March 2006 until December 2009. In addition, we are surveying a representative sample of issuers that were eligible to file a short form prospectus in 2009. We are not making these issuer surveys generally available because they are targeted at specific groups of issuers. However, you can view the questions in the surveys by [clicking here](#).

We understand that the requirement to prepare a new technical report imposes extra costs and limits an issuer's ability to complete these offerings on a timely basis. Feedback should confirm whether the extra costs and delays are a significant concern to industry and whether investors think they will be disadvantaged if the scientific or technical disclosure in a short form prospectus is not supported by a technical report. Comments and survey responses will help us determine if the reduced costs to issuers of eliminating this requirement would outweigh the benefit to investors of keeping it.

The table below illustrates the effect of eliminating the short form prospectus trigger in three situations. In each situation, there is new material scientific or technical information about a property material to the issuer that is not supported by a previously filed technical report. (An issuer can rely on a previously filed technical report if there is no new material scientific or technical information.)

	<u>Case 1</u>	<u>Case 2</u>	<u>Case 3</u>
	New information is not a material change in the affairs of the issuer	New information is a material change in the affairs of the issuer but not first disclosure of, or a material change to, mineral resources, mineral reserves, or a preliminary assessment	New information is a material change in the affairs of the issuer and also first disclosure of, or a material change to, mineral resources, mineral reserves, or a preliminary assessment

Short form trigger	New technical report required	New technical report required	New technical report required
Delete short form trigger	No new technical report required	No new technical report required	No new technical report required with short form prospectus, but will be required under para. 4.2(1)(j) and filed after the offering is completed.

Examples of Case 2 are

- an issuer acquires a property that is material to the issuer, but which does not have a mineral resource or mineral reserve
- an issuer completes a significant amount of drilling on a material property

Whether we keep or eliminate the short form prospectus trigger:

- Under section 3.1 of the Amended Instrument, the issuer would be required to name in its preliminary and final short form prospectus the qualified person who prepared or supervised the preparation of the new scientific or technical information, or approved the written disclosure.
- The qualified person would likely be considered an expert named in the prospectus and so would be required to provide an expert consent under NI 44-101 to the disclosure of the new scientific or technical information in the final short form prospectus.

In making our decision, it would be helpful to have feedback from both issuers and those on the buy side of short form prospectus offerings. We therefore encourage input from all stakeholders on this important issue.

Questions

1. Do you rely on technical reports when making, or advising on, investment decisions in a short form prospectus offering? If yes, please explain how the content of a technical report, or the certification of a technical report by a qualified person, could influence your investment decisions or your recommendations.
2. Do you think we should keep, or eliminate, the short form prospectus trigger? Please explain your reasoning.
3. Please discuss how your answers to questions 1 and 2 might change in each of the three cases described in the table.
4. If we decide to eliminate the short form prospectus trigger, is the proposed guidance in subsection 4.2(13) of the Amended Companion Policy useful? Do you have any suggestions concerning this guidance?

Depending on the comments received, we might consider removing the short form trigger for one of the three cases or for a combination of the three cases described in the table above.

New exemption for property acquisition with current technical report

The new exemption in subsection 4.2(7) of the Amended Instrument allows a conditional 6-month filing delay for a technical report supporting mineral resources, mineral reserves, or a preliminary economic assessment, if the estimates are supported by a current technical report filed by a previous owner. The 6-month period would permit the new owner additional time to have a new technical report prepared. This exemption is intended to provide the issuer with an additional option to disclosing the information as a historical estimate, or having the previous technical report re-addressed to it.

Question

5. Is the proposed new exemption relating to an acquired property helpful? Is it reasonable to expect that issuers will use the new exemption in light of the attached conditions?

Existing exemption from site visit requirement

Subsections 6.2(2) and (3) of the Amended Instrument carry forward an exemption from the requirement for a current personal inspection of a property that is the subject of a technical report.

Question

6. Do market participants use this exemption? Should we keep it in the Amended Instrument?

Alternatives Considered

We considered maintaining the status quo. However, in recent years we have received considerable feedback from market participants on how the Current Mining Rule is working. Market participants have identified some problems they are having with the requirements and we have identified certain areas of concern. Since we adopted the original mining rule in February 2001, we have made only one set of relatively minor amendments, in 2005. Given that the rule has now been in force for nine years, during all phases of the economic cycle, we felt that it was an appropriate time to consult industry on the rule and contemplate more substantive amendments.

We considered no other alternatives.

Unpublished Materials

In developing the Amended Mining Rule, we did not rely upon any significant unpublished study, report, or other written materials, except the results of the public consultations referred to above.

Local Notices

Certain jurisdictions will publish other information required by local securities legislation in Appendix E to this Notice.

Publishing Jurisdictions

The Amended Mining Rule and the Consequential Amendments are initiatives of all CSA members. Each CSA member would replace the Current Mining Rule with the Amended Mining Rule. Each CSA member would adopt the Amended Instrument, the Amended Form, and the Consequential Amendments, as a rule, commission regulation, or regulation, and the Amended Companion Policy as a policy.

How to Provide Your Comments

Please provide your comments by **July 23, 2010**.

Please address your submission to all the CSA member commissions, as follows:

British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission – Securities Division
Manitoba Securities Commission
Ontario Securities Commission
Autorité des marchés financiers
New Brunswick Securities Commission
Registrar of Securities, Prince Edward Island
Nova Scotia Securities Commission
Securities Commission of Newfoundland and Labrador
Superintendent of Securities, Northwest Territories
Superintendent of Securities, Yukon Territory
Superintendent of Securities, Nunavut

You do not need to deliver your comments to all CSA members. Please deliver your comments **only** to the following addresses, and CSA members' staff will distribute your comments to all other jurisdictions.

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If you are not sending your comments by e-mail, please send a CD-ROM containing your comments in MS Word format.

We cannot keep submissions confidential because securities legislation in certain provinces requires that we publish a summary of the written comments received during the comment period.

Questions

If you have any questions, please refer them to any of the following:

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Appendix A
Amendments to
National Instrument 44-101 *Short Form Prospectus Distributions*

1. National Instrument 44-101 *Short Form Prospectus Distributions* is amended by this Instrument.
2. Part 4 is amended by adding the following new section:

“4.2.1 Alternative Consent - (1) Despite subparagraph 4.2(a)(vii), the issuer may file the consent of the firm that employed the qualified person at the date of signing the technical report, rather than the consent of the qualified person if

 - (a) the person named in the short form prospectus is a qualified person as defined in NI 43-101,
 - (b) the person’s consent is required in connection with a technical report that was not required to be filed with the preliminary short form prospectus, and
 - (c) the principal business of the firm is providing engineering or geoscientific services.

(2) A consent filed under subsection (1) must be signed by an individual who is an authorized signatory of the firm and who satisfies the conditions in paragraphs (a) and (c) of the definition of “qualified person” in NI 43-101.”
3. This Instrument comes into force on *.

Appendix B

Amendments to Form 51-102F1 *Management's Discussion and Analysis* and Form 51-102F2 *Annual Information Form*

1. Form 51-102F1 *Management's Discussion and Analysis* ("F1") and Form 51-102F2 *Annual Information Form* ("F2") are amended by this Instrument.
2. F1 is amended by repealing paragraph (e) of section 1.4 and substituting the following:

“(e) for resource issuers with producing mines or mines under development, identify milestones such as mine expansion plans, productivity improvements, plans to develop a new deposit, or production decisions, and whether the milestones are based on a technical report filed under National Instrument 43-101 *Standards of Disclosure for Mineral Projects*.”
3. F2 is amended by repealing Instruction (i) to Item 16 Interests of Experts.
4. This Instrument comes into force on *.

Appendix C

Amendments to National Instrument 45-106 *Prospectus and Registration Exemptions*

1. National Instrument 45-106 *Prospectus and Registration Exemptions* is amended by this Instrument.
2. Section 2.9 is amended by repealing subsection (18).
3. This Instrument comes into force on *.

Appendix D

Amendments to National Instrument 45-101 *Rights Offerings*

1. National Instrument 45-101 *Rights Offerings* is amended by this Instrument.
2. Subsection 3.1(1) is amended by repealing item 4 and substituting the following:
“4. A copy of the technical reports, certificates, and consents prepared under
National Instrument 43-101 *Standards of Disclosure for Mineral Projects*.”
3. This Instrument comes into force on *.

National Instrument 43-101
Standards of Disclosure for Mineral Projects

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National Instrument 43-101
Standards of Disclosure for Mineral Projects

PART 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions – In this Instrument

“acceptable foreign code” means the JORC Code, the PERC Code, the SAMREC Code, SEC Industry Guide 7, the Certification Code, or any other code, generally accepted in a foreign jurisdiction, that defines mineral resources and mineral reserves in a manner that is consistent with mineral resource and mineral reserve definitions and categories set out in sections 1.2 and 1.3;

“adjacent property” means a property

- (a) in which the issuer does not have an interest;
- (b) that has a boundary reasonably proximate to the property being reported on; and
- (c) that has geological characteristics similar to those of the property being reported on;

“advanced property” means a property for which

- (a) the potential economic viability of its mineral resources is supported by a preliminary economic assessment, or
- (b) the economic viability of its mineral reserves is supported by a pre-feasibility study or a feasibility study;

“Certification Code” means the Certification Code for Exploration Prospects, Mineral Resources and Ore Reserves prepared by the Mineral Resources Committee of the Institution of Mining Engineers of Chile, and the Chilean Ministry of Mining, as amended;

“data verification” means the process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used;

“development property” means a property that is being prepared for mineral production or a material expansion of current production, and for which economic viability has been demonstrated by a pre-feasibility or feasibility study;

“disclosure” means any oral statement or written disclosure made by or on behalf of an issuer and intended to be, or reasonably likely to be, made available to the public in a jurisdiction of Canada, whether or not filed under securities legislation, but does not include written disclosure that is made available to the public only by reason of having been filed with a government or agency of government pursuant to a requirement of law other than securities legislation;

“early stage exploration property” means a property for which the technical report being filed has

- (a) no current mineral resources or mineral reserves defined; and
- (b) no drilling or trenching proposed;

“effective date” means, with reference to a technical report, the date of the most recent scientific or technical information included in the technical report;

“exploration information” means geological, geophysical, geochemical, sampling, drilling, trenching, analytical testing, assaying, mineralogical, metallurgical, and other similar information concerning a particular property that is derived from activities undertaken to locate, investigate, define, or delineate a mineral prospect or mineral deposit;

“feasibility study” means a comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental, and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production;

“historical estimate” means an estimate of the quantity, grade, or metal or mineral content of a deposit that an issuer has not verified as a current mineral resource or mineral reserve, and which was prepared before the issuer acquiring, or entering into an agreement to acquire, an interest in the property that contains the deposit;

“JORC Code” means the Australasian Code for Reporting of Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia, as amended;

“mineral project” means any exploration, development or production activity, including a royalty interest in these activities, in respect of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals;

“NI 44-101” means National Instrument 44-101 *Short Form Prospectus Distributions*;

“PERC Code” means the Reporting Code for Mineral Reserves and Mineral Resources prepared by the Pan-European Reserves and Resources Reporting Committee, as amended;

“preliminary economic assessment” means a study, other than a pre-feasibility or feasibility study, that includes an economic analysis of the potential viability of mineral resources;

“preliminary feasibility study” and “pre-feasibility study” each mean a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the mineral resource may be classified as a mineral reserve;

“producing issuer” means an issuer with annual audited financial statements that disclose

- (a) gross revenues, derived from mining operations, of at least \$30 million Canadian for the issuer’s most recently completed financial year; and
- (b) gross revenues, derived from mining operations, of at least \$90 million Canadian in the aggregate for the issuer’s three most recently completed financial years;

“professional association” means a self-regulatory organization of engineers, geoscientists or both engineers and geoscientists that

- (a) is
 - (i) given authority or recognition by statute in a jurisdiction of Canada, or
 - (ii) a foreign association that is generally accepted within the international mining community as a reputable professional association;
- (b) admits individuals on the basis of their academic qualifications, experience, and ethical fitness;
- (c) requires compliance with the professional standards of competence and ethics established by the organization; and

- (d) has and applies disciplinary powers, including the power to suspend or expel a member regardless of where the member practises or resides;

“qualified person” means an individual who

- (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice;
- (b) has experience relevant to the subject matter of the mineral project and the technical report; and
- (c) is in good standing with a professional association and, in the case of a professional association in a foreign jurisdiction, has a membership designation that
 - (i) requires a university degree or equivalent accreditation in an area of geoscience, or engineering, relating to mineral exploration or mining;
 - (ii) requires attainment of a position of responsibility in their profession that requires the exercise of independent judgment;
 - (iii) requires or encourages continuing professional development; and
 - (iv) requires
 - A. a favourable confidential peer evaluation of the individual’s character, professional judgement, experience, and ethical fitness; or
 - B. a recommendation for membership by at least three peers, and at least ten years of post-degree practical experience or demonstrated prominence in the field of mineral exploration or mining;

“quantity” means either tonnage or volume, depending on which term is the standard in the mining industry for the type of mineral;

“SAMREC Code” means the South African Code for Reporting of Mineral Resources and Mineral Reserves prepared by the South African Mineral Committee (SAMREC) under the auspices of the South African Institute of Mining and Metallurgy (SAIMM), as amended;

“SEC Industry Guide 7” means the mining industry guide entitled “Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations” contained in the Securities Act Industry Guides published by the United States Securities and Exchange Commission, as amended;

“specified exchange” means the Australian Stock Exchange, the Johannesburg Stock Exchange, the London Stock Exchange Main Market, the Nasdaq Stock Market, the New York Stock Exchange, or the Hong Kong Stock Exchange;

“technical report” means a report prepared and filed in accordance with this Instrument and Form 43-101F1 Technical Report that includes, in summary form, all material scientific and technical information in respect of the subject property as of the effective date of the technical report; and

“written disclosure” includes any writing, picture, map, or other printed representation whether produced, stored or disseminated on paper or electronically, including websites.

1.2 Mineral Resource - In this Instrument, the terms “mineral resource”, “inferred mineral resource”, “indicated mineral resource” and “measured mineral resource” have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council on December 11, 2005, as amended.

1.3 Mineral Reserve - In this Instrument, the terms “mineral reserve”, “probable mineral reserve” and “proven mineral reserve” have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council on December 11, 2005, as amended.

1.4 Independence - In this Instrument, a qualified person is independent of an issuer if there is no circumstance that, in the opinion of a reasonable person aware of all relevant facts, could interfere with the qualified person’s judgment regarding the preparation of the technical report.

PART 2 REQUIREMENTS APPLICABLE TO ALL DISCLOSURE

2.1 Requirements Applicable to All Disclosure - All disclosure of scientific or technical information made by an issuer, including disclosure of a mineral resource or mineral reserve, concerning a mineral project on a property material to the issuer must be

- (a) based upon information prepared by or under the supervision of a qualified person; or
- (b) approved by a qualified person.

2.2 All Disclosure of Mineral Resources or Mineral Reserves - An issuer must not disclose any information about a mineral resource or mineral reserve unless the disclosure

- (a) uses only the applicable mineral resource and mineral reserve categories set out in sections 1.2 and 1.3;
- (b) reports each category of mineral resources and mineral reserves separately, and states the extent, if any, to which mineral reserves are included in total mineral resources;
- (c) does not add inferred mineral resources to the other categories of mineral resources; and
- (d) states the grade or quality and the quantity for each category of the mineral resources and mineral reserves if the quantity of contained metal or mineral is included in the disclosure.

2.3 Restricted Disclosure

- (1) An issuer must not disclose
 - (a) the quantity, grade, or metal or mineral content of a deposit that has not been categorized as an inferred mineral resource, an indicated mineral resource, a measured mineral resource, a probable mineral reserve, or a proven mineral reserve;
 - (b) the results of an economic analysis that includes or is based on inferred mineral resources or an estimate permitted under subsection 2.3(2) or section 2.4;
 - (c) the gross contained metal or mineral value of a deposit or a sampled interval or drill intersection; or
 - (d) a metal or mineral equivalent grade for a multiple commodity deposit, sampled interval, or drill intersection, unless it also discloses the grade of each metal or mineral used to establish the metal or mineral equivalent grade.
- (2) Despite paragraph (1)(a), an issuer may disclose in writing the potential quantity and grade, expressed as ranges, of a target for further exploration if the disclosure
 - (a) states with equal prominence that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to

define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource; and

- (b) states the basis on which the disclosed potential quantity and grade has been determined.
- (3) Despite paragraph (1)(b), an issuer may disclose a preliminary economic assessment that includes or is based on inferred mineral resources if the disclosure
- (a) states with equal prominence that the preliminary economic assessment is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized;
 - (b) states the basis for the preliminary economic assessment and any qualifications and assumptions made by the qualified person; and
 - (c) describes the impact of the preliminary economic assessment on the results of any pre-feasibility or feasibility study in respect of the subject property.
- (4) An issuer must not use the term preliminary feasibility study, pre-feasibility study, or feasibility study when referring to a study unless the study satisfies the criteria set out in the definition of the applicable term in section 1.1.

2.4 Disclosure of Historical Estimates - Despite section 2.2, an issuer may disclose an historical estimate, using the original terminology, if the disclosure

- (a) identifies the source and date of the historical estimate, including any existing technical report;
- (b) comments on the relevance and reliability of the historical estimate;
- (c) to the extent known, provides the key assumptions, parameters, and methods used to prepare the historical estimate;
- (d) states whether the historical estimate uses categories other than the ones set out in sections 1.2 and 1.3 and, if so, includes an explanation of the differences;
- (e) includes any more recent estimates or data available to the issuer;

- (f) comments on what work needs to be done to upgrade or verify the historical estimate as current mineral resources or mineral reserves; and
- (g) states with equal prominence that
 - (i) a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves; and
 - (ii) the issuer is not treating the historical estimate as current mineral resources or mineral reserves.

PART 3 ADDITIONAL REQUIREMENTS FOR WRITTEN DISCLOSURE

3.1 Written Disclosure to Include Name of Qualified Person - If an issuer discloses in writing scientific or technical information about a mineral project on a property material to the issuer, the issuer must include in the written disclosure the name and the relationship to the issuer of the qualified person who

- (a) prepared or supervised the preparation of the information that forms the basis for the written disclosure; or
- (b) approved the written disclosure.

3.2 Written Disclosure to Include Data Verification - If an issuer discloses in writing scientific or technical information about a mineral project on a property material to the issuer, the issuer must include in the written disclosure

- (a) a statement whether a qualified person has verified the data disclosed, including sampling, analytical, and test data underlying the information or opinions contained in the written disclosure;
- (b) a description of how the data was verified and any limitations on the verification process; and
- (c) an explanation of any failure to verify the data.

3.3 Requirements Applicable to Written Disclosure of Exploration Information

- (1) If an issuer discloses in writing exploration information about a mineral project on a property material to the issuer, the issuer must include in the written disclosure a summary of
 - (a) the material results of surveys and investigations regarding the property;

- (b) the interpretation of the exploration information; and
 - (c) the quality assurance program and quality control measures applied during the execution of the work being reported on.
- (2) If an issuer discloses in writing sample or analytical or testing results on a property material to the issuer, the issuer must include in the written disclosure
- (a) the location and type of the samples collected;
 - (b) the location, azimuth, and dip of any drill holes and the depth of the sample intervals;
 - (c) a summary of the relevant analytical values, widths, and to the extent known, the true widths of the mineralized zone;
 - (d) the results of any significantly higher grade intervals within a lower grade intersection;
 - (e) any drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data referred to in this subsection; and
 - (f) a summary description of the type of analytical or testing procedures utilized, sample size, the name and location of each analytical or testing laboratory used, and any relationship of the laboratory to the issuer.

3.4 Requirements Applicable to Written Disclosure of Mineral Resources and Mineral Reserves - If an issuer discloses in writing mineral resources or mineral reserves on a property material to the issuer, the issuer must include in the written disclosure

- (a) the effective date of each estimate of mineral resources and mineral reserves;
- (b) the quantity and grade or quality of each category of mineral resources and mineral reserves;
- (c) the key assumptions, parameters, and methods used to estimate the mineral resources and mineral reserves;

- (d) the identification of any known legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources or mineral reserves; and
- (e) if the disclosure includes the results of an economic analysis of mineral resources, an equally prominent statement that mineral resources that are not mineral reserves do not have demonstrated economic viability.

3.5 Exception for Written Disclosure Already Filed - Sections 3.2 and 3.3 and paragraphs (a), (c), and (d) of section 3.4 do not apply if the issuer includes in the written disclosure a reference to the title and date of a previously filed document that complies with those requirements.

PART 4 OBLIGATION TO FILE A TECHNICAL REPORT

4.1 Obligation to File a Technical Report Upon Becoming a Reporting Issuer

- (1) Upon becoming a reporting issuer in a jurisdiction of Canada an issuer must file in that jurisdiction a technical report for each mineral property material to the issuer.
- (2) Subsection (1) does not apply if the issuer is a reporting issuer in a jurisdiction of Canada and subsequently becomes a reporting issuer in another jurisdiction of Canada.
- (3) Subsection (1) does not apply if
 - (a) the issuer previously filed a technical report for the property;
 - (b) at the date the issuer becomes a reporting issuer, there is no new material scientific or technical information concerning the subject property not included in the previously filed technical report; and
 - (c) the previously filed technical report meets any independence requirements under section 5.3.

4.2 Obligation to File a Technical Report in Connection with Certain Written Disclosure about Mineral Projects on Material Properties

NOTE TO READER: The CSA is seeking comment on whether to keep or eliminate the short form prospectus trigger in (1)(b), therefore all references to the short form prospectus trigger in this draft Instrument are square-bracketed. Please see the discussion in the CSA Notice and Request for Comment dated April 23, 2010.

- (1) An issuer must file a technical report to support scientific or technical information in any of the following documents filed or made available to the public in a jurisdiction of Canada that describes a mineral project on a property material to the issuer, or in the case of paragraph (c), the resulting issuer:
 - (a) a preliminary prospectus, other than a preliminary short form prospectus filed in accordance with NI 44-101;
 - (b) [a preliminary short form prospectus filed in accordance with NI 44-101];
 - (c) an information or proxy circular concerning a direct or indirect acquisition of a mineral property where the issuer or resulting issuer issues securities as consideration;
 - (d) an offering memorandum, other than an offering memorandum delivered solely to accredited investors as defined under securities legislation;
 - (e) for a reporting issuer, a rights offering circular;
 - (f) an annual information form;
 - (g) a valuation required to be prepared and filed under securities legislation;
 - (h) an offering document that complies with and is filed in accordance with Policy 4.6 - *Public Offering by Short Form Offering Document* and Exchange Form 4H - *Short Form Offering Document*, of the TSX Venture Exchange, as amended;
 - (i) a take-over bid circular that discloses a preliminary economic assessment, mineral resources, or mineral reserves on a property material to the offeror if securities of the offeror are being offered in exchange on the take-over bid; and
 - (j) any written disclosure made by or on behalf of an issuer, other than in a document described in paragraphs (a) to (i), that discloses for the first time
 - (i) a preliminary economic assessment, mineral resources, or mineral reserves on a property material to the issuer that constitutes a material change in respect of the affairs of the issuer; or

- (ii) a change in a preliminary economic assessment, mineral resources, or mineral reserves from the most recently filed technical report that constitutes a material change in respect of the affairs of the issuer.
- (2) Subsection (1) does not apply for disclosure of an historical estimate in a document referred to in paragraph (1)(j) if the disclosure is made in accordance with subsection 2.4.
- (3) If a technical report is filed under paragraph (1)(a) [or (b)], and new material scientific or technical information concerning the subject property becomes available before the filing of the final version of the prospectus [or short form prospectus], the issuer must file an updated technical report or an addendum to the technical report with the final version of the prospectus [or short form prospectus].
- (4) The issuer must file the technical report referred to in subsection (1) not later than the time it files or makes available to the public the document listed in subsection (1) that the technical report supports.
- (5) Despite subsection (4), an issuer must
 - (a) file a technical report supporting disclosure under paragraph (1)(j) not later than 45 days after the date of the disclosure or, if the disclosure is in a directors' circular, by the earlier of 45 days after the date of the disclosure and 3 business days before expiry of the take-over bid; and
 - (b) issue a news release at the time it files the technical report disclosing the filing of the technical report and reconciling any material differences in the preliminary economic assessment, mineral resources, or mineral reserves between the technical report and the issuer's disclosure under paragraph (1)(j).
- (6) Despite subsection (4), if a property referred to in an annual information form first becomes material to the issuer less than 30 days before the filing deadline for the annual information form, the issuer must file the technical report within 45 days of the date that the property first became material to the issuer.
- (7) Despite subsections (4) and (5), an issuer is not required to file a technical report within 45 days to support disclosure under subparagraph (1)(j)(i), if
 - (a) the preliminary economic assessment, mineral resources, or mineral reserves
 - (i) were prepared by or on behalf of another issuer who holds or previously held an interest in the property;

- (ii) were disclosed by the other issuer in a document listed in subsection (1); and
 - (iii) are supported by a technical report filed by the other issuer;
 - (b) the issuer, in its disclosure under subparagraph (1)(j)(i),
 - (i) identifies the title and effective date of the previous technical report and the name of the other issuer that filed it;
 - (ii) names the qualified person who reviewed the technical report on behalf of the issuer; and
 - (iii) states with equal prominence that, to the best of the issuer's knowledge, information, and belief, there is no new material scientific or technical information that would make the disclosure of the preliminary economic assessment, mineral resources, or mineral reserves inaccurate or misleading;
 - (c) the issuer files a technical report supporting its disclosure of the preliminary economic assessment, mineral resources, or mineral reserves within 6 months of the date of its disclosure; and
 - (d) the issuer issues a news release at the time it files the technical report disclosing the filing of the technical report and reconciling any material differences in the preliminary economic assessment, mineral resources, or mineral reserves between the technical report and the issuer's disclosure under subparagraph (1)(j)(i).
- (8) Subsection (1) does not apply if
- (a) the issuer previously filed a technical report that supports the scientific or technical information in the document;
 - (b) at the date of filing the document, there is no new material scientific or technical information concerning the subject property not included in the previously filed technical report; and
 - (c) the previously filed technical report meets any independence requirements under section 5.3.

4.3 Required Form of Technical Report - A technical report that is required to be filed under this Part must be prepared

- (a) in English or French; and

- (b) in accordance with Form 43-101F1.

PART 5 AUTHOR OF TECHNICAL REPORT

- 5.1 Prepared by a Qualified Person** - A technical report must be prepared by or under the supervision of one or more qualified persons.
- 5.2 Execution of Technical Report** - A technical report must be dated, signed and, if the qualified person has a seal, sealed by

- (a) each qualified person who is responsible for preparing or supervising the preparation of all or part of the report; or
- (b) a person or company whose principal business is providing engineering or geoscientific services if each qualified person responsible for preparing or supervising the preparation of all or part of the report is an employee, officer, or director of that person or company.

5.3 Independent Technical Report

- (1) A technical report required under any of the following provisions of this Instrument must be prepared by or under the supervision of one or more qualified persons that are, at the effective and filing dates of the technical report, all independent of the issuer:
 - (a) section 4.1;
 - (b) paragraphs (a) and (g) of subsection 4.2(1); or
 - (c) paragraphs (b), (c), (d), (e), (f), (h), (i), and (j) of subsection 4.2(1), if the document discloses
 - (i) for the first time a preliminary economic assessment, mineral resources, or mineral reserves on a property material to the issuer, or
 - (ii) a 100 percent or greater change in the total mineral resources or total mineral reserves on a property material to the issuer, since the issuer's most recently filed independent technical report in respect of the property.
- (2) Despite subsection (1), a technical report required to be filed by a producing issuer under paragraph (1)(a) is not required to be prepared by or under the supervision of an independent qualified person if the securities of the issuer trade on a specified exchange.

- (3) Despite subsection (1), a technical report required to be filed by a producing issuer under paragraph (1)(b) or (c) is not required to be prepared by or under the supervision of an independent qualified person.
- (4) Despite subsection (1), a technical report required to be filed by an issuer concerning a property which is or will be the subject of a joint venture with a producing issuer is not required to be prepared by or under the supervision of an independent qualified person, if the qualified person preparing or supervising the preparation of the report relies on scientific and technical information prepared by or under the supervision of a qualified person that is an employee or consultant of the producing issuer.

PART 6 PREPARATION OF TECHNICAL REPORT

6.1 The Technical Report - A technical report must be based on all available data relevant to the disclosure that it supports.

6.2 Current Personal Inspection

- (1) Before an issuer files a technical report, the issuer must have at least one qualified person who is responsible for preparing or supervising the preparation of all or part of the technical report complete a current inspection on the property that is the subject of the technical report.
- (2) Subsection (1) does not apply to an issuer provided that
 - (a) the property that is the subject of the technical report is an early stage exploration property;
 - (b) seasonal weather conditions prevent a qualified person from accessing any part of the property or obtaining beneficial information from it; and
 - (c) the issuer discloses in the technical report, and in the disclosure that the technical report supports, that a personal inspection by a qualified person was not conducted, the reasons why, and the intended time frame to complete the personal inspection.
- (3) If an issuer relies on subsection (2), the issuer must
 - (a) as soon as practical, have at least one qualified person who is responsible for preparing or supervising the preparation of all or part of the technical report complete a current inspection on the property that is the subject of the technical report; and

- (b) promptly file a technical report and the certificates and consents required under Part 8 of this Instrument.

6.3 Maintenance of Records - An issuer must keep for 7 years copies of assay and other analytical certificates, drill logs, and other information referenced in the technical report or used as a basis for the technical report.

6.4 Limitation on Disclaimers

- (1) An issuer must not file a technical report that contains a disclaimer by any qualified person responsible for preparing or supervising the preparation of all or part of the report that
 - (a) disclaims responsibility for, or reliance by another party on, any information in the part of the report the qualified person prepared or supervised the preparation of; or
 - (b) limits the use or publication of the report in a manner that interferes with the issuer's obligation to reproduce the report by filing it on SEDAR.
- (2) Despite subsection (1), an issuer may file a technical report that includes a disclaimer in accordance with Item 3 of Form 43-101F1.

PART 7 USE OF FOREIGN CODE

7.1 Use of Foreign Code - Despite section 2.2, an issuer may make disclosure and file a technical report that uses the mineral resource and mineral reserve categories of an acceptable foreign code, if the issuer

- (a) is incorporated or organized in a foreign jurisdiction; or
- (b) is incorporated or organized under the laws of Canada or a jurisdiction of Canada, for its properties located in a foreign jurisdiction.

PART 8 CERTIFICATES AND CONSENTS OF QUALIFIED PERSONS FOR TECHNICAL REPORTS

8.1 Certificates of Qualified Persons

- (1) An issuer must, when filing a technical report, file a certificate that is dated, signed, and if the signatory has a seal, sealed, of each qualified person responsible for preparing or supervising the preparation of all or part of the technical report.

- (2) A certificate under subsection (1) must state
 - (a) the name, address, and occupation of the qualified person;
 - (b) the title and effective date of the technical report to which the certificate applies;
 - (c) the qualified person's qualifications, including a brief summary of relevant experience, the name of all professional associations to which the qualified person belongs, and that the qualified person is a "qualified person" for purposes of this Instrument;
 - (d) the date and duration of the qualified person's most recent personal inspection of each property, if applicable;
 - (e) the item or items of the technical report for which the qualified person is responsible;
 - (f) whether the qualified person is independent of the issuer as described in section 1.4;
 - (g) what prior involvement, if any, the qualified person has had with the property that is the subject of the technical report;
 - (h) that the qualified person has read this Instrument and the technical report, or part that the qualified person is responsible for, has been prepared in compliance with this Instrument; and
 - (i) that, at the effective date of the technical report, to the best of the qualified person's knowledge, information, and belief, the technical report, or part that the qualified person is responsible for, contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

8.2 Addressed to Issuer - All technical reports must be addressed to the issuer.

8.3 Consents of Qualified Persons

- (1) An issuer must, when filing a technical report, file a statement of each qualified person responsible for preparing or supervising the preparation of all or part of the technical report, dated, and signed by the qualified person
 - (a) consenting to the public filing of the technical report;
 - (b) identifying the document that the technical report supports;

- (c) consenting to the use of extracts from, or a summary of, the technical report in the document; and
 - (d) confirming that the qualified person has read the document and that it fairly and accurately represents the information in the technical report or part that the qualified person is responsible for.
- (2) Paragraphs (1)(b), (c), and (d) do not apply to a consent filed with a technical report filed under section 4.1.
- (3) If an issuer relies on subsection (2), the issuer must file an updated consent that includes paragraphs (1)(b), (c), and (d) for any subsequent use of the technical report to support disclosure in a document filed under subsection 4.2(1).

PART 9 EXEMPTIONS

9.1 Authority to Grant Exemptions

- (1) The regulator or the securities regulatory authority may, on application, grant an exemption from this Instrument, in whole or in part, subject to such conditions or restrictions as may be imposed in the exemption in response to an application.
- (2) Despite subsection (1), in Ontario, only the regulator may grant such an exemption.
- (3) Except in Ontario, an exemption referred to in subsection (1) is granted under the statute referred to in Appendix B to National Instrument 14-101 *Definitions* opposite the name of the local jurisdiction.

9.2 Exemptions for Royalty Interests

- (1) An issuer whose interest in a mineral project is only a royalty interest is not required to file a technical report to support disclosure in a document under subsection 4.2(1) if
 - (a) the operator of the mineral project is
 - (i) subject to the requirements of this Instrument, or
 - (ii) a producing issuer whose securities trade on a specified exchange and that discloses mineral resources and mineral reserves under an acceptable foreign code;

- (b) the issuer identifies in its document under subsection 4.2(1) the source of the scientific and technical information; and
 - (c) the operator of the mineral project has disclosed the scientific and technical information.
- (2) An issuer whose interest in a mineral project is only a royalty interest and that does not qualify to use the exemption in subsection (1) is not required to
- (a) comply with section 6.2; and
 - (b) complete those items under Form 43-101F1 that require data verification, inspection of documents, or personal inspection of the property to complete those items.
- (3) Paragraphs (2)(a) and (b) only apply if the issuer
- (a) has requested but has not received access to the necessary data from the operating company and is not able to obtain the necessary information from the public domain;
 - (b) under Item 3 of Form 43-101F1, states the issuer has requested but has not received access to the necessary data from the operating company and is not able to obtain the necessary information from the public domain and describes the content referred to under each item of Form 43-101F1 that the issuer did not complete; and
 - (c) includes in all scientific and technical disclosure a statement that the issuer has an exemption from completing certain items under Form 43-101F1 in the technical report required to be filed and includes a reference to the title and effective date of that technical report.

9.3 Exemption for Certain Types of Filings - This Instrument does not apply if the only reason an issuer files written disclosure of scientific or technical information is to comply with the requirement under securities legislation to file a copy of a record or disclosure material that was filed with a securities commission, exchange, or regulatory authority in another jurisdiction.

PART 10 EFFECTIVE DATE AND REPEAL

10.1 Effective Date - This Instrument comes into force on *.

10.2 Repeal - National Instrument 43-101 *Standards of Disclosure for Mineral Projects*, which came into force on December 31, 2005, is repealed.

Form 43-101F1
Technical Report

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Technical Report

INSTRUCTIONS:

- (1) *The objective of the technical report is to provide a summary of material scientific and technical information concerning mineral exploration, development, and production activities on a mineral property that is material to an issuer. This Form sets out the requirements for the preparation and content of a technical report.*
- (2) *Terms used in this Form that are defined or interpreted in National Instrument 43-101 Standards of Disclosure for Mineral Projects (the “Instrument”) will have that definition or interpretation. In addition, a general definition instrument has been adopted as National Instrument 14-101 Definitions that contains definitions of certain terms used in more than one national instrument. Readers of this Form should review both these national instruments for defined terms.*
- (3) *The qualified person preparing the technical report should keep in mind that the intended audience is the investing public and their advisors who, in most cases, will not be mining experts. Therefore, to the extent possible, technical reports should be simplified, summarized, and written in plain language. However, the technical report should include sufficient context and cautionary language to allow a reasonable investor to understand the nature, importance, and limitations of the data, interpretations, and conclusions summarized in the technical report.*
- (4) *The qualified person preparing the technical report must use all of the headings of Items 1 to 14 and 23 to 27 in this Form and provide the information specified under each heading. For advanced properties, the qualified person must also use the headings of Items 15 to 22 and include the information required under each of these headings. The qualified person may create sub-headings. Disclosure included under one heading is not required to be repeated under another heading.*
- (5) *The qualified person preparing the technical report may refer to information in a technical report previously filed by the issuer for the subject property if the information is still current and the technical report identifies the title, date and author of the previously filed technical report. However, the qualified person must still summarize or quote the referenced information in the current technical report and may not disclaim responsibility for the referenced information. Except as permitted by subsection 4.2(3) of the Instrument, an issuer may not update or revise a previously filed technical report by filing an addendum.*
- (6) *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.*

- (7) *The technical report may only contain disclaimers that are in accordance with section 6.4 of the Instrument and Item 3 of this Form.*
- (8) *Since a technical report is a summary document the inclusion and filing of comprehensive appendices is not generally necessary to comply with the requirements of the Form.*
- (9) *The Instrument requires certificates and consents of qualified persons, prepared in accordance with sections 8.1 and 8.3 respectively, 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.*

CONTENTS OF THE TECHNICAL REPORT

Title Page - Include a title page setting out the title of the technical report, the general location of the mineral project, the name and professional designation of each qualified person, and the effective date of the technical report.

Date and Signature Page – The technical report must have a signature page, at either the beginning or end of the technical report, signed in accordance with section 5.2 of the Instrument. The effective date of the technical report and date of signing must be on the signature page.

Table of Contents - Provide a table of contents listing the contents of the technical report, including figures and tables.

Illustrations – Technical reports must be illustrated by legible maps, plans and sections, all prepared at an appropriate scale to distinguish important features. Maps must be dated and include a legend, author or information source, a scale in bar or grid form, and an arrow indicating north. All technical reports must be accompanied by a location or index map and a compilation map outlining the general geology of the property. In addition, all technical reports must include more detailed maps showing all important features described in the text, relative to the property boundaries, including but not limited to

- (a) for exploration projects, areas of previous or historical exploration, and the location of known mineralization, geochemical or geophysical anomalies, drilling, and mineral deposits;
- (b) for advanced properties other than development and production properties, the location and surficial outline of mineral resources, mineral reserves, and, to the extent known, areas for potential access and infrastructure; and
- (c) for development and production properties, the location of pit limits or underground development, plant sites, tailings storage areas, waste disposal areas, and all other significant infrastructure features.

If information is used from other sources in preparing maps, drawings, or diagrams, disclose the source of the information. If adjacent or nearby properties have an important bearing on the potential of the subject property, the location of the properties and any relevant mineralized structures discussed in the report must be shown in relationship to the subject property.

***INSTRUCTION:** Summarize and simplify the illustrations so that they are legible and suitable for electronic filing. For ease of reference, consider inserting the illustration in the text of the report in relative proximity to the text they illustrate.*

Requirements for All Technical Reports

Item 1: Summary – Briefly summarize important information in the technical report, including property description and ownership, geology and mineralization, the status of exploration, development and operations, mineral resource and mineral reserve estimates, and the qualified person’s conclusions and recommendations.

Item 2: Introduction - Include a description of

- (a) the issuer for whom the technical report is prepared;
- (b) the terms of reference and purpose for which the technical report was prepared;
- (c) the sources of information and data contained in the technical report or used in its preparation, with citations if applicable; and
- (d) the details of the personal inspection on the property by each qualified person or, if applicable, the reason why a personal inspection has not been completed.

Item 3: Reliance on Other Experts - A qualified person who prepares or supervises the preparation of all or part of a technical report may include a limited disclaimer of responsibility if:

- (a) The qualified person is relying on a report, opinion, or statement of another expert who is not a qualified person, or on information provided by the issuer, concerning legal, political, environmental, or tax matters relevant to the technical report, and the qualified person identifies
 - (i) the source of the information relied upon, including the date, title, and author of any report, opinion, or statement;
 - (ii) the extent of reliance; and
 - (iii) the portions of the technical report to which the disclaimer applies.
- (b) The qualified person is relying on a report, opinion, or statement of another expert who is not a qualified person, concerning diamond or other gemstone valuations, or the pricing of commodities for which pricing is not publicly available, and the qualified person discloses

- (i) the date, title, and author of the report, opinion, or statement;
- (ii) the qualifications of the other expert and why it is reasonable for the qualified person to rely on the other expert;
- (iii) any significant risks associated with the valuation or pricing; and
- (iv) any steps the qualified person took to verify the information provided.

Item 4: Property Description and Location - To the extent applicable, describe

- (a) the area of the property in hectares or other appropriate units;
- (b) the location, reported by an easily recognizable geographic and grid location system;
- (c) the type of mineral tenure (claim, license, lease, etc.) and the identifying name or number of each;
- (d) the nature and extent of the issuer's title to, or interest in, the property including surface rights, legal access, the obligations that must be met to retain the property, and the expiration date of claims, licences, or other property tenure rights;
- (e) to the extent known, the terms of any royalties, back-in rights, payments, or other agreements and encumbrances to which the property is subject;
- (f) to the extent known, all environmental liabilities to which the property is subject;
- (g) to the extent known, the permits that must be acquired to conduct the work proposed for the property, and if the permits have been obtained; and
- (h) to the extent known, any other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

Item 5: Accessibility, Climate, Local Resources, Infrastructure and Physiography - Describe

- (a) topography, elevation, and vegetation;
- (b) the means of access to the property;
- (c) the proximity of the property to a population centre, and the nature of transport;
- (d) to the extent relevant to the mineral project, the climate and the length of the operating season; and
- (e) to the extent relevant to the mineral project, the sufficiency of surface rights for mining operations, the availability and sources of power, water, mining personnel,

potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.

Item 6: History - To the extent known, describe

- (a) the prior ownership of the property and ownership changes;
- (b) the type, amount, quantity, and general results of exploration and development work undertaken by any previous owners or operators;
- (c) historical mineral resource and mineral reserve estimates in accordance with section 2.4 of the Instrument; and
- (d) any production from the property.

Item 7: Geological Setting and Mineralization - Describe

- (a) the regional, local, and property geology; and
- (b) the significant mineralized zones encountered on the property, including a summary of the surrounding rock types, relevant geological controls, and the length, width, depth, and continuity of the mineralization, together with a description of the type, character, and distribution of the mineralization.

Item 8: Deposit Types - Describe the mineral deposit type(s) being investigated or being explored for and the geological model or concepts being applied in the investigation and on the basis of which the exploration program is planned.

Item 9: Exploration – Briefly describe the nature and extent of all relevant exploration work other than drilling, conducted by or on behalf of, the issuer, including

- (a) the procedures and parameters relating to the surveys and investigations;
- (b) the sampling methods and sample quality, including whether the samples are representative, and any factors that may have resulted in sample biases;
- (c) relevant information of location, number, type, nature, and spacing or density of samples collected, and the size of the area covered; and
- (d) the significant results and interpretation of the exploration information.

INSTRUCTION: *If exploration results from previous operators are included, clearly identify the work conducted by or on behalf of the issuer.*

Item 10: Drilling - Describe

- (a) the type and extent of drilling including the procedures followed and a summary and interpretation of all relevant results;

- (b) any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results;
- (c) for a property other than an advanced property
 - (i) the location, azimuth, and dip of any drill hole, and the depth of the relevant sample intervals;
 - (ii) the relationship between the sample length and the true thickness of the mineralization, if known, and if the orientation of the mineralization is unknown, state this; and
 - (iii) the results of any significantly higher grade intervals within a lower grade intersection.

INSTRUCTION: *For properties with mineral resource estimates, the qualified person may meet the requirements under Item 10 (c) by providing a drill plan and representative examples of drill sections through the mineral deposit.*

Item 11: Sample Preparation, Analyses, and Security – Describe

- (a) sample preparation methods and quality control measures employed before dispatch of samples to an analytical or testing laboratory, the method or process of sample splitting and reduction, and the security measures taken to ensure the validity and integrity of samples taken;
- (b) relevant information regarding sample preparation, assaying and analytical procedures used, the name and location of the analytical or testing laboratories, the relationship of the laboratory to the issuer, and whether the laboratories are certified by any standards association and the particulars of any certification;
- (c) a summary of the nature, extent, and results of quality control procedures employed and quality assurance actions taken or recommended to provide adequate confidence in the data collection and estimation process; and
- (d) the author's opinion on the adequacy of sample preparation, security, and analytical procedures.

Item 12: Data Verification – Describe the steps taken by the qualified person to verify the data being reported on, including

- (a) the data verification procedures applied by the qualified person;
- (b) any limitations on or failure to conduct such verification, and the reasons for any such limitations or failure; and
- (c) the qualified person's opinion on the adequacy of the data for the purposes used in the technical report.

Item 13: Mineral Processing and Metallurgical Testing - If mineral processing or metallurgical testing analyses have been carried out, discuss

- (a) the nature and extent of the testing and analytical procedures, and provide a summary of the relevant results;
- (b) the basis for any assumptions or predictions regarding recovery estimates;
- (c) to the extent known, the degree to which the test samples are representative of the various types and styles of mineralization and the mineral deposit as a whole; and
- (d) to the extent known, any processing factors or deleterious elements that could have a significant effect on potential economic extraction.

Item 14: Mineral Resource Estimates – A technical report disclosing mineral resources must

- (a) provide sufficient discussion of the key assumptions, parameters, and methods used to estimate the mineral resources, for a reasonably informed reader to understand the basis for the estimate and how it was generated;
- (b) comply with all disclosure requirements for mineral resources set out in the Instrument, including sections 2.2, 2.3, and 3.4;
- (c) when the grade for a multiple commodity mineral resource is reported as metal or mineral equivalent, report the individual grade of each metal or mineral and the metal prices, recoveries, and any other relevant conversion factors used to estimate the metal or mineral equivalent grade; and
- (d) include a general discussion on the extent to which the mineral resource estimates could be materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors.

INSTRUCTIONS:

- (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 mineral resources reported under the cut-off grade scenarios must meet the test of reasonable prospect of economic extraction.*

Additional Requirements for Advanced Property Technical Reports

Item 15: Mineral Reserve Estimates - A technical report disclosing mineral reserves must

- (a) provide sufficient discussion and detail of the key assumptions, parameters, and methods used in the preliminary feasibility or feasibility study, for a reasonably

informed reader to understand how the qualified person converted the mineral resources to mineral reserves;

- (b) comply with all disclosure requirements for mineral reserves set out in the Instrument, including sections 2.2, 2.3, and 3.4;
- (c) when the grade for a multiple commodity mineral reserve is reported as metal or mineral equivalent, report the individual grade of each metal or mineral and the metal prices, recoveries, and any other relevant conversion factors used to estimate the metal or mineral equivalent grade; and
- (d) discuss the extent to which the mineral reserve estimates could be materially affected by mining, metallurgical, infrastructure, permitting, and other relevant factors.

Item 16: Mining Methods – Discuss the current or proposed mining methods and provide a summary of the relevant information used to establish the amenability or potential amenability of the mineral resources or mineral reserves to the proposed mining methods. Consider and, where relevant, include

- (a) geotechnical, hydrological, and other parameters relevant to mine or pit designs and plans;
- (b) production rates, expected mine life, mining unit dimensions, and mining dilution factors used;
- (c) requirements for stripping, underground development, and backfilling; and
- (d) required mining fleet and machinery.

INSTRUCTION: *Preliminary economic assessments, pre-feasibility studies, and feasibility studies 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 three studies.*

Item 17: Recovery Methods – Discuss reasonably available information on test or operating results relating to the recoverability of the valuable component or commodity and amenability of the mineralization to the proposed processing methods. Consider and, where relevant, include

- (a) a description or flow sheet of any current or proposed process plant;
- (b) plant design, equipment characteristics and specifications, as applicable; and
- (c) current or projected requirements for energy, water, and process materials.

Item 18: Infrastructure – Provide a summary of infrastructure and logistic requirements for the project, which could include roads, rail, port facilities, dams, dumps and leach pads, tailings disposal, power and pipelines, as applicable.

Item 19: Market Studies and Contracts

- (a) Provide a summary of reasonably available information concerning markets for the issuer's production, including the nature and material terms of any agency relationships and the results of any relevant market studies, commodity price projections, product valuation, market entry strategies, and product specification requirements.
- (b) Identify any contracts material to the issuer that are required for property development, including mining, concentrating, smelting, refining, transportation, handling, sales and hedging, and forward sales contracts or arrangements. State which contracts are in place and which are still under negotiation. For contracts that are in place, discuss whether the terms, rates or charges are within industry norms.

Item 20: Environmental Studies, Permitting, and Social or Community Impact - Discuss reasonably available information on environmental, permitting, and social or community factors related to the project. Consider and, where relevant, include

- (a) a summary of the results of any environmental studies and a discussion of any known environmental issues that could materially impact the issuer's ability to extract the mineral resources or mineral reserves;
- (b) requirements and plans for waste and tailings disposal, site monitoring, and water management both during operations and post mine closure;
- (c) project permitting requirements, the status of any permit applications, and any known requirements to post performance or reclamation bonds;
- (d) a discussion of any potential social or community related requirements and plans for the project and the status of any negotiations or agreements with local communities; and
- (e) a discussion of mine closure (remediation and reclamation) requirements and costs.

Item 21: Capital and Operating Costs – Provide a summary of capital and operating cost estimates, with the major components set out in tabular form. Explain and justify the basis for the cost estimates.

Item 22: Economic Analysis – Provide an economic analysis for the project that includes

- (a) a clear statement of and justification for the principal assumptions;

- (b) cash flow forecasts on an annual basis using mineral reserves or mineral resources and an annual production schedule for the life of project;
- (c) a discussion of net present value (NPV), internal rate of return (IRR), and payback period of capital with imputed or actual interest;
- (d) a summary of the taxes, royalties, and other government levies or interests applicable to the mineral project or to production, and to revenues or income from the mineral project; and
- (e) sensitivity or other analysis using variants in commodity price, grade, capital and operating costs, or other significant parameters, as appropriate, and discuss the impact of the results.

INSTRUCTIONS:

- (1) *Producing issuers may exclude the information required under Item 22 for technical reports on properties currently in production unless the technical report includes a material expansion of current production.*
- (2) *The economic analysis in technical reports must comply with paragraphs 2.3(1)(b) and (c), subsections 2.3(3) and (4), and paragraph 3.4(e), of the Instrument, including any required cautionary language.*

Requirements for All Technical Reports

Item 23: Adjacent Properties - A technical report may include relevant information concerning an adjacent property if

- (a) such information was publicly disclosed by the owner or operator of the adjacent property;
- (b) the source of the information is identified;
- (c) the technical report states that its qualified person has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the property that is the subject of the technical report;
- (d) the technical report clearly distinguishes between the information from the adjacent property and the information from the property that is the subject of the technical report; and
- (e) any historical estimates of mineral resources or mineral reserves are disclosed in accordance with section 2.4 of the Instrument.

Item 24: Other Relevant Data and Information - Include any additional information or explanation necessary to make the technical report understandable and not misleading.

Item 25: Interpretation and Conclusions - Summarize the relevant results and interpretations of the information and analysis being reported on. Discuss any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information, mineral resource or mineral reserve estimates, or projected economic outcomes. Discuss any reasonably foreseeable impacts of these risks and uncertainties to the project's potential economic viability or continued viability. A technical report concerning exploration information must include the conclusions of the qualified person.

Item 26: Recommendations - Provide particulars of recommended work programs and a breakdown of costs for each phase. If successive phases of work are recommended, each phase must culminate in a decision point. The recommendations must not apply to more than two phases of work. The recommendations must state whether advancing to a subsequent phase is contingent on positive results in the previous phase.

***INSTRUCTION:** 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 producing or development properties 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.*

Item 27: References - Include a detailed list of all references cited in the technical report.

**Companion Policy 43-101CP
to National Instrument 43-101
*Standards of Disclosure for Mineral Projects***

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**Companion Policy 43-101CP
to National Instrument 43-101
*Standards of Disclosure for Mineral Projects***

This companion policy (the “Policy”) sets out the views of the Canadian securities regulatory authorities (the “securities regulatory authorities” or “we”) as to how we interpret and apply certain provisions of National Instrument 43-101 and Form 43-101F1 (the “Instrument”).

GENERAL GUIDANCE

- (1) **Application of the Instrument** – The definition of “disclosure” in the Instrument includes oral and written disclosure. 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, 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 1.1 of the Instrument.
- (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 must comply with the requirements of Part 4A of NI 51-102, including identifying 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 preliminary economic assessments, pre-feasibility studies, and feasibility studies.
- (4) **Materiality** – An issuer should determine materiality in the context of the issuer's overall business and financial condition taking into account qualitative and quantitative factors, assessed in respect of the issuer as a whole.

In making materiality judgements, 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 in light of 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) **Property Material to the Issuer** – An actively trading mining issuer, in most circumstances, will have at least one material property. We will generally assess an issuer’s view of the materiality of a property based on the issuer’s disclosure record, its deployment of resources, and other indicators. For example, we will likely conclude that a property is material if
- (a) the issuer’s disclosure record is focused on the property;
 - (b) the issuer’s disclosure 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 material properties; or
 - (d) the issuer is raising significant money or devoting significant resources to the exploration and development of the property.

In determining if a property is material, the issuer should consider how important or significant the property is to the issuer’s overall business and in comparison to its other properties. For example

- (a) more advanced stage properties will, in most cases, be more material than earlier stage properties;
 - (b) historical expenditures or book value might not be a good indicator of materiality for an inactive property if the issuer is focussing its resources on new properties;
 - (c) a small interest in a sizeable property might, in the circumstances, not be material to the issuer;
 - (d) a royalty interest in an advanced property could be material to the issuer in comparison to its active projects; or
 - (e) several non-material properties in an area or region, when taken as a whole, could be material to the issuer.
- (6) **Industry Best Practices 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. The Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) has published and adopted several industry best practice guidelines to assist qualified persons and other industry practitioners. These guidelines, as amended and supplemented, are posted on www.cim.org, and include

- (a) Exploration Best Practice Guidelines – adopted August 20, 2000;
- (b) Guidelines for Reporting of Diamond Exploration Results – adopted March 9, 2003;
- (c) Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines – adopted November 23, 2003; and
- (d) Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines – Guidelines Specific to Particular Commodities – Rock Hosted Diamonds – adopted May 4, 2008.

The Instrument does not specifically require the qualified person to follow the CIM best practices 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 generally 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.

- (7) **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.
- (8) **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 meaning 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.

PART 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

- (1) **“acceptable foreign code”** – The definition of “acceptable foreign code” in the Instrument lists five internationally recognized foreign codes that govern the estimation and disclosure of mineral resources and mineral reserves. The JORC Code, PERC Code, SAMREC Code, and Certification Code use mineral resource and mineral reserve definitions and categories that are substantially the same as

the CIM definitions mandated in the Instrument. These codes also use mineral resource and mineral reserve categories that are based on or consistent with the International Reporting Template, published in July 2006 by the Committee for Mineral Reserves International Reporting Standards (“the CRIRSCO Template”), as amended.

We think other foreign codes will generally meet the test in the definition if they

- (a) have been adopted or recognized by appropriate government authorities or professional organizations in the foreign jurisdiction; and
 - (b) use mineral resource and mineral reserve categories that are based on the CRIRSCO Template, and are substantially the same as the CIM definitions mandated in the Instrument, the JORC Code, the PERC Code, the SAMREC Code, and the Certification Code, as amended and supplemented.
- (2) **“mineral project”** – The definition of “mineral project” in the Instrument includes a royalty interest. Scientific and technical disclosure regarding all types of royalty interests in a mineral project is subject to the Instrument. We consider a ‘royalty interest’ to include gross overriding royalty, net smelter return, net profit interest, free carried interest, and a product tonnage royalty.
- (3) **“preliminary economic assessment”** – The term “preliminary economic assessment”, commonly referred to as a scoping study, is defined in the Instrument. A preliminary economic assessment might be based on measured, indicated, or inferred mineral resources, or a combination of any of these. We consider these types of economic analyses to include disclosure of forecast mine production rates that might contain capital costs to develop and sustain the mining operation, operating costs, and projected cash flows.
- (4) **“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. Appendix A to the Policy provides a list of the foreign associations that we think meet this test as of the effective date of the Instrument. We anticipate updating the list periodically. In assessing whether we think other foreign professional associations meet the test, we will consider the reputation of the association, the degree to which the association satisfies paragraphs (b), (c) and (d) of the definition, and whether it is substantially similar to a professional association in a jurisdiction of Canada.

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.

- (5) **definitions that include “property”** – The Instrument defines different types of properties (early stage exploration, development, advanced) and requires a technical report to summarize material information about the subject property.

We consider a property, in the context of the Instrument, to include multiple mineral claims or other documents of title that are contiguous or in such close proximity that any underlying mineral deposits would likely be developed using common infrastructure.

- (6) **“qualified person”** – The definition of “qualified person” in the Instrument does not include engineering and geoscience technicians, engineers and geoscientists in training, and equivalent designations that restrict the individual’s scope of practice or require the individual to practise under the supervision of another professional engineer, professional geoscientist, or equivalent.

Canadian provincial and territorial legislation requires a qualified person to be registered if practising in a jurisdiction of Canada. It is the responsibility of the qualified person, in compliance with their professional association’s code of ethics, to comply with laws requiring licensure of geoscientists and engineers.

Paragraph (c) of the definition includes a test for what constitutes an acceptable membership designation in a foreign professional association. Appendix A to the Policy provides a list of the membership designations that we think meet this test as of the effective date of the Instrument. We anticipate updating the list periodically. In assessing whether we think a membership designation meets the test, we will consider whether it is substantially similar to a membership designation in a professional association in a jurisdiction of Canada.

- (7) **“technical report”** – A report may constitute a “technical report” as defined in the Instrument, even if prepared considerably 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 the Instrument requires the issuer to file it and the issuer has filed the required certificates and consents of qualified persons.

The definition requires the technical report to include a summary of all material information about the subject property. 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 materiality of the scientific or technical information to be included in the technical report.

1.4 Independence

- (1) **Guidance on Independence** – Section 1.4 of the Instrument provides the test an issuer and a qualified person must apply to determine whether a qualified person is independent of the issuer. When an independent qualified person is required, an issuer must always apply the test in section 1.4 to confirm that the requirement is met.

Applying this test, the following are examples of when we would consider that a qualified person is not independent. These examples are not a complete list of non-independence situations.

We consider a qualified person is not independent when the qualified person

- (a) is an employee, insider, or director of the issuer;
- (b) is an employee, insider, or director of a related party of the issuer;
- (c) is a partner of any 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;
- (e) holds or expects to hold securities, either directly or indirectly, in another issuer that has a direct or indirect interest in the property that is the subject of the technical report or in an adjacent property;
- (f) is an employee, insider, or director of another issuer that has a direct or indirect interest in the property that is the subject of the technical report or in an adjacent property;
- (g) has or expects to have, directly or indirectly, an ownership, royalty, or other interest in the property that is the subject of the technical report or an adjacent property; or
- (h) has received the majority of their income, either directly or indirectly, in the three years preceding the date of the technical report from the issuer or a related party of the issuer.

For the purposes of (d) above, a related party of the issuer means an affiliate, associate, subsidiary, or control person of the issuer as those terms are defined in securities legislation.

- (2) **Independence Not Compromised** – In some cases, it might be reasonable to consider the qualified person's 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 property, or in an adjacent property. The issuer needs to determine whether a reasonable person would consider such interest would interfere with the qualified person's judgement regarding the preparation of the technical report.

PART 2 REQUIREMENTS APPLICABLE TO ALL DISCLOSURE

2.1 Requirements Applicable to All Disclosure

- (1) **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 document filed with a securities regulatory authority, each signatory to the document, to ensure that disclosure in the document is consistent with the related technical report or advice. 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.

- (2) **Material Information not yet 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.

- (3) **Use of Plain Language** – An issuer should apply plain language principles when preparing disclosure regarding mineral projects on its material properties, keeping in mind that the investing public are often not mining experts. An issuer should present written disclosure 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.

2.2 All Disclosure of Mineral Resources or Mineral Reserves – Use of GSC Paper 88-21 – A qualified person estimating mineral resources or mineral reserves for coal may

follow the guidelines of Paper 88-21 of the Geological Survey of Canada: A Standardized Coal Resource/Reserve Reporting System for Canada, as amended (“Paper 88-21”). However, for all disclosure of mineral resources or mineral reserves for coal, section 2.2 of the Instrument requires an issuer to use the equivalent mineral resource or mineral reserve categories set out in the CIM Definition Standards and not the categories set out in Paper 88-21.

2.3 Restricted Disclosure

- (1) **Economic Analysis** – Paragraph 2.3(1)(b) of the Instrument prohibits the disclosure of the results of an economic analysis (including a preliminary economic assessment, a pre-feasibility study, and a feasibility study) that includes or is based on inferred mineral resources, a historical estimate, or an exploration target.

CIM considers the 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. The Instrument extends this prohibition to exploration targets because such targets are conceptual and have even less confidence than inferred mineral resources. The Instrument also extends the prohibition to historical estimates because they have not been demonstrated or verified to the standards required for mineral resources or mineral reserves and, therefore, cannot be used in an economic analysis suitable for public disclosure.

- (2) **Exceptions** – The Instrument permits an issuer to disclose the results of an economic analysis that uses inferred mineral resources, provided the issuer complies with the requirements of subsection 2.3(3). The issuer must also include the cautionary statement under paragraph 3.4(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 2.3(3) does not allow an issuer to disclose the results of an economic analysis using an exploration target or an historical estimate.
- (3) **Cautionary Language and Explanations** – The requirements of subsections 2.3(2), 2.3(3), and 3.4(e) of the Instrument mean the issuer must include the required cautionary statements and explanations each time it makes the disclosure permitted by these exceptions. These subsections 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.

2.4 Disclosure of Historical Estimates

- (1) **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

property, provided the issuer complies with the conditions set out in section 2.4 of the Instrument. Under this requirement, 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 (see the discussion in subsection 2.3(3) of the Policy).

- (2) **Source and Date** – Under paragraph 2.4(a) of the Instrument, the issuer must disclose the source and date of the historical estimate. This means 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.
- (3) **Suitability for Public Disclosure** – Under paragraph 2.4(b) of the Instrument, an issuer that discloses a historical estimate must comment on its relevance and reliability. In determining whether to disclose a historical estimate, an issuer should consider whether the historical estimate is suitable for public disclosure.
- (4) **Technical Report Trigger** – The disclosure of an historical estimate will not trigger the requirement to file a technical report under paragraph 4.2(1)(j) of the Instrument if the issuer discloses the historical estimate in accordance with section 2.4 of the Instrument, including the cautionary statements required under paragraph 2.4(g).

An issuer could trigger the filing of a technical report under paragraph 4.2(1)(j) 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 an issuer is treating the historical estimate as a current mineral resource or mineral reserve in its disclosure if, for example, it

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

If the issuer discloses the historical estimate as a current mineral resource or mineral reserve, it will trigger the requirement to file a current technical report within the 45-day period set out in subsection 4.2(5) of the Instrument if

- (a) the property is material to the issuer; and
- (b) the property acquisition or determination of the mineral resources or mineral reserves is a material change in the affairs of the issuer.

PART 3 ADDITIONAL REQUIREMENTS FOR WRITTEN DISCLOSURE

3.3 Requirements Applicable to Written Disclosure of Exploration Information – Adjacent Property Information – It is an offence under securities legislation to make misleading disclosure. An issuer may disclose in writing scientific and technical information about an adjacent property. However, in order for the disclosure not to be misleading, the issuer should clearly distinguish between the information from the adjacent property and its own property and not state or infer the issuer will obtain similar information from its own property.

3.5 Exception for Written Disclosure Already Filed – Section 3.5 of the Instrument provides that the disclosure requirements of sections 3.2 and 3.3 and paragraphs 3.4(a) and (c) of the Instrument may be satisfied by referring to a previously filed document that includes the required disclosure. However, the disclosure as a whole must be factual, complete, and balanced and not present or omit information in a manner that is misleading.

PART 4 OBLIGATION TO FILE A TECHNICAL REPORT

4.2 Obligation to File a Technical Report in Connection with Certain Written Disclosure about Mineral Projects on Material Properties

(1) Information Circular Trigger (4.2(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 4.2(1)(c) of the Instrument requires the issuer to file technical reports for properties 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 property, the issuer should consider if the property 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 properties are filed on the resulting issuer’s SEDAR profile or the SEDAR profile of a wholly-owned subsidiary.

- (2) **First Time Disclosure Trigger (4.2(1)(j)(i))** – In most cases, we think that first time disclosure of a preliminary economic assessment, mineral resources, or mineral reserves on a property material to the issuer will constitute a material change in the affairs of the issuer.
- (3) **Property Acquisitions – 45-Day Filing Requirement** – Subsection 4.2(5) of the Instrument requires an issuer in certain cases to file a technical report within 45 days to support first time disclosure of a preliminary economic assessment, mineral resources, or mineral reserves on a property material to the issuer. Property materiality is not contingent on the issuer having acquired an actual interest in the property or having formal agreements in place. In many cases, the property 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 resource, mineral reserve, or preliminary economic assessment.
- (4) **Property Acquisitions – Other Alternatives for Disclosure of Previous Estimates** – If an issuer options or agrees to buy a property material to the issuer, any previous estimates of mineral resources or mineral reserves on the property will be in many 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 2.3(2) of the Instrument. Alternatively, the issuer may be able to disclose the previous estimate as a historical estimate, in compliance with section 2.4 of the Instrument. Both these options require the issuer to include certain cautionary language and prohibit 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 or mineral reserve, in compliance with subsection 4.2(7) of the Instrument. In this case, the issuer will still be required to file a technical report. However, it will have up to six months to do so.

- (5) **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, based on information provided by qualified persons. 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 comprehensive 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 supported by a technical report and completing a feasibility study. Historically, such projects 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 feasibility study of 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.

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

- (6) **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. An issuer should consider the current validity of economic assumptions in its technical reports to determine if the technical reports are 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.
- (7) **Technical Reports Must be Current and Complete** – A “technical report” as defined in the Instrument must include in summary form all material scientific and technical information about the property. Any time an issuer is required to file a technical report, that report must be complete and current. There should only be one current technical report on a property 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 property. This means the new technical report must 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.
- (8) **Limited Provision for Addendums** – The only exception to the requirement to file a complete technical report is under subsection 4.2(3) of the Instrument. An issuer may file an addendum if it is for a technical report that it originally filed with a [preliminary short form prospectus or] preliminary long form prospectus and new material scientific or technical information becomes available before the issuance of the final receipt.

- (9) **Impact of Preliminary Economic Assessment on Previous Feasibility or Pre-Feasibility Studies** – An issuer may disclose the results of a preliminary economic assessment 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 2.3(3) of the Instrument. Under paragraph 2.3(3)(c), the issuer must discuss the impact of the preliminary economic assessment on the mineral reserves and feasibility study. This means considering and disclosing whether the existing mineral reserves and feasibility study are still current and valid in light of the key assumptions and parameters used in the preliminary economic assessment.

For example, if the preliminary economic assessment considers the potential economic viability of developing a satellite deposit in conjunction with the main development project, then the existing mineral reserves, feasibility study, and production scenario could still be current. However, if the preliminary economic assessment significantly modifies the key variables in the feasibility study, including metal prices, mine plan, and costs, the feasibility study and mineral reserves might no longer be current.

- (10) **Exception from Requirement to File Technical Report if Information Included in a Previously Filed Technical Report** – Subsection 4.2(8) 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 property 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 property generally will not constitute new material scientific or technical information as the change should be reasonably predictable based on an issuer's continuous disclosure record.

- (11) **Filing on SEDAR** – If an issuer is required under National Instrument 13-101 *System for Electronic Document Analysis and Retrieval (SEDAR)* to be an electronic filer, then all technical reports must be prepared so that the issuer can file them on SEDAR. Figures required in the technical report must be included in the technical report filed on SEDAR and therefore should be prepared in electronic format.
- (12) **Technical Reports Not Required by the Instrument** – The securities regulatory authorities in most Canadian jurisdictions require an issuer to file, if not already filed with them, any record or disclosure material that the issuer files with any other securities regulator including stock exchanges. In other cases, an issuer might wish to file a technical report voluntarily for general public information. The Instrument does not prohibit an issuer from filing a technical report in these situations. However, any document purporting to be a technical report must comply with the Instrument.

When an issuer files a technical report that is not required to be filed by the Instrument, the issuer might not be able to file a consent of qualified person that complies with subsection 8.3(1) of the Instrument. The issuer should consider filing a cover letter with the technical report explaining why the issuer is filing the technical report and indicating that it is not filing the technical report as a requirement of the Instrument. Alternatively, the issuer should consider filing a modified consent with the technical report that provides the same information.

NOTE TO READER: The CSA is seeking comment on whether to keep or eliminate the short form prospectus trigger in paragraph 4.2(1)(b) of the draft Instrument. The following section of the Policy is square-bracketed as it will only be included if CSA decides to eliminate the short form prospectus trigger. Please see the discussion in the CSA Notice and Request for Comment dated April 23, 2010.

- [(13) **Preliminary Short Form Prospectus** – The Instrument does not require an issuer to file a technical report to support disclosure in a preliminary short form prospectus because an issuer qualified to file a short form prospectus must, among other things, have filed all periodic and timely disclosure documents that it is required to have filed. These documents would include all required technical reports filed under subsection 4.2(1) of the Instrument, including technical reports supporting the issuer’s disclosure in its current AIF.

If an issuer’s preliminary short form prospectus or final short form prospectus includes or incorporates by reference new material scientific or technical information about a property material to the issuer that is not supported by a previously filed technical report, there could be additional risk associated with this information. To help ensure that it is making full, true, and plain disclosure in its prospectus, the issuer should clearly identify the new information and state that this new information is not supported by the previously filed technical report. Also, to comply with section 3.1 of the Instrument, the issuer must include in its prospectus the name and relationship to the issuer of the qualified person who is responsible for the new material scientific or technical information. Although this qualified person is not required under subsection 8.2(1) of the Instrument to provide a consent in respect of the new material scientific and technical information, the qualified person could be required to provide an expert consent under section 4.1 of NI 44-101.

In addition, if the disclosure of the new material scientific or technical information triggers the filing of a technical report under paragraph 4.2(1)(j) of the Instrument, the issuer could file its preliminary short form prospectus before expiry of the 45-day period, or the 6-month period if the issuer is relying on subsection 4.2(7) of the Instrument, for filing the technical report. An issuer that elects to do this should consider the potential risk that the technical report, when filed, might not support the new mineral resource, mineral reserve, or preliminary assessment information in the prospectus. To help ensure that it is making full, true, and plain disclosure in its prospectus, the issuer should clearly identify with

equal prominence any significant risks that could result from material deviations in the information. See the discussion on equal prominence in subsection 2.3(3) of the Policy.

If, before the issuer files its final short form prospectus, the issuer files a technical report that does not support the new material scientific or technical information in the preliminary short form prospectus, the issuer should consider whether the unsupported information constitutes an adverse material change to the issuer under section 6.5 of National Instrument 41-101 *General Prospectus Requirements* (NI 41-101) or, in Ontario, subsection 57(1) of the *Securities Act* (Ontario). If so, the issuer is required to file an amended preliminary short form prospectus.]

4.3 Required Form of Technical Report

- (1) **Review** – Disclosure and technical reports filed under the Instrument may be subject to review by the securities regulatory authorities. If an issuer that is required to file a technical report under the Instrument files a technical report that does not meet the requirements of the Instrument, the issuer has not complied with securities legislation. This includes filing certificates and consents that do not comply with subsections 8.1(2) and 8.3(1) of the Instrument.
- (2) **Filing Other Scientific and Technical Reports** – An issuer might 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.

PART 5 AUTHOR OF THE TECHNICAL REPORT

5.1 Prepared by a Qualified Person

- (1) **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.
- (2) **Assistance of non-Qualified Persons** – A person who is not a qualified person may work on a 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. The qualified person must take whatever steps are appropriate, in their professional judgement, to ensure that the work, information, or advice that they rely on is sound.

- (3) **Exemption from Qualified Person Requirement** – The securities regulatory authorities will rarely grant requests for exemption from the requirement that the qualified person belong to a professional association.
- (4) **More than One Qualified Person** – Section 5.1 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 advanced properties, could require the involvement of several qualified persons with different areas of expertise. In that case, each qualified person taking responsibility for a part of the technical report must sign the technical report and provide a certificate and consent under Part 8 of the Instrument.

However, section 5.2 and Part 8 of the Instrument allow qualified persons who supervised the preparation of all or part of the technical report to take overall responsibility for the work conducted under their supervision by other qualified persons. While supervising qualified persons do not need to be experts in all aspects of the work they supervise, they should be sufficiently knowledgeable about the subject matter to understand the information and opinions for which they are accepting responsibility. Where there are supervising qualified persons, only the supervising qualified persons must sign the technical report and provide their certificates and consents.

- (5) **A Qualified Person Must Be Responsible for All Items of Technical Report** – Section 5.2 and Part 8 of the Instrument require at least one qualified person to take responsibility for each section or item of the technical report, including any information incorporated from previously filed technical reports. If the qualified person, in response to a particular item, refers to the equivalent item in a previously filed technical report, the qualified person is implicitly saying that the information is still reliable and current and there have been no material changes. This would normally involve the qualified person doing a certain amount of background work and validation.
- (6) **Previous Mineral Resources or Mineral Reserves** – When a technical report includes a mineral resource or mineral reserve estimate prepared by another qualified person for a previously filed technical report, under section 5.2 and Part 8 of the Instrument one of the qualified persons preparing the new technical report must take responsibility for those estimates. In doing this, that qualified person should make whatever investigations are necessary to reasonably rely on the estimates.

5.2 Execution of Technical Report – Section 5.2 and subsection 8.1(1) of the Instrument require the qualified person to date, sign, and if the qualified person has a seal, seal the technical report and certificate. Section 8.3 of the Instrument requires the qualified person to date and sign the consent. If a person's name appears in an electronic document with (signed by) or (sealed) next to the person's name or there is a similar indication in the document, the securities regulatory authorities will consider that the person has signed

and sealed the document. Although not required, the qualified person may sign or seal maps and drawings in the same manner.

5.3 Independent Technical Report

- (1) **Independent Qualified Persons** – Subsection 5.3(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 co-authoring or 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) **Hundred Percent or Greater Change** – Subparagraph 5.3(1)(c)(ii) of the Instrument requires the issuer to file an independent technical report to support its disclosure of a 100 percent or greater change in total mineral resources or total mineral reserves. 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 property will require the issuer to file an independent technical report regardless of any changes to mineral reserves, and vice versa.
- (3) **Objectivity of Author** – We could question the objectivity of the author based on our review of a technical report. In order 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 PREPARATION OF TECHNICAL REPORT

6.1 The Technical Report

- (1) **Summary of Material Information** – Section 1.1 of the Instrument defines a technical report as a report that provides a summary of all material scientific and technical information about a property. Instruction (1) to Form 43-101F1 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 reasonably knowledgeable 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 property or include extensive geostatistical analysis, charts, data tables, assay certificate, drill logs, appendices, and other supporting technical information.

In addition, SEDAR might not be able to accommodate large technical report files. An issuer could have difficulty filing, and more importantly, the public could have difficulty accessing and downloading, large technical reports. An issuer should consider limiting the size of its technical reports to facilitate filing and public access to the reports.

6.2 Current Personal Inspection

(1) **Meaning** – The current personal inspection referred to in subsection 6.2(1) of the Instrument is the most recent personal inspection of the property, provided there is no new material scientific or technical information about the property 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 material scientific or technical information about the property at the filing date.

(2) **Importance of Personal Inspection** – We consider current personal inspections under section 6.2 of the Instrument to be particularly important because they enable qualified persons to become familiar with conditions on the property. Qualified persons can observe the geology and mineralization, verify the 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 properties 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.

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.

(3) **More than One Qualified Person** – Subsection 6.2(1) 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 property. This is the minimum standard for a current personal inspection. There could be cases in advanced mineral projects where the issuer should consider having more than one qualified person conduct current personal inspections of the property, taking into account the nature of the work on the property and the different expertise required to prepare the technical report.

6.3 Maintenance of Records – Section 6.3 of the Instrument requires an issuer to keep copies of underlying or supporting exploration information for at least 7 years. In our view, the issuer could satisfy this requirement by keeping records in any accessible format, not necessarily in hard copies.

6.4 Limitation on Disclaimers – Paragraph 6.4(1)(a) of the Instrument prohibits certain disclaimers in technical reports.

These disclaimers are also potentially misleading disclosure because, in certain circumstances, securities legislation provides investors with a statutory right of action against a qualified person for a misrepresentation in disclosure that is based upon the qualified person's technical report. That right of action exists despite any disclaimer to the contrary that appears in the technical report. The securities regulatory authorities will generally require the issuer to have its qualified person remove any blanket disclaimers in a technical report that the issuer uses to support its public offering document.

Item 3 of Form 43-101F1 permits a qualified person to insert a limited disclaimer of responsibility in certain specified circumstances.

PART 7 USE OF FOREIGN CODE

7.1 Use of Foreign Code – Use of Foreign Codes other than Acceptable Foreign Codes – Section 2.2 and Part 7 of the Instrument require an issuer to disclose mineral resources or mineral reserves using either the CIM Definition Standards or an “acceptable foreign code” as defined in the Instrument. If an issuer wishes to announce an acquisition or proposed acquisition of a property that contains estimates of quantity and grade that are not in accordance with the CIM Definition Standards or an acceptable foreign code, the issuer may disclose the estimate as an historical estimate, provided the issuer complies with the requirements of section 2.4 of the Instrument. However, it might be more appropriate for the issuer to disclose the estimate as an exploration target, in compliance with subsection 2.3(2) of the Instrument, if the supporting information for the estimate is not well-documented or if the estimate is not comparable to a category in the CIM Definition Standards or an acceptable foreign code.

PART 8 CERTIFICATES AND CONSENTS OF QUALIFIED PERSONS FOR TECHNICAL REPORTS

8.1 Certificates of Qualified Persons

- (1) **Certificates Apply to the Entire Technical Report** – Section 8.1 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 Form 43-101F1.
- (2) **Deficient Certificates** – Certificates must include all the statements required by subsection 8.1(2) 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.

8.2 Addressed to Issuer – We consider the technical report is addressed to the 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 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.

8.3 Consents of Qualified Persons

- (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 8.1 of NI 41-101 and section 4.1 of NI 44-101), in addition to the consent of qualified person required under the Instrument.
- (2) **Deficient Consents** – Consents must include all the statements required by subsection 8.3(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 the Policy provides an example of an acceptable consent of a qualified person.
- (3) **Modified Consents under Subsection 8.3(2)** – Subsection 8.3(1) of the Instrument requires the qualified person to identify and read the disclosure that the technical report supports and certify 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 4.2(1) of the Instrument. In these cases, the issuer has the option of filing a modified consent under subsection 8.3(2) of the Instrument that excludes the statements in paragraphs 8.3(1)(b), (c) and (d).
- (4) **Filing of Full Consent Required** – If an issuer files a modified consent under subsection 8.3(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 4.2(1) of the Instrument. This requirement is set out in subsection 8.3(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 8.3(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 4.2(1) of the Instrument, the issuer must file the consents of qualified persons in accordance with subsection 8.3(1).

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 8.3(1)(b), (c), and (d) of the Instrument as they relate to the Filing Statement or other disclosure document.

Appendix A
Accepted 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)	Professional Member (MIMMM), Fellow (FIMMM), Chartered Scientist (CSi 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 (CP)
Australian Institute of Geoscientists (AIG)	Fellow (FAIG) or Registered Professional Geoscientist (RPGeo)
South 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.)
Chilean Comision 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 date of report] (the "Technical Report") by [insert name of company 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 company 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 company] 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

[Blackline]

National Instrument 43-101
Standards of Disclosure for Mineral Projects

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National Instrument 43-101
Standards of Disclosure for Mineral Projects

PART 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions - In this Instrument

“acceptable foreign code” means the JORC Code, the PERC Code, the SAMREC Code, SEC Industry Guide 7, the Certification Code, or any other code, generally accepted in a foreign jurisdiction, that defines mineral resources and mineral reserves in a manner that is consistent with mineral resource and mineral reserve definitions and categories set out in sections 1.2 and 1.3;

“adjacent property” means a property

- (a) in which the issuer does not have an interest;
- (b) that has a boundary reasonably proximate to the property being reported on; and
- (c) that has geological characteristics similar to those of the property being reported on;

“advanced property” means a property for which

- (a) the potential economic viability of its mineral resources is supported by a preliminary economic assessment, or
- (b) the economic viability of its mineral reserves is supported by a pre-feasibility study or a feasibility study;

“Certification Code” means the Certification Code for Exploration Prospects, Mineral Resources and Ore Reserves prepared by the Mineral Resources Committee of the Institution of Mining Engineers of Chile, and the Chilean Ministry of Mining, as amended;

“data verification” means the process of confirming that data has been generated with proper procedures, has been accurately transcribed from the original source and is suitable to be used;

“development property” means a property that is being prepared for mineral production or a material expansion of current production, and for which economic viability has been demonstrated by a pre-feasibility or feasibility study;

“disclosure” means any oral statement or written disclosure made by or on behalf of an issuer and intended to be, or reasonably likely to be, made available to the public in a jurisdiction of Canada, whether or not filed under securities legislation, but does not include written disclosure that is made available to the public only by reason of having been filed with a government or agency of government pursuant to a requirement of law other than securities legislation;

“early stage exploration property” means a property ~~that~~ for which the technical report being filed has

(a) no current mineral resources or mineral reserves defined; and

(b) no drilling or trenching proposed;
~~in a technical report being filed in a local jurisdiction;~~

“effective date” means, with reference to a technical report, the date of the most recent scientific or technical information included in the technical report;

“exploration information” means geological, geophysical, geochemical, sampling, drilling, trenching, analytical testing, assaying, mineralogical, metallurgical, and other similar information concerning a particular property that is derived from activities undertaken to locate, investigate, define, or delineate a mineral prospect or mineral deposit;

“feasibility study” means a comprehensive study of a mineral deposit in which all geological, engineering, legal, operating, economic, social, environmental, and other relevant factors are considered in sufficient detail that it could reasonably serve as the basis for a final decision by a financial institution to finance the development of the deposit for mineral production;

“historical estimate” means an estimate of ~~mineral resources or mineral reserves prepared prior to February 1, 2001~~ the quantity, grade, or metal or mineral content of a deposit that an issuer has not verified as a current mineral resource or mineral reserve, and which was prepared before the issuer acquiring, or entering into an agreement to acquire, an interest in the property that contains the deposit;

~~“IMMM Reporting Code” means the classification system and definitions of mineral resources and mineral reserves approved by The Institution of Materials, Minerals, and Mining in the United Kingdom, as amended;~~

“JORC Code” means the Australasian Code for Reporting of Mineral Resources and Ore Reserves prepared by the Joint Ore Reserves Committee of the Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Mineral Council of Australia, as amended;

“mineral project” means any exploration, development or production activity, including a royalty ~~interest or similar~~ interest in these activities, in respect of

diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals;

“NI 44-101” means National Instrument 44-101 *Short Form Prospectus Distributions*;

“PERC Code” means the [Reporting Code for Mineral Reserves and Mineral Resources prepared by the Pan-European Reserves and Resources Reporting Committee, as amended](#);

“preliminary [economic](#) assessment” means a study, [other than a pre-feasibility or feasibility study](#), that includes an economic analysis of the potential viability of mineral resources ~~taken at an early stage of the project prior to the completion of a preliminary feasibility study~~;

“preliminary feasibility study” and “pre-feasibility study” each mean a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a qualified person, acting reasonably, to determine if all or part of the mineral resource may be classified as a mineral reserve;

“producing issuer” means an issuer with annual audited financial statements that disclose

- (a) gross revenues, derived from mining operations, of at least \$30 million [Canadian](#) for the issuer’s most recently completed financial year; and
- (b) gross revenues, derived from mining operations, of at least \$90 million [Canadian](#) in the aggregate for the issuer’s three most recently completed financial years;

“professional association” means a self-regulatory organization of engineers, geoscientists or both engineers and geoscientists that

- (a) is
 - (i) given authority or recognition by statute in a jurisdiction of Canada, or
 - (ii) a foreign association ~~listed in Appendix A~~ [that is generally accepted within the international mining community as a reputable professional association](#);

- (b) admits individuals on the basis of their academic qualifications ~~and~~, experience, and ethical fitness;
- (c) requires compliance with the professional standards of competence and ethics established by the organization; and
- (d) has and applies disciplinary powers, including the power to suspend or expel a member regardless of where the member practises or resides;

“qualified person” means an individual who

- (a) is an engineer or geoscientist with at least five years of experience in mineral exploration, mine development or operation, or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice;
- (b) has experience relevant to the subject matter of the mineral project and the technical report; and
- (c) is in good standing with a professional association and, in the case of a ~~foreign professional~~ association ~~listed in Appendix A, has the corresponding~~ in a foreign jurisdiction, has a membership designation in Appendix A; that
 - (i) requires a university degree or equivalent accreditation in an area of geoscience, or engineering, relating to mineral exploration or mining;
 - (ii) requires attainment of a position of responsibility in their profession that requires the exercise of independent judgment;
 - (iii) requires or encourages continuing professional development; and
 - (iv) requires
 - A. a favourable confidential peer evaluation of the individual’s character, professional judgement, experience, and ethical fitness; or
 - B. a recommendation for membership by at least three peers, and at least ten years of post-degree practical experience or demonstrated prominence in the field of mineral exploration or mining;

“quantity” means either tonnage or volume, depending on which term is the standard in the mining industry for the type of mineral;

“SAMREC Code” means the South African Code for Reporting of Mineral Resources and Mineral Reserves prepared by the South African Mineral Committee (SAMREC) under the auspices of the South African Institute of Mining and Metallurgy (SAIMM), as amended;

“SEC Industry Guide 7” means the mining industry guide entitled “Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations” contained in the Securities Act Industry Guides published by the United States Securities and Exchange Commission, as amended;

[“specified exchange” means the Australian Stock Exchange, the Johannesburg Stock Exchange, the London Stock Exchange Main Market, the Nasdaq Stock Market, the New York Stock Exchange, or the Hong Kong Stock Exchange;](#)

“technical report” means a report prepared and filed in accordance with this Instrument and Form 43-101F1 Technical Report that ~~does not omit any~~includes, in summary form, all material scientific and technical information in respect of the subject property as of the effective date of the ~~filing of the~~technical report; and

“written disclosure” includes any writing, picture, map, or other printed representation whether produced, stored or disseminated on paper or electronically, including websites.

1.2 Mineral Resource - In this Instrument, the terms “mineral resource”, “inferred mineral resource”, “indicated mineral resource” and “measured mineral resource” have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, ~~as those definitions may be on~~ December 11, 2005, as amended.

1.3 Mineral Reserve - In this Instrument, the terms “mineral reserve”, “probable mineral reserve” and “proven mineral reserve” have the meanings ascribed to those terms by the Canadian Institute of Mining, Metallurgy and Petroleum, as the CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council, ~~as those definitions may be~~ on December 11, 2005, as amended.

1.4 Independence - In this Instrument, a qualified person is independent of an issuer if there is no circumstance that ~~could~~, in the opinion of a reasonable person aware of all relevant facts, could interfere with the qualified person’s judgment regarding the preparation of the technical report.

PART 2 REQUIREMENTS APPLICABLE TO ALL DISCLOSURE

2.1 Requirements Applicable to All Disclosure - All disclosure of scientific or technical information made by an issuer, including disclosure of a mineral resource or mineral reserve, concerning a mineral project on a property material to the issuer must be

(a) based upon information prepared by or under the supervision of a qualified person; or

(b) approved by a qualified person.

2.2 All Disclosure of Mineral Resources or Mineral Reserves - An issuer must not disclose any information about a mineral resource or mineral reserve unless the disclosure

- (a) uses only the applicable mineral resource and mineral reserve categories set out in sections 1.2 and 1.3;
- (b) reports each category of mineral resources and mineral reserves separately, and states the extent, if any, to which mineral reserves are included in total mineral resources;
- (c) does not add inferred mineral resources to the other categories of mineral resources; and
- (d) states the grade or quality and the quantity for each category of the mineral resources and mineral reserves if the quantity of contained metal or mineral is included in the disclosure.

2.3 ~~Restricted~~ ~~Prohibited~~ Disclosure

- (1) An issuer must not ~~make any disclosure of the~~ disclose
 - (a) the quantity, grade, or metal or mineral content of a deposit that has not been categorized as an inferred mineral resource, an indicated mineral resource, a measured mineral resource, a probable mineral reserve, or a proven mineral reserve; ~~or~~
 - (b) the results of an economic analysis that includes or is based on inferred mineral resources or an estimate permitted under subsection 2.3(2) or section 2.4;
 - (c) the gross contained metal or mineral value of a deposit or a sampled interval or drill intersection; or

- (d) a metal or mineral equivalent grade for a multiple commodity deposit, sampled interval, or drill intersection, unless it also discloses the grade of each metal or mineral used to establish the metal or mineral equivalent grade.
- (2) Despite paragraph (1)(a), an issuer may disclose in writing the potential quantity and grade, expressed as ranges, of a ~~potential mineral deposit that is to be the~~ target ~~of~~for further exploration if the disclosure
- (a) states with equal prominence ~~includes a statement~~ that the potential quantity and grade is conceptual in nature, that there has been insufficient exploration to define a mineral resource and that it is uncertain if further exploration will result in the target being delineated as a mineral resource; and
- (b) states the basis on which the disclosed potential quantity and grade has been determined.
- (3) Despite paragraph (1)(b), an issuer may disclose a preliminary economic assessment that includes or is based on inferred mineral resources if the disclosure
- (a) ~~the results of the preliminary assessment are a material change or a material fact with respect to the issuer; and~~
- (b) ~~the disclosure~~
- (i) ~~includes a statement~~(a) states with equal prominence that the preliminary economic assessment is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the preliminary economic assessment will be realized; ~~and~~
- (ii) ~~(b)~~ states the basis for the preliminary economic assessment and any qualifications and assumptions made by the qualified person; ~~and~~
- (c) describes the impact of the preliminary economic assessment on the results of any pre-feasibility or feasibility study in respect of the subject property.
- (4) An issuer must not use the term preliminary feasibility study, pre-feasibility study, or feasibility study when referring to a study unless the study satisfies the criteria set out in the definition of the applicable term in section 1.1.

2.4 Disclosure of Historical Estimates - Despite section 2.2, an issuer may disclose an historical estimate, using the ~~historical~~original terminology, if the disclosure

- (a) identifies the source and date of the historical estimate, including any existing technical report;
- (b) comments on the relevance and reliability of the historical estimate;
- (c) to the extent known, provides the key assumptions, parameters, and methods used to prepare the historical estimate;
- ~~(e)~~(d) states whether the historical estimate uses categories other than the ones set out in sections 1.2 and 1.3 and, if so, includes an explanation of the differences; ~~and~~
- ~~(d)~~(e) includes any more recent estimates or data available to the issuer;
- (f) comments on what work needs to be done to upgrade or verify the historical estimate as current mineral resources or mineral reserves; and
- (g) states with equal prominence that
 - (i) a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves; and
 - (ii) the issuer is not treating the historical estimate as current mineral resources or mineral reserves.

PART 3 ADDITIONAL REQUIREMENTS FOR WRITTEN DISCLOSURE

3.1 Written Disclosure to Include Name of Qualified Person - If an issuer discloses in writing scientific or technical information about a mineral project on a property material to the issuer, the issuer must include in the written disclosure the name and the relationship to the issuer of the qualified person who

- (a) prepared or supervised the preparation of the information that forms the basis for the written disclosure; or
- (b) approved the written disclosure.
- ~~(a) — the name; and~~
- ~~(b) — the relationship to the issuer~~

~~of the qualified person who prepared or supervised the preparation of the information that forms the basis for the written disclosure.~~

3.2 Written Disclosure to Include Data Verification - ~~Subject to section 3.5, if~~ If an issuer discloses in writing scientific or technical information about a mineral project on a property material to the issuer, the issuer must include in the written disclosure

- (a) a statement whether a qualified person has verified the data disclosed, including sampling, analytical, and test data underlying the information or opinions contained in the written disclosure;
- (b) a description of how the data was verified and any limitations on the verification process; and
- (c) an explanation of any failure to verify the data.

3.3 Requirements Applicable to Written Disclosure of Exploration Information

- (1) ~~Except as provided in section 3.5, if~~ If an issuer discloses in writing exploration information about a mineral project on a property material to the issuer, the issuer must include in the written disclosure a summary of
 - ~~(a) the results, or a summary of~~ the material results; of surveys and investigations regarding the property;
 - ~~(b) a summary of~~ the interpretation of the exploration information; and
 - ~~(c) a description of~~ the quality assurance program and quality control measures applied during the execution of the work being reported on.
- (2) ~~Except as provided in section 3.5, if~~ If an issuer discloses in writing sample, or analytical or test testing results on a property material to the issuer, the issuer must include in the written disclosure
 - ~~(a) — a summary description of the geology, mineral occurrences and nature of mineralization found;~~
 - (a) the location and type of the samples collected;
 - (b) the location, azimuth, and dip of any drill holes and the depth of the sample intervals;
 - (c) a summary of the relevant analytical values, widths, and to the extent known, the true widths of the mineralized zone;
 - ~~(b) — a summary description of rock types, geological controls and dimensions of mineralized zones, and the identification~~

- (d) the results of any significantly higher grade intervals within a lower grade intersection;
- ~~(e) — the location, number, type, nature and spacing or density of the samples collected and the location and dimensions of the area sampled;~~
- ~~(d)~~ (e) any drilling, sampling, recovery, or other factors that could materially affect the accuracy or reliability of the data referred to in this subsection; and
- ~~(e)~~ (f) a summary description of the type of analytical or testing procedures utilized, sample size, the name and location of each analytical or testing laboratory used, and any relationship of the laboratory to the issuer; and
- ~~(f) — a summary of the relevant analytical values, widths and, to the extent known to the issuer, the true widths of the mineralized zone.~~

3.4 Requirements Applicable to Written Disclosure of Mineral Resources and Mineral Reserves - If an issuer discloses in writing mineral resources or mineral reserves on a property material to the issuer, the issuer must include in the written disclosure

- (a) the effective date of each estimate of mineral resources and mineral reserves;
- (b) ~~details of~~ the quantity and grade or quality of each category of mineral resources and mineral reserves;
- (c) ~~details of~~ the key assumptions, parameters, and methods used to estimate the mineral resources and mineral reserves;
- (d) ~~a general discussion of the extent to which the estimate of mineral resources or mineral reserves may be materially affected by any known environmental, permitting,~~ the identification of any known legal, title, taxation, socio-political, marketing, or other relevant issues political, environmental, or other risks that could materially affect the potential development of the mineral resources or mineral reserves; and
- (e) if the disclosure includes the results of an economic analysis of mineral resources, an equally prominent statement that mineral resources that are not mineral reserves do not have demonstrated economic viability, ~~if the results of an economic analysis of mineral resources are included in the disclosure.~~

- 3.5 Exception for Written Disclosure Already Filed** - Sections 3.2 and 3.3 and paragraphs ~~3.4~~(a), (c), and (d) of section 3.4 do not apply if the issuer includes in the written disclosure a reference to the title and date of a previously filed document that complies with those requirements.

PART 4 OBLIGATION TO FILE A TECHNICAL REPORT

4.1 Obligation to File a Technical Report Upon Becoming a Reporting Issuer

- (1) Upon becoming a reporting issuer in a jurisdiction of Canada an issuer must file in that jurisdiction a technical report for each mineral ~~project on each~~ property material to the issuer.
- (2) Subsection (1) does not apply if the issuer is a reporting issuer in a jurisdiction of Canada and subsequently becomes a reporting issuer in another jurisdiction of Canada.
- (3) Subsection (1) does not apply if
 - (a) the issuer previously filed a technical report for the property;
 - (b) at the date the issuer becomes a reporting issuer, there is no new material scientific or technical information concerning the subject property not included in the previously filed technical report; and
 - (c) the previously filed technical report meets any independence requirements under section 5.3.

4.2 Obligation to File a Technical Report in Connection with Certain Written Disclosure ~~About~~about Mineral Projects on Material Properties

NOTE TO READER: The CSA is seeking comment on whether to keep or eliminate the short form prospectus trigger in (1)(b), therefore all references to the short form prospectus trigger in this draft Instrument are square-bracketed. Please see the discussion in the CSA Notice and Request for Comment dated April 23, 2010.

- (1) An issuer must file a technical report to support scientific or technical information in any of the following documents filed or made available to the public in a jurisdiction of Canada ~~describing~~that describes a mineral project on a property material to the issuer, or in the case of paragraph (c) ~~below~~, the resulting issuer:
 - (a) a preliminary prospectus, other than a preliminary short form prospectus filed in accordance with NI 44-101;

- (b) [a preliminary short form prospectus filed in accordance with NI 44-101 ~~that includes material scientific or technical information about a mineral project on a property material to the issuer but not contained in~~];
 - ~~(i) — an annual information form, prospectus, or material change report filed before February 1, 2001; or~~
 - ~~(ii) — a previously filed technical report;~~
- (c) an information or proxy circular concerning a direct or indirect acquisition of a mineral property where the issuer or resulting issuer issues securities as consideration;
- (d) an offering memorandum, other than an offering memorandum delivered solely to accredited investors as defined under securities legislation;
- (e) for a reporting issuer, a rights offering circular;
- (f) an annual information form ~~that includes material scientific or technical information about a mineral project on a property material to the issuer but not contained in~~];
 - ~~(i) — an annual information form, prospectus, or material change report filed before February 1, 2001; or~~
 - ~~(ii) — a previously filed technical report;~~
- (g) a valuation required to be prepared and filed under securities legislation;
- (h) an offering document that complies with and is filed in accordance with Policy 4.6 - Public Offering by Short Form Offering Document and Exchange Form 4H - Short Form Offering Document, of the TSX Venture Exchange ~~policy~~; as amended;
- (i) a take-over bid circular that discloses a preliminary economic assessment ~~or~~ mineral resources, or mineral reserves on a property material to the offeror if securities of the offeror are being offered in exchange on the take-over bid; and
 - ~~(j) — a news release or directors' circular that contains~~
 - ~~(j) —~~ (j) any written disclosure made by or on behalf of an issuer, other than in a document described in paragraphs (a) to (i), that discloses for the first time ~~disclosure of~~

- (i) ~~_____~~ a preliminary economic assessment ~~or,~~ mineral resources, or mineral reserves on a property material to the issuer that constitutes a material change in respect of the affairs of the issuer; or
 - (ii) a change in a preliminary economic assessment ~~or in,~~ mineral resources, or mineral reserves from the most recently filed technical report that constitutes a material change in respect of the affairs of the issuer.
- (2) Subsection (1) does not apply for disclosure of an historical estimate in a document referred to in paragraph (1)(j) ~~of that subsection~~ if the disclosure is made in accordance with subsection 2.4.
 - ~~(a) — is in accordance with section 2.4; and~~
 - ~~(b) — includes a statement that~~
 - ~~(i) — a qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves;~~
 - ~~(ii) — the issuer is not treating the historical estimate as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of this Instrument; and~~
 - ~~(iii) — the historical estimate should not be relied upon.~~
- (3) If ~~there has been a material change to the information in the~~ a technical report is filed under paragraph (1)(a) ~~or (b) of subsection (1)~~ [or (b)], and new material scientific or technical information concerning the subject property becomes available before the filing of the final version of the prospectus [or short form prospectus], the issuer must file an updated technical report or an addendum to the technical report with the final version of the prospectus [or short form prospectus].
- (4) ~~Subject to subsections (5), (6), and (7),~~ The issuer must file the technical report referred to in subsection (1) ~~must be filed~~ not later than the time it files or makes available to the public the document listed in subsection (1) that ~~it~~ the technical report supports ~~is filed or made available to the public.~~
- (5) Despite subsection (4), ~~a technical report about mineral resources or mineral reserves that supports a news release must~~ an issuer must
 - (a) ~~be filed~~ file a technical report supporting disclosure under paragraph (1)(j) not later than 45 days after the ~~news release; and~~ date of the disclosure or, if the disclosure is in a directors' circular, by the earlier

of 45 days after the date of the disclosure and 3 business days before expiry of the take-over bid; and

- (b) ~~if there are~~ issue a news release at the time it files the technical report disclosing the filing of the technical report and reconciling any material differences in the preliminary economic assessment, mineral resources, or mineral reserves between the technical report filed and the news release, be accompanied by a news release that reconciles those differences and the issuer's disclosure under paragraph (1)(j).
- (6) Despite subsection (4), if a property referred to in an annual information form first becomes material to the issuer less than 30 days before the filing deadline for the annual information form, the issuer must file the technical report within 45 days of the date that the property first became material to the issuer.
- (7) Despite ~~subsection (4), a technical report that supports a directors' circular must be filed not less than 3 business days prior to the expiry of the take-over bid.~~ subsections (4) and (5), an issuer is not required to file a technical report within 45 days to support disclosure under subparagraph (1)(j)(i), if
- (a) the preliminary economic assessment, mineral resources, or mineral reserves
- (i) were prepared by or on behalf of another issuer who holds or previously held an interest in the property;
- (ii) were disclosed by the other issuer in a document listed in subsection (1); and
- (iii) are supported by a technical report filed by the other issuer;
- (b) the issuer, in its disclosure under subparagraph (1)(j)(i),
- (i) identifies the title and effective date of the previous technical report and the name of the other issuer that filed it;
- (ii) names the qualified person who reviewed the technical report on behalf of the issuer; and
- (iii) states with equal prominence that, to the best of the issuer's knowledge, information, and belief, there is no new material scientific or technical information that would make the disclosure of the preliminary economic assessment, mineral resources, or mineral reserves inaccurate or misleading;

- (c) the issuer files a technical report supporting its disclosure of the preliminary economic assessment, mineral resources, or mineral reserves within 6 months of the date of its disclosure; and
 - (d) the issuer issues a news release at the time it files the technical report disclosing the filing of the technical report and reconciling any material differences in the preliminary economic assessment, mineral resources, or mineral reserves between the technical report and the issuer's disclosure under subparagraph (1)(j)(i).
- (8) Subsection (1) does not apply if
- (a) the issuer ~~has~~previously filed a technical report ~~filed~~ that supports the scientific or technical information ~~contained in the disclosure and there has been~~in the document;
 - (b) at the date of filing the document, there is no new material ~~change in the~~ scientific ~~and/or~~ technical information concerning the subject property ~~since the date of the filing of the~~not included in the previously filed technical report; and
 - ~~(a) — the issuer files an updated certificate in accordance with subsection 8.1 and consent in accordance with subsection 8.3 of each qualified person who has been responsible for preparing or supervising the preparation of each portion of the technical report.~~
 - (c) the previously filed technical report meets any independence requirements under section 5.3.

4.3 Required Form of Technical Report - A technical report that is required to be filed under this Part must be prepared

- (a) in English or French; and
- (b) in accordance with Form 43-101F1.

PART 5 AUTHOR OF TECHNICAL REPORT

5.1 Prepared by a Qualified Person - A technical report must be prepared by or under the supervision of one or more qualified persons.

5.2 Execution of Technical Report - A technical report must be dated, signed and, if the qualified person has a seal, sealed by

- (a) each qualified person who is responsible for preparing or supervising the preparation of all or part of the report; or

- (b) a person or company whose principal business is providing engineering or geoscientific services if each qualified person responsible for preparing or supervising the preparation of all or part of the report is an employee, officer, or director of that person or company.

5.3 Independent Technical Report

- (1) ~~Subject to subsection (2), a~~ technical report required under any of the following provisions of this Instrument must be prepared by or under the supervision of ~~a one or more~~ qualified ~~person~~ persons that ~~is~~ are, at the ~~date effective and filing dates~~ of the technical report, all independent of the issuer:
 - (a) section 4.1;
 - (b) paragraphs (a) and (g) of subsection 4.2(1); or
 - (c) paragraphs (b), (c), (d), (e), (f), (h), (i), and (j) of subsection 4.2(1), if the document discloses
 - (i) for the first time a preliminary economic assessment ~~of~~ mineral resources, or mineral reserves on a property material to the issuer, or
 - (ii) a 100 percent or greater change, ~~from the most recently filed technical report prepared by a qualified person who is independent of the issuer, in~~ in the total mineral resources or total mineral reserves on a property material to the issuer, since the issuer's most recently filed independent technical report in respect of the property.
- ~~(2)~~ (2) ~~Despite subsection (1), a technical report required to be filed by a producing issuer under paragraph (1)(a) is not required to be prepared by or under the supervision of an independent qualified person if the securities of the issuer trade on a specified exchange.~~
- ~~(2)~~ (3) ~~Despite subsection (1), a~~ technical report required to be filed by a producing issuer under paragraph ~~(1)(b) or (c) of subsection (1)~~ is not required to be prepared by or under the supervision of an independent qualified person.
- ~~(3)~~ (4) ~~Despite subsection (1), a~~ technical report required to be filed by an issuer ~~that is or has contracted to become a joint venture participant,~~ concerning a property which is or will be the subject of ~~the~~ a joint venture's ~~activities,~~ with a producing issuer is not required to be prepared by or under the supervision of an independent qualified person, if the qualified person preparing or supervising the preparation of the report relies on scientific and

technical information prepared by or under the supervision of a qualified person that is an employee or consultant of the producing issuer ~~that is a participant in the joint venture.~~

PART 6 PREPARATION OF TECHNICAL REPORT

6.1 The Technical Report - A technical report must be ~~prepared~~based ~~on the basis of~~ all available data relevant to the disclosure that it supports.

6.2 Current Personal Inspection

- (1) ~~Subject to subsections (2) and (3), before~~Before an issuer files a technical report, the issuer must have at least one qualified person who is responsible for preparing or supervising the preparation of all or part of the technical report complete a current inspection on the property that is the subject of the technical report.
- (2) Subsection (1) does not apply to an issuer provided that
 - (a) the property that is the subject of the technical report is an early stage exploration property;
 - (b) seasonal weather conditions prevent a qualified person from accessing any part of the property or obtaining beneficial information from it; and
 - (c) the issuer discloses in the technical report, and in the disclosure that the technical report supports, that a personal inspection by a qualified person was not conducted, the reasons why, and the intended time frame to complete the personal inspection.
- (3) If an issuer relies on subsection (2), the issuer must
 - (a) as soon as practical, have at least one qualified person who is responsible for preparing or supervising the preparation of all or part of the technical report complete a current inspection on the property that is the subject of the technical report; and
 - (b) promptly file a technical report and the certificates and consents required under Part 8 of this Instrument.

6.3 Maintenance of Records - An issuer must keep for 7 years copies of assay and other analytical certificates, drill logs, and other information referenced in the technical report or used as a basis for the technical report.

6.4 Limitation on Disclaimers –

(1) An issuer must not file a technical report that contains a disclaimer by any qualified person responsible for preparing or supervising the preparation of all or part of the report that

- (a) disclaims responsibility for, or reliance ~~on, that portion~~ by another party on, any information in the part of the report the qualified person prepared or supervised the preparation of; or
- (b) limits the use or publication of the report in a manner that interferes with the issuer's obligation to reproduce the report by filing it on SEDAR.

(2) Despite subsection (1), an issuer may file a technical report that includes a disclaimer in accordance with Item 3 of Form 43-101F1.

PART 7 USE OF FOREIGN CODE

7.1 Use of Foreign Code – Despite section 2.2, an issuer ~~that~~ may make disclosure and file a technical report that uses the mineral resource and mineral reserve categories of an acceptable foreign code, if the issuer

- (a) is incorporated or organized in a foreign jurisdiction; or
- (b) is incorporated or organized under the laws of Canada or a jurisdiction of Canada, for its properties located in a foreign jurisdiction;

~~may make disclosure and file a technical report that utilizes the mineral resource and mineral reserve categories of the JORC Code, the SEC Industry Guide 7, the IMMM Reporting Code or the SAMREC Code if a reconciliation to the mineral resource and mineral reserve categories set out in sections 1.2 and 1.3 is disclosed in the technical report.~~

PART 8 CERTIFICATES AND CONSENTS OF QUALIFIED PERSONS FOR TECHNICAL REPORTS

8.1 Certificates of Qualified Persons

(1) An issuer must, when filing a technical report, file a certificate that is dated, signed, and if the signatory has a seal, sealed, of each qualified person responsible for preparing or supervising the preparation of ~~each portion~~ all or part of the technical report ~~and the certificate must be dated, signed and, if the signatory has a seal, sealed.~~

- (2) A certificate under subsection (1) must state
- (a) the name, address, and occupation of the qualified person;
 - (b) the title and effective date of the technical report to which the certificate applies;
 - (c) the qualified person's qualifications, including a brief summary of relevant experience, the name of all professional associations to which the qualified person belongs, and that the qualified person is a "qualified person" for purposes of this Instrument;
 - (d) the date and duration of the qualified person's most recent personal inspection of each property, if applicable;
 - (e) the item or items of the technical report for which the qualified person is responsible;
 - (f) whether the qualified person is independent of the issuer as described in section 1.4;
 - (g) what prior involvement, if any, the qualified person has had with the property that is the subject of the technical report;
 - (h) that the qualified person has read this Instrument and the technical report, or part that the qualified person is responsible for, has been prepared in compliance with this Instrument; and
 - (i) that, ~~as of~~ at the effective date of the ~~certificate~~ technical report, to the best of the qualified person's knowledge, information, and belief, the technical report, or part that the qualified person is responsible for, contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

8.2 Addressed to Issuer - All technical reports must be addressed to the issuer.

8.3 Consents of Qualified Persons--

(1) An issuer must, when filing a technical report, file a statement of each qualified person responsible for preparing or supervising the preparation of ~~each portion~~ all or part of the technical report, ~~addressed to the securities regulatory authority~~, dated, and signed by the qualified person

(a) consenting to the public filing of the technical report ~~and~~;

(b) identifying the document that the technical report supports;

- (c) consenting to the use of extracts from, or a summary of, the technical report in the ~~written disclosure being filed~~document; and
- ~~(b)~~ (d) confirming that the qualified person has read the ~~written disclosure being filed~~document and that it fairly and accurately represents the information in the technical report or part that ~~supports the disclosure.~~ the qualified person is responsible for.
- (2) Paragraphs (1)(b), (c), and (d) do not apply to a consent filed with a technical report filed under section 4.1.
- (3) If an issuer relies on subsection (2), the issuer must file an updated consent that includes paragraphs (1)(b), (c), and (d) for any subsequent use of the technical report to support disclosure in a document filed under subsection 4.2(1).

PART 9 EXEMPTIONS

9.1 Authority to Grant Exemptions

- (1) The regulator or the securities regulatory authority may, on application, grant an exemption from this Instrument, in whole or in part, subject to such conditions or restrictions as may be imposed in the exemption in response to an application.
- (2) Despite subsection (1), in Ontario, only the regulator may grant such an exemption.
- (3) Except in Ontario, an exemption referred to in subsection (1) is granted under the statute referred to in Appendix B ~~of~~to National Instrument 14-101 *Definitions* opposite the name of the local jurisdiction.

9.2 ~~Limited Exemption~~Exemptions for Royalty Interests ~~or Similar Interests~~

- (1) Subject to subsection (2), an~~An~~ issuer ~~that has only a royalty interest or similar~~whose interest in a mineral project ~~and is~~ only a royalty interest is not required to file a technical report ~~in accordance with section 4.3~~to support disclosure in a document under subsection 4.2(1) if
- (a) the operator of the mineral project is
- (i) subject to the requirements of this Instrument, or

- (ii) a producing issuer whose securities trade on a specified exchange and that discloses mineral resources and mineral reserves under an acceptable foreign code;
 - (b) the issuer identifies in its document under subsection 4.2(1) the source of the scientific and technical information; and
 - (c) the operator of the mineral project has disclosed the scientific and technical information.
- (2) An issuer whose interest in a mineral project is only a royalty interest and that does not qualify to use the exemption in subsection (1) is not required to
- (a) comply with section 6.2; and
 - (b) complete those items under Form 43-101F1 that require data verification, inspection of documents, or personal inspection of the property to complete those items.

~~(2)~~ (3) Paragraphs ~~(12)~~ (a) and (b) only apply if the issuer

- (a) has requested but has not received access to the necessary data from the operating company and is not able to obtain the necessary information from the public domain;
- (b) under Item 3 of Form 43-101F1, states the issuer has requested but has not received access to the necessary data from the operating company and is not able to obtain the necessary information from the public domain and describes the content referred to under each item of Form 43-101F1 that the issuer did not complete; and
- (c) includes in all scientific and technical disclosure a statement that the issuer has an exemption from completing certain items under Form 43-101F1 in the technical report required to be filed and includes a reference to the title and effective date of that technical report.

9.3 Exemption for Certain Types of Filings - This Instrument does not apply if the only reason an issuer files written disclosure of scientific or technical information is to comply with the requirement under securities legislation to file a copy of a record or disclosure material that was filed with a securities commission, exchange, or regulatory authority in another jurisdiction.

PART 10 EFFECTIVE DATE AND REPEAL

10.1 Effective Date - This Instrument comes into force on ~~December 30, 2005~~.*.

10.2 Repeal - National Instrument 43-101 *Standards of Disclosure for Mineral Projects*, which came into force on December 31, 2005, is repealed.

Appendix A

Recognized Foreign Associations and Designations

Foreign Association	Designation
American Institute of Professional Geologists (AIPG)	Certified Professional Geologist
Any state in the United States of America	Licensed or certified as a professional engineer
Mining and Metallurgical Society of America (MMSA)	Qualified Professional
European Federation of Geologists (EFG)	European Geologist
Australasian Institute of Mining and Metallurgy (AusIMM)	Fellow or member
Institute of Materials, Minerals and Mining (IMMM)	Fellow or professional member
Australian Institute of Geoscientists (AIG)	Fellow or member
South African Institute of Mining and Metallurgy (SAIMM)	Fellow
South African Council for Natural Scientific Professions (SACNASP)	Professional Natural Scientist
Institute of Geologists of Ireland (IGI)	Professional Member
Geological Society of London (GSL)	Chartered Geologist
National Association of State Boards of Geology (ASBOG)	Licensed or certified in: Alabama, Arizona, Arkansas, California, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Maine, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, North Carolina, Oregon, Pennsylvania, Puerto Rico, South Carolina, Texas, Utah, Virginia, Washington, Wisconsin or Wyoming

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**Form 43-101F1
Technical Report**

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Form 43-101F1
Technical Report

INSTRUCTIONS:

- (1) *The objective of the technical report is to provide a summary of material scientific and technical information concerning mineral exploration, development, and production activities on a mineral property that is material to an issuer. This Form sets out ~~specific~~the requirements for the preparation and ~~contents~~content of a technical report.*
- (2) *Terms used in this Form that are defined or interpreted in National Instrument 43-101 Standards of Disclosure for Mineral Projects (the “Instrument”) will ~~bear~~have that definition or interpretation. In addition, a general definition instrument has been adopted as National Instrument 14-101 Definitions that contains definitions of certain terms used in more than one national instrument. Readers of this Form should review both these national instruments for defined terms.*
- (3) *The qualified person preparing the technical report should keep in mind that the intended audience is the investing public and their advisors who, in most cases, will not be mining experts. Therefore, to the extent possible, technical reports should be simplified, summarized, and written in plain language. However, the technical report should include sufficient context and cautionary language to allow a reasonable investor to understand the nature, importance, and limitations of the data, interpretations, and conclusions summarized in the technical report.*
- (4) *The qualified person preparing the technical report must use all of the headings of ~~the items in this Form and may create sub-headings. If unique or infrequently used technical terms are required, clear and concise explanations must be included.~~(4) — No disclosure need be given in respect of inapplicable items and, unless otherwise required by this Form, negative answers to items may be omittedItems 1 to 14 and 23 to 27 in this Form and provide the information specified under each heading. For advanced properties, the qualified person must also use the headings of Items 15 to 22 and include the information required under each of these headings. The qualified person may create sub-headings. Disclosure included under one heading is not required to be repeated under another heading.*
- (5) ~~*The technical report is not required to include the information required in Items 6 through 11 of this Form to the extent that the required information has been previously filed in a technical report for the property being reported on, the previous technical*~~

~~report is referred to in the technical report and there has not been any material change in the information.~~

(5) The qualified person preparing the technical report may refer to information in a technical report previously filed by the issuer for the subject property if the information is still current and the technical report identifies the title, date and author of the previously filed technical report. However, the qualified person must still summarize or quote the referenced information in the current technical report and may not disclaim responsibility for the referenced information. Except as permitted by subsection 4.2(3) of the Instrument, an issuer may not update or revise a previously filed technical report by filing an addendum.

~~(6) — The technical report for development properties and production properties may summarize the information required in the items of this Form, except for Item 25, provided that the summary includes the material information necessary to understand the project at its current stage of development or production.~~

(6) 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.

(7) The technical report may only contain disclaimers that are in accordance with section 6.4 of the Instrument and Item 53 of this Form.

(8) Since a technical report is a summary document the inclusion and filing of comprehensive appendices is not generally necessary to comply with the requirements of the Form.

(9) The Instrument requires certificates and consents of qualified persons, prepared in accordance with sections 8.1 and 8.3 respectively, 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.

CONTENTS OF THE TECHNICAL REPORT

Item 1: — Title Page - Include a title page setting out the title of the technical report, the general location of the mineral project, the name and professional designation of each qualified person, and the effective date of the technical report.

Date and Signature Page – The technical report must have a signature page, at either the beginning or end of the technical report, signed in accordance with section 5.2 of the Instrument. The effective date of the technical report and date of signing must be on the signature page.

Item 2: — Table of Contents - Provide a table of contents listing the contents of the technical report, including figures and tables.

Illustrations – Technical reports must be illustrated by legible maps, plans and sections, all prepared at an appropriate scale to distinguish important features. Maps must be dated and include a legend, author or information source, a scale in bar or grid form, and an arrow indicating north. All technical reports must be accompanied by a location or index map and a compilation map outlining the general geology of the property. In addition, all technical reports must include more detailed maps showing all important features described in the text, relative to the property boundaries, including but not limited to

- (a) for exploration projects, areas of previous or historical exploration, and the location of known mineralization, geochemical or geophysical anomalies, drilling, and mineral deposits;
- (b) for advanced properties other than development and production properties, the location and surficial outline of mineral resources, mineral reserves, and, to the extent known, areas for potential access and infrastructure; and
- (c) for development and production properties, the location of pit limits or underground development, plant sites, tailings storage areas, waste disposal areas, and all other significant infrastructure features.

If information is used from other sources in preparing maps, drawings, or diagrams, disclose the source of the information. If adjacent or nearby properties have an important bearing on the potential of the subject property, the location of the properties and any relevant mineralized structures discussed in the report must be shown in relationship to the subject property.

INSTRUCTION: Summarize and simplify the illustrations so that they are legible and suitable

for electronic filing. For ease of reference, consider inserting the illustration in the text of the report in relative proximity to the text they illustrate.

Requirements for All Technical Reports

Item 1: ~~Item 3: Summary~~ – Provide a summary that briefly describes the property, its location, Summary – Briefly summarize important information in the technical report, including property description and ownership, geology and mineralization, ~~the exploration concept~~, the status of exploration, development and operations, mineral resource and mineral reserve estimates, and the qualified person's conclusions and recommendations.

Item 2: ~~Item 4: Introduction~~ - Include a description of

- (a) ~~who~~ the issuer for whom the technical report is prepared ~~for~~;
- (b) the terms of reference and purpose for which the technical report was prepared;
- (c) the sources of information and data contained in the technical report or used in its preparation, with citations if applicable; and
- (d) the ~~scope~~ details of the personal inspection on the property by each qualified person ~~and author~~ or, if applicable, the reason why a personal inspection has not been completed.

Item 3: ~~Item 5: Reliance on Other Experts~~ - ~~If a~~ A qualified person ~~preparing or supervising~~ who prepares or supervises the preparation of all or ~~a portion~~ part of ~~the~~ a technical report may include a limited disclaimer of responsibility if:

- (a) The qualified person is relying on a report, opinion ~~or statement of a legal or other,~~ or statement of another expert; who is not a qualified person, ~~for or on~~ information provided by the issuer, concerning legal; ~~environmental, political or other issues and factors,~~ political, environmental, or tax matters relevant to the technical report, ~~the qualified person may include a disclaimer of responsibility in which the qualified person identifies the report, opinion or statement relied upon, the maker of that report, opinion or statement, the extent of reliance and the portions of the technical report to which the disclaimer applies and the qualified person identifies~~
 - (i) the source of the information relied upon, including the date, title, and author of any report, opinion, or statement;
 - (ii) the extent of reliance; and
 - (iii) the portions of the technical report to which the disclaimer applies.
- (b) The qualified person is relying on a report, opinion, or statement of another expert who is not a qualified person, concerning diamond or other

gemstone valuations, or the pricing of commodities for which pricing is not publicly available, and the qualified person discloses

(i) the date, title, and author of the report, opinion, or statement;

(ii) the qualifications of the other expert and why it is reasonable for the qualified person to rely on the other expert;

(iii) any significant risks associated with the valuation or pricing; and

(iv) any steps the qualified person took to verify the information provided.

Item 4: ~~Item 6: Property Description and Location~~ - To the extent applicable, ~~with respect to each property reported on,~~ describe

- (a) the area of the property in hectares or other appropriate units;
- (b) the location, reported by an easily recognizable geographic and grid location system;
- (c) the type of mineral tenure (~~eg-~~claim, license, lease, etc.) and the identifying name or number of each;
- (d) the nature and extent of the issuer's title to, or interest in, the property including surface rights, legal access, the obligations that must be met to retain the property, and the expiration date of claims, licences, or other property tenure rights;
- ~~(e) — how the property boundaries were located;~~
- ~~(f) — the location of all known mineralized zones, mineral resources, mineral reserves and mine workings, existing tailing ponds, waste deposits and important natural features and improvements, relative to the outside property boundaries;~~
- (e) ~~(g)~~ to the extent known, the terms of any royalties, back-in rights, payments, or other agreements and encumbrances to which the property is subject;
- (f) ~~(h)~~ to the extent known, all environmental liabilities to which the property is subject; ~~and~~
- (g) ~~(i)~~ to the extent known, the permits that must be acquired to conduct the work proposed for the property, and if the permits have been obtained; and

- (h) to the extent known, any other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

Item 5: ~~Item 7: Accessibility, Climate, Local Resources, Infrastructure and Physiography - With respect to each property reported on, describe~~ Describe

- (a) topography, elevation, and vegetation;
- (b) the means of access to the property;
- (c) the proximity of the property to a population centre, and the nature of transport;
- (d) to the extent relevant to the mineral project, the climate and the length of the operating season; and
- (e) to the extent relevant to the mineral project, the sufficiency of surface rights for mining operations, the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.

Item 6: ~~Item 8: History - To the extent known, with respect to each property reported on, describe~~

- (a) the prior ownership of the property and ownership changes;
- (b) the type, amount, quantity, and general results of exploration and development work undertaken by any previous owners or operators;
- (c) historical mineral resource and mineral reserve estimates in accordance with section 2.4 ~~of the Instrument, including the reliability of the historical estimates and whether the estimates are in accordance with the categories set out in sections 1.2 and 1.3~~ of the Instrument; and
- (d) any production from the property.

Item 7: Geological Setting and Mineralization – Describe

- (a) ~~Item 9: Geological Setting – Include a concise description of the regional, local, and property geology; and~~
- (b) the significant mineralized zones encountered on the property, including a summary of the surrounding rock types, relevant geological controls, and the length, width, depth, and continuity of the mineralization, together with a description of the type, character, and distribution of the mineralization.

Item 8: ~~Item 10: Deposit Types~~ - Describe the mineral deposit type(s) being investigated or being explored for and the geological model or concepts being applied in the investigation and on the basis of which the exploration program is planned.

~~Item 11: Mineralization~~ Describe the mineralized zones encountered on the property, the surrounding rock types and relevant geological controls, detailing length, width, depth and continuity, together with a description of the type, character and distribution of the mineralization.

Item 9: ~~Item 12: Exploration~~ ~~Describe~~ Briefly describe the nature and extent of all relevant exploration work other than drilling, conducted by, or on behalf of, the issuer ~~on each property being reported on~~, including

- (a) ~~results of surveys and investigations, and~~ the procedures and parameters relating to the surveys and investigations;
- (b) the sampling methods and sample quality, including whether the samples are representative, and any factors that may have resulted in sample biases;
- (c) relevant information of location, number, type, nature, and spacing or density of samples collected, and the size of the area covered; and
- (d) ~~(b) an~~ the significant results and interpretation of the exploration information; ~~and.~~
- (e) ~~— a statement as to whether the surveys and investigations have been carried out by the issuer or by a contractor and, if the latter, identifying the contractor.~~

INSTRUCTION: If exploration results from previous operators are included, ~~the qualified person or author must~~ clearly identify the work conducted by, or on behalf of, the issuer.

Item 10: ~~Item 13: Drilling~~ ~~Describe~~ Drilling - Describe

- (a) the type and extent of drilling including the procedures followed and a summary and interpretation of all ~~results.~~ Relevant results;
- (b) any drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results;
- (c) for a property other than an advanced property
 - (i) the location, azimuth, and dip of any drill hole, and the depth of the relevant sample intervals;

- (ii) the relationship between the sample length and the true thickness of the mineralization ~~must be stated~~, if known, and if the orientation of the mineralization is unknown, state this; and

~~Item 14: Sampling Method and Approach~~ Provide

- ~~(a) a brief description of sampling methods and relevant details of location, number, type, nature and spacing or density of samples collected, and the size of the area covered;~~
- ~~(b) a description of any drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the results;~~
- ~~(c) a discussion of the sample quality, including whether the samples are representative, and any factors that may have resulted in sample biases;~~
- (iii) ~~(d) a description of rock types, geological controls, widths of mineralized zones and other parameters used to establish the sampling interval and identification~~ the results of any significantly higher grade intervals within a lower grade intersection; and,
- ~~(e) a summary of relevant samples or sample composites with values and estimated true widths.~~

INSTRUCTION: For properties with mineral resource estimates, the qualified person may meet the requirements under Item 10 (c) by providing a drill plan and representative examples of drill sections through the mineral deposit.

Item 11: Sample Preparation, Analyses, and Security – Describe

- (a) ~~**Item 15: Sample Preparation, Analyses and Security**~~ ~~Describe~~ sample preparation methods and quality control measures employed before dispatch of samples to an analytical or testing laboratory, the method or process of sample splitting and reduction, and the security measures taken to ensure the validity and integrity of samples taken. ~~Include:~~
- ~~(a) a statement whether any aspect of the sample preparation was conducted by an employee, officer, director or associate of the issuer;~~
- (b) details relevant information regarding sample preparation, assaying and analytical procedures used, the name and location of the analytical or testing laboratories, the relationship of the laboratory to the issuer, and whether the laboratories are certified by any standards association and the particulars of any certification;
- (c) a summary of the nature and extent, and results of all quality control measures employed and check assay and other check analytical and testing

~~procedures utilized, including the results and corrective actions taken~~ quality control procedures employed and quality assurance actions taken or recommended to provide adequate confidence in the data collection and estimation process; and

- (d) ~~a statement of~~ the author's opinion on the adequacy of sample preparation, security, and analytical procedures.

Item 12: ~~Item 16: Data Verification – Include~~ – Describe the steps taken by the qualified person to verify the data being reported on, including

- (a) ~~a discussion of quality control measures and~~ the data verification procedures applied by the qualified person;
- ~~(b) — a statement as to whether the qualified person has verified the data referred to or relied upon;~~
- ~~(b)~~ ~~(e) a discussion of the nature of and~~ any limitations on or failure to conduct such verification, and the reasons for any such limitations or failure; and
- (c) the qualified person's opinion on the adequacy of the data for the purposes used in the technical report.

Item 13: Mineral Processing and Metallurgical Testing - If mineral processing or metallurgical testing analyses have been carried out, discuss

- (a) the nature and extent of the testing and analytical procedures, and provide a summary of the relevant results;
- (b) the basis for any assumptions or predictions regarding recovery estimates;
- (c) to the extent known, the degree to which the test samples are representative of the various types and styles of mineralization and the mineral deposit as a whole; and
- (d) to the extent known, any processing factors or deleterious elements that could have a significant effect on potential economic extraction.

Item 14: Mineral Resource Estimates – A technical report disclosing mineral resources must

- (a) provide sufficient discussion of the key assumptions, parameters, and methods used to estimate the mineral resources, for a reasonably informed reader to understand the basis for the estimate and how it was generated;
- (b) comply with all disclosure requirements for mineral resources set out in the Instrument, including sections 2.2, 2.3, and 3.4;

- (c) when the grade for a multiple commodity mineral resource is reported as metal or mineral equivalent, report the individual grade of each metal or mineral and the metal prices, recoveries, and any other relevant conversion factors used to estimate the metal or mineral equivalent grade; and
- (d) include a general discussion on the extent to which the mineral resource estimates could be materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors.

INSTRUCTIONS:

- (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 mineral resources reported under the cut-off grade scenarios must meet the test of reasonable prospect of economic extraction.*

Additional Requirements for Advanced Property Technical Reports

Item 15: Mineral Reserve Estimates - A technical report disclosing mineral reserves must

- (a) provide sufficient discussion and detail of the key assumptions, parameters, and methods used in the preliminary feasibility or feasibility study, for a reasonably informed reader to understand how the qualified person converted the mineral resources to mineral reserves;
- (b) comply with all disclosure requirements for mineral reserves set out in the Instrument, including sections 2.2, 2.3, and 3.4;
- (c) when the grade for a multiple commodity mineral reserve is reported as metal or mineral equivalent, report the individual grade of each metal or mineral and the metal prices, recoveries, and any other relevant conversion factors used to estimate the metal or mineral equivalent grade; and
- (d) discuss the extent to which the mineral reserve estimates could be materially affected by mining, metallurgical, infrastructure, permitting, and other relevant factors.

Item 16: Mining Methods – Discuss the current or proposed mining methods and provide a summary of the relevant information used to establish the amenability or potential amenability of the mineral resources or mineral reserves to the proposed mining methods. Consider and, where relevant, include

- (a) geotechnical, hydrological, and other parameters relevant to mine or pit designs and plans;
- (b) production rates, expected mine life, mining unit dimensions, and mining dilution factors used;
- (c) requirements for stripping, underground development, and backfilling; and
- (d) required mining fleet and machinery.

INSTRUCTION: Preliminary economic assessments, pre-feasibility studies, and feasibility studies 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 three studies.

Item 17: Recovery Methods – Discuss reasonably available information on test or operating results relating to the recoverability of the valuable component or commodity and amenability of the mineralization to the proposed processing methods. Consider and, where relevant, include

- (a) a description or flow sheet of any current or proposed process plant;
- (b) plant design, equipment characteristics and specifications, as applicable; and
- (c) current or projected requirements for energy, water, and process materials.

Item 18: Infrastructure – Provide a summary of infrastructure and logistic requirements for the project, which could include roads, rail, port facilities, dams, dumps and leach pads, tailings disposal, power and pipelines, as applicable.

Item 19: Market Studies and Contracts

- (a) Provide a summary of reasonably available information concerning markets for the issuer's production, including the nature and material terms of any agency relationships and the results of any relevant market studies, commodity price projections, product valuation, market entry strategies, and product specification requirements.
- (b) Identify any contracts material to the issuer that are required for property development, including mining, concentrating, smelting, refining, transportation, handling, sales and hedging, and forward sales contracts or arrangements. State which contracts are in place and which are still under negotiation. For contracts that are in place, discuss whether the terms, rates or charges are within industry norms.

Item 20: Environmental Studies, Permitting, and Social or Community Impact -
Discuss reasonably available information on environmental, permitting, and social or community factors related to the project. Consider and, where relevant, include

- (a) a summary of the results of any environmental studies and a discussion of any known environmental issues that could materially impact the issuer's ability to extract the mineral resources or mineral reserves;
- (b) requirements and plans for waste and tailings disposal, site monitoring, and water management both during operations and post mine closure;
- (c) project permitting requirements, the status of any permit applications, and any known requirements to post performance or reclamation bonds;
- (d) a discussion of any potential social or community related requirements and plans for the project and the status of any negotiations or agreements with local communities; and
- (e) a discussion of mine closure (remediation and reclamation) requirements and costs.

Item 21: Capital and Operating Costs –
Provide a summary of capital and operating cost estimates, with the major components set out in tabular form. Explain and justify the basis for the cost estimates.

Item 22: Economic Analysis –
Provide an economic analysis for the project that includes

- (a) a clear statement of and justification for the principal assumptions;
- (b) cash flow forecasts on an annual basis using mineral reserves or mineral resources and an annual production schedule for the life of project;
- (c) a discussion of net present value (NPV), internal rate of return (IRR), and payback period of capital with imputed or actual interest;
- (d) ~~the reasons for any failure to verify the data~~ a summary of the taxes, royalties, and other government levies or interests applicable to the mineral project or to production, and to revenues or income from the mineral project; and
- (e) sensitivity or other analysis using variants in commodity price, grade, capital and operating costs, or other significant parameters, as appropriate, and discuss the impact of the results.

INSTRUCTIONS:

- (1) Producing issuers may exclude the information required under Item 22 for technical reports on properties currently in production unless the technical report includes a material expansion of current production.
- (2) The economic analysis in technical reports must comply with paragraphs 2.3(1)(b) and (c), subsections 2.3(3) and (4), and paragraph 3.4(e), of the Instrument, including any required cautionary language.

Requirements for All Technical Reports

Item 23: ~~Item 17: Adjacent Properties~~ - A technical report may include relevant information concerning an adjacent property if

- (a) such information was publicly disclosed by the owner or operator of the adjacent property;
- (b) the source of the information is identified;
- (c) the technical report states that its qualified person has been unable to verify the information and that the information is not necessarily indicative of the mineralization on the property that is the subject of the technical report;
- (d) the technical report clearly distinguishes between ~~mineralization on the~~ information from the adjacent property and ~~mineralization on the~~ information from the property ~~being reported on that is the subject of the technical report~~; and
- (e) ~~if~~ any historical estimates of mineral resources or mineral reserves ~~are included in the technical report, they~~ are disclosed in accordance with section 2.4 of the Instrument.

~~**Item 18: Mineral Processing and Metallurgical Testing**—If mineral processing or metallurgical testing analyses have been carried out, include the results of the testing, details of the testing and analytical procedures, and discuss whether the samples are representative.~~

~~**Item 19: Mineral Resource and Mineral Reserve Estimates**—A technical report disclosing mineral resources or mineral reserves must~~

- ~~(a) use only the applicable mineral resource and mineral reserve categories set out in sections 1.2 and 1.3 of the Instrument;~~
- ~~(b) report each category of mineral resources and mineral reserves separately and if both mineral resources and mineral reserves are disclosed, state the extent, if any, to which mineral reserves are included in total mineral resources;~~

- ~~(c) — not add inferred mineral resources to the other categories of mineral resources;~~
- ~~(d) — disclose the name, qualifications and relationship, if any, to the issuer of the qualified person who estimated mineral resources and mineral reserves;~~
- ~~(e) — include appropriate details of quantity and grade or quality for each category of mineral resources and mineral reserves;~~
- ~~(f) — include details of the key assumptions, parameters and methods used to estimate the mineral resources and mineral reserves;~~
- ~~(g) — include a general discussion on the extent to which the estimate of mineral resources and mineral reserves may be materially affected by any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues;~~
- ~~(h) — identify the extent to which the estimates of mineral resources and mineral reserves may be materially affected by mining, metallurgical, infrastructure and other relevant factors;~~
- ~~(i) — use only indicated mineral resources, measured mineral resources, probable mineral reserves and proven mineral reserves when referring to mineral resources or mineral reserves in an economic analysis that is used in a preliminary feasibility study or a feasibility study of a mineral project;~~
- ~~(j) — if inferred mineral resources are used in an economic analysis, state the required disclosure set out in subsection 2.3(3) of the Instrument;~~
- ~~(k) — when the results of an economic analysis of mineral resources are reported, state “mineral resources that are not mineral reserves do not have demonstrated economic viability”;~~
- ~~(l) — state the grade or quality, quantity and category of the mineral resources and mineral reserves if the quantity of contained metal or mineral is reported; and~~
- ~~(m) — when the grade for a polymetallic mineral resource or mineral reserve is reported as metal equivalent, report the individual grade of each metal, and consider and report the recoveries, refinery costs and all other relevant conversion factors in addition to metal prices and the date and sources of such prices.~~

~~INSTRUCTION:~~ ~~*A statement of quantity and grade or quality is an estimate and should be rounded to reflect the fact that it is an approximation.*~~

Item 24: ~~Item 20: Other Relevant Data and Information~~ - Include any additional information or explanation necessary to make the technical report understandable and not misleading.

Item 25: ~~Item 21: Interpretation and Conclusions~~ - Summarize the relevant results and interpretations of ~~all field surveys, analytical and testing data and other relevant information. Discuss the adequacy of data density and the data reliability as well as any areas of uncertainty~~ the information and analysis being reported on. Discuss any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information, mineral resource or mineral reserve estimates, or projected economic outcomes. Discuss any reasonably foreseeable impacts of these risks and uncertainties to the project's potential economic viability or continued viability. A technical report concerning exploration information must include the conclusions of the qualified person. ~~The qualified person must discuss whether the completed project met its original objectives.~~

Item 26: ~~Item 22: Recommendations~~ - Provide particulars of ~~the~~ recommended work programs and a breakdown of costs for each phase. If successive phases of work are recommended, each phase must culminate in a decision point. The recommendations must not apply to more than two phases of work. The recommendations must state whether advancing to a subsequent phase is contingent on positive results in the previous phase.

INSTRUCTION: 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 producing or development properties 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.

Item 27: ~~Item 23: References~~ - Include a detailed list of all references cited in the technical report.

~~Item 24: Date and Signature Page~~ - ~~The technical report must have a signature page at the end, signed in accordance with section 5.2 of the Instrument. The effective date of the technical report and date of signing must be on the signature page.~~

~~Item 25: Additional Requirements for Technical Reports on Development Properties and Production Properties~~ - ~~Technical reports on development properties and production properties must include~~

~~(a) Mining Operations~~ - ~~information and assumptions concerning the mining method, metallurgical processes and production forecast;~~

~~(b) Recoverability~~ - ~~information concerning all test and operating results relating to the recoverability of the valuable component or commodity~~

~~and amenability of the mineralization to the proposed processing methods;~~

- ~~(c) — Markets — information concerning the markets for the issuer's production and the nature and material terms of any agency relationships;~~
- ~~(d) — Contracts — a discussion of whether the terms of mining, concentrating, smelting, refining, transportation, handling, sales and hedging and forward sales contracts or arrangements, rates or charges are within industry norms;~~
- ~~(e) — Environmental Considerations — a discussion of bond posting, remediation and reclamation;~~
- ~~(f) — Taxes — a description of the nature and rates of taxes, royalties and other government levies or interests applicable to the mineral project or to production, and to revenues or income from the mineral project;~~
- ~~(g) — Capital and Operating Cost Estimates — capital and operating cost estimates, with the major components being set out in tabular form;~~
- ~~(h) — Economic Analysis — an economic analysis with cash flow forecasts on an annual basis using proven mineral reserves and probable mineral reserves only, and sensitivity analyses with variants in metal prices, grade, capital and operating costs;~~
- ~~(i) — Payback — a discussion of the payback period of capital with imputed or actual interest; and~~
- ~~(j) — Mine Life — a discussion of the expected mine life and exploration potential.~~

~~Item 26: — Illustrations~~

- ~~(a) — Technical reports must be illustrated by legible maps, plans and sections, which may be located in the appropriate part of the report. All technical reports must be accompanied by a location or index map and more detailed maps showing all important features described in the text. In addition, technical reports must include a compilation map outlining the general geology of the property and areas of historical exploration. The location of all known mineralization, anomalies, deposits, pit limits, plant sites, tailings storage areas, waste disposal areas and all other significant features must be shown relative to property boundaries. If information is used, from other sources, in preparing maps, drawings, or diagrams, disclose the source of the information.~~

- (b) ~~If adjacent or nearby properties have an important bearing on the potential of the property under consideration, their location and any mineralized structures common to two or more such properties must be shown on the maps.~~
- (c) ~~If the potential merit of a property is predicated on geophysical or geochemical results, maps showing the results of surveys and their interpretations must be included in the technical report.~~
- (d) ~~Maps must include a scale in bar form and an arrow indicating north.~~

***INSTRUCTION:** ~~Illustrations should be sufficiently summarized and simplified so that they are not oversized and are suitable for electronic filing.~~*