## Australasian Code for Reporting of Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves

# The JORC Code Exposure Draft

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#### **FOREWORD**

The Joint Ore Reserves Committee (JORC) has developed The Australasian Code for Reporting of Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves (the 'JORC Code' or 'the Code') which sets out the minimum standards, recommendations, and guidelines for Public Reporting in Australasia of Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves.

JORC was established in 1971 and published several reports containing recommendations on the classification and Public Reporting of Ore Reserves before the release of the first edition of the JORC Code in 1989. Revised and updated editions of the Code were issued in 1992, 1996, 1999, 2004, and 2012.

This 2024 edition supersedes all previous editions.

To promote consistency and good practice, The Committee for Mineral Reserves International Reporting Standards (CRIRSCO) has developed a set of Standard Definitions for application when reporting Mineral Resources and Mineral (Ore) Reserves. CRIRSCO has developed an International Reporting Template for the Public Reporting of Exploration Targets, Exploration Results, Mineral Resources, and Mineral Reserves. The International Reporting Template has been recognised as a commodity-specific code in the United Nations Framework Classification for Resources (UNFC) and is aligned with the UNFC. As a result of the Council of Mining and Metallurgical Institutions / CRIRSCO initiative, considerable progress has been made towards the widespread adoption of consistent reporting standards worldwide.

The Defined Terms in this edition of the JORC Code are aligned to the CRIRSCO Standard Definitions and International Reporting Template as revised in June 2024.

CRIRSCO's members are National Reporting Organisations (NROs) responsible for developing national or regional mineral reporting codes, standards, and guidelines. CRIRSCO strategically partners with the International Council on Mining and Metals (ICMM) to improve international reporting.

The Current List of NROs can be accessed here: <a href="https://www.crirsco.com/members/">https://www.crirsco.com/members/</a>

## **Standard Definitions**

The JORC Code provides for standardised definitions, including definitions that are identical to, or not materially different from the CRIRSCO Standard Definitions within the CRIRSCO International Reporting Template. Where included, CRIRSCO Standard Definitions are denoted with a superscript asterisk (\*). Definitions are listed in the order they appear in the JORC Code.

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#### 1 INTRODUCTION

#### **Format**

- 1.1 In this JORC Code edition, Defined Terms are in **bold** text, with Defined Terms considered proper nouns, and as such, have their first letter(s) capitalised.
- 1.2 Defined Terms, where referred to in other definitions, are <u>underlined</u>.
- 1.3 The JORC Code mandatory elements are identified as numbered clauses in normal typeface.
- 1.4 Guidance and further description of the definitions and mandatory clauses are provided in the document 'The JORC Code Guidance Notes'. The 'JORC Code Guidance Notes' are not part of the JORC Code and therefore contain optional recommendations. The Guidance Notes are intended to provide readers with direction and assistance to interpret and apply the Mandatory Clauses of the JORC Code in the preparation of the Documentation and the Public Report.

#### **Structure**

- 1.5 Table 1 is provided in Appendix 1 as a Documentation checklist and to provide the basis for Public Reporting where required.
- 1.6 The Table 1 Documentation checklist of reporting and assessment criteria is to be used by those preparing Competent Persons' Documentation on Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves, to ensure they have addressed all the necessary aspects and can provide justification of assumptions used.
- 1.7 Table 1 must be completed and issued when a Public Report requires it, to disclose and discuss on an 'if not, why not' basis for initial disclosure of Exploration Results, Mineral Resources, or Ore Reserves and when a material change since the prior declaration has occurred for material mining projects.
- 1.8 Appendix 2 contains a list of common terms that can considered equivalent to some of the JORC Code's Defined Terms, however, Competent Persons must use the JORC Code Defined Terms in Public Reporting.
- 1.9 Appendix 3 provides the Competent Person Consent and Specialist Consent forms.
- 1.10 Appendix 4 provides appropriate forms of compliance statements.
- 1.11 Appendix 5 provides a list of relevant abbreviations referred to within the JORC Code.

#### 2 SCOPE

## **Application**

- 2.1 The JORC Code sets out the minimum standards, recommendations, and guidelines for the Public Reporting of Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves.
- 2.2 The Code has been adopted by The Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG) and is binding on members of those organisations. The Code is endorsed by the Minerals Council of Australia and the Financial Services Institute of Australasia as a contribution to good practice.
- 2.3 The Code has been adopted by and included in the listing rules of the Australian Securities Exchange (ASX), other Australian stock, and securities exchanges, NZX (New Zealand's Exchange) and PNGX (Papua New Guinea's National Stock Exchange) (collectively securities exchanges). Under these listing rules, a Public Report must be prepared in accordance with the Code if it includes a statement on Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves or the outcomes of Technical Studies.
- The term mineral is broad, and therefore the Code applies to a diverse range of commodities for which Public Reporting of Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves is required by securities exchanges, regulatory authorities, or other entities. The term mineral in Public Reporting includes but is not limited to:
  - metalliferous minerals;
  - coal
  - · diamonds and other gemstones;
  - industrial minerals;
  - other mineral raw materials;
  - mineralised fill, remnants, pillars, low-grade mineralisation, stockpiles, dumps, and tailings (remnant materials);
  - smelting slags;
  - mineral brines; and
  - metallic or non-metallic minerals extracted by solution mining methods.
- 2.5 'Documentation' or <u>Competent Person</u> Documentation in this Code refers to internal company documents prepared by or under the supervision or direction of a <u>Competent Person</u>, that serve as a basis for, or to support, a <u>Public Report</u>.
- 2.6 Use of the term 'JORC-compliant' in a Public Report, is not permitted unless all JORC-compliant reporting requirements are met, including but not limited to the inclusion of required sections of Table 1 'if not, why not' appendix, when required under clauses 7.6, 8.28 and 9.28.
- 2.7 The words 'JORC-compliant' should be interpreted to mean: 'Reported in accordance with the JORC Code and estimated (or based on Documentation prepared) by a Competent Person as defined by the JORC Code.'
- 2.8 Competent Person Documentation and Public Reports must be prepared in accordance with the current version of the JORC Code.

JORC recognises that further review of the Code and Guidance Notes will be required periodically.

## **Principles**

- 2.10 The principles governing the operation and application of the JORC Code are Transparency, Materiality, and Competence.
- 2.11 'Transparency' requires that the reader of a <u>Public Report</u> is provided with sufficient information, the presentation of which is clear and unambiguous, to understand the <u>Public Report</u> and not be misled by this information or by omission of material information that is known to the <u>Competent Person</u>.
- 2.12 'Materiality' requires that a <u>Public Report</u> contains all the relevant information that investors and their professional advisers would reasonably require, and reasonably expect to find in the <u>Public Report</u>, for the purpose of making a reasoned and balanced judgement regarding the <u>Exploration Targets</u>, <u>Exploration Results</u>, <u>Mineral Resources</u> or <u>Ore Reserves</u> being reported. Where relevant information is not supplied, an explanation must be provided to justify its exclusion.
- 2.13 'Competence' requires that the <u>Public Report</u> be based on work that is the responsibility of suitably qualified and experienced person(s) who are subject to an enforceable professional code of ethics (refer to Section 3).
- 2.14 Transparency and Materiality are guiding principles of the Code, and the Competent Person must disclose and discuss the material assumptions underlying the declaration of Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves.
- 2.15 In particular, the Competent Person must consider that the benchmark of Materiality is that which includes all aspects relating to the Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves that an investor or their professional advisers would reasonably expect the Competent Person to disclose.
- 2.16 The Competent Person must not remain silent on any material matter that would cause the Public Report to be misleading by omission.
- 2.17 The Competent Person must not take responsibility for generating aspects of the Public Report that are outside their area(s) of relevant experience. Provision has been made for reliance on other Specialists or another Competent Person(s) in Clauses 3.10 to 3.12.

## **Public Reports**

- 2.18 'Public Reports' are reports prepared to inform investors or potential investors, and their professional advisers on Exploration Targets, Exploration Results, Mineral Resources, Ore Reserves, or the outcomes of Technical Studies. They include, but are not limited to, company reports, media releases, information memoranda, technical papers, website, and social media postings, podcasts and video posts, public presentations, and other materials commissioned by the company.
- 2.19 Public Reports include those to securities exchanges for listing, continuous disclosure, or regulatory, and government authorities or as required by law.
- 2.20 Public Reporting and disclosure requirements addressed in the JORC Code apply equally to all publicly released company information including in the form of postings on company websites,

- social media, press releases, and company briefings for shareholders, stockbrokers, and investment analysts.
- 2.21 An ASX listed entity must comply with the ASX Listing Rules and the JORC Code and Australian securities laws more broadly in respect of Public Reports. It is recognised that companies can be required to issue Public Reports into more than one regulatory jurisdiction, with compliance standards that may differ from these requirements. Such reports must include a statement alerting the reader to this situation. Where companies are required to report in other jurisdictions, they are obliged to comply with the requirements of those jurisdictions, without compromising the requirements of the JORC Code if they also claim compliance with the JORC Code.
- 2.22 In cases where summary information is presented, the Public Report must clearly state that the information is a summary, with reference to where the information, reported in accordance with the JORC Code, has been previously released, and the date of that release, of the Public Report on which the summary is based.
- 2.23 The Public Report must include sufficient context and cautionary language to allow a reasonable investor to understand the nature, importance, and limitations of the data, interpretations, material Risks (both Opportunities and Threats) and conclusions in the Public Report. This commentary must be provided by the Competent Person within their Technical Summary as appropriate.
- 2.24 For Public Reports of initial or materially changed Exploration Targets, Exploration Results, Mineral Resources, Ore Reserves, or outcomes of Technical Studies, the JORC Code requires the Competent Person(s) and Specialist(s), on whose Documentation the Public Report is based, to be named in the Public Report. The Public Report or attached statement must say that the Competent Person(s) and Specialist(s) individually consent to the inclusion in the Public Report of the matters based on their information in the form and context in which it appears and must include the name of the Competent Person's or Specialist's employer (refer to Appendix 4 for Compliance Statements).
- 2.25 Valuation of mineral assets and mineral securities falls under the jurisdiction of the VALMIN Code, not the JORC Code. The information contained in JORC Documentation and Public Reports may be used by others to prepare subsequent valuations.

## **Reporting General**

- 2.26 Public Reports concerning a company's Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves must include a description of the style and nature of the mineralisation.
- 2.27 A company must disclose all relevant information concerning Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves that could materially influence the economic value of those Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves to the company.
- 2.28 A company must promptly report any material changes in its Mineral Resources or Ore Reserves.
- 2.29 Table 1 Checklist provides a list of the criteria to be disclosed and discussed by the Competent Person in preparing Documentation to support the reporting of Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves.

- 2.30 The relevant sections of Table 1 must be provided on an 'if not, why not' basis within Public Reporting for material mining projects when reporting Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves for the first time or where these items have materially changed from when they were last publicly reported.
- 2.31 Throughout the Code, if appropriate, 'quality' may be substituted for 'grade' and 'volume' may be substituted for 'tonnage'. Other appropriate equivalent terms may be used for specific commodity reporting.
- 2.32 The effective date of a Mineral Resource and Ore Reserve statement must be declared in the Public Report.
- 2.33 Where a mineral deposit has multiple owners, the proportion of the reported Mineral Resources and Ore Reserves in which the company or reporting entity has an interest must be made clear. The company's or reporting entity's economic interest in a project or operation must be declared in the Public Report.
- 2.34 Where Mineral Resources and Ore Reserves are estimated for multiple properties, they may be aggregated for reporting purposes, particularly if the properties are located in close proximity or their products utilise common infrastructure. The principles of Transparency and Materiality govern aggregation for reporting purposes.

#### **Annual Review**

- 2.35 An Annual Review is a comprehensive review of a company's declared <u>Mineral Resources</u> and <u>Ore Reserves</u> estimates, to identify any changes related to those estimates during the previous 12 months and an assessment of whether those changes have a material effect on the declared Mineral Resources and Ore Reserves.
- 2.36 Companies must review and report the material results of their Annual Review together with the annual statement of Mineral Resources and Ore Reserves. The Annual Review date must be nominated by the company and the effective date of each Mineral Resource & Ore Reserve statement must be shown. This statement as a whole must be approved by a named Competent Person(s).
- 2.37 The company must discuss any material changes to underlying assumptions for previously reported Mineral Resources and Ore Reserves at the time of publishing the annual Mineral Resources and Ore Reserves statement.
- 2.38 If an initial release or materially modified estimates of Mineral Resources or Ore Reserves is included within the Annual Review summary, separate Public Reports outlining the basis for the new or changed estimates must be disclosed as outlined in Clauses 8.28 to 8.29 and 9.28 to 9.29 respectively.

#### 3 COMPETENCE AND RESPONSIBILITY

3.1 A 'Competent Person' is a minerals industry professional, who is a Member or Fellow of the Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists ('Professional Organisation'), or a 'Recognised Professional Organisation' (RPO), as included in a list available on the JORC and ASX websites.

These organisations have enforceable ethics and disciplinary processes including the powers to suspend or expel a member.

A Competent Person must have a minimum of five years of experience relevant to the style of mineralisation or type of deposit under consideration.

A Competent Person must have a minimum of five years of experience relevant to the activity which that person is undertaking.

Before acting as a Competent Person in a Public Report, a Competent Person must:

- Submit a dated CV of Record, in English, outlining their area(s) of practice to the JORC website;
- Provide a record of induction into the current version of the JORC Code; and
- Provide a declaration of their current membership of a Professional Organisation or RPO.

## **Competent Person Experience**

- 3.2 In addition to the requirements of Clause 3.1, if the Competent Person is:
  - preparing, supervising, or signing off on Documentation on Exploration Targets or Exploration Results, the experience must be relevant to exploration;
  - estimating, supervising, or signing off on the estimation of Mineral Resources, the experience must be relevant to the estimation, assessment, and evaluation of Mineral Resources; or
  - estimating, supervising, or signing off on the estimation of Ore Reserves, the
    experience must be relevant to the estimation, assessment, and evaluation of the
    economic extraction of Ore Reserves.

## **Competent Person Responsibilities**

- 3.3 Documentation detailing Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves, must be prepared by, or under the direction of, and signed by a Competent Person.
- 3.4 If only one Competent Person signs the Exploration Targets, Exploration Results, Mineral Resource, or Ore Reserve Documentation, the named Competent Person is responsible and accountable for the whole of the Documentation under the Code.
- 3.5 If multiple Competent Persons sign the Exploration Targets, Exploration Results, Mineral Resource, or Ore Reserve Documentation, the specific contributions should be identified, with the name and responsibility of each Competent Person identified, and their accountability must be accepted for that contribution. The name of the primary Competent Person for the Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves in the Public Report must be disclosed in this case.

- 3.6 The Competent Person must disclose and describe in their Documentation, the material assumptions underlying the Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves.
- 3.7 The Competent Person must disclose and describe in their Documentation all aspects that would influence the public perception or value of the Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves.
- 3.8 The Competent Person must be satisfied that:
  - their work has not been unduly influenced by the organisation, company or person commissioning their work or Documentation that may become the basis for a Public Report;
  - their Documentation provides a fair representation of the matters being reported;
  - all material assumptions are disclosed in their Documentation and disclosed in the Public Report; and
  - adequate disclosure is made in both the Documentation and the Public Report of all material aspects including material Risks (both Opportunities and Threats) that an informed reader may require to make a reasonable and balanced judgement thereof.

## **Reliance on Other Specialists**

- 3.9 Where a Competent Person does not have the necessary specialist expertise on required content for the Public Report, they may rely on information provided by an appropriate Specialist or another Competent Person.
- 3.10 A 'Specialist' must be a qualified professional with a minimum of five years of contextual experience relevant to the project type being reported and a member of a relevant Professional Organisation that has enforceable ethics and disciplinary processes including the powers to suspend or expel a member.
- 3.11 The Competent Person must:
  - critically review the Specialist's Documentation, particularly to consider whether the Specialist has used assumptions and methodologies that appear to be reasonable and has drawn on source data that appears to be appropriate in the circumstances;
  - have reasonable grounds for believing the Specialist's Documentation is not false or misleading;
  - ensure that the Specialist's Documentation is reported in a way that will not be misleading or deceptive; and
  - identify the Specialist(s) as (a) contributor(s) to Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves, including the name(s), professional membership(s), qualification(s), and relevant experience of the Specialist(s).

## **Company Responsibility and Consent for Public Reporting**

- 3.12 A Public Report concerning a company's Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves is the responsibility of the company acting through its Board of Directors.
- 3.13 A Public Report must be based on, and fairly reflect, the Documentation prepared by, or under the direction of and signed by the Competent Person(s).
- 3.14 A Public Report may include information from multiple Competent Persons and Specialists.
- 3.15 A company issuing a Public Report must include in the Public Report:
  - the name(s) of the Competent Person(s) and any Specialist(s);
  - whether the Competent Person(s) or Specialist(s) is an employee of the company, and, if not, name the Competent Person's or Specialist's employer and the relationship with the company;
  - any potential for a conflict of interest by the Competent Person(s) or Specialist(s) or a related party;
  - any other relationship of the Competent Person(s) or Specialist(s) with the company making the Public Report;
  - ensure that the reliance upon the work performed by a Specialist is not limited in a manner that results in the Competent Person and reader of the resulting report being unable to rely upon it; and
  - a statement identifying the parts of the Public Report each Competent Person is responsible for and to which each Specialist has contributed.
- 3.16 The issue of a Public Report requires the consent of the Competent Person(s) and the Specialist(s) in writing before the release of the Public Report, as to the form, and context in which it appears.
- 3.17 The written consent must be provided using the Consent Form(s) provided in Appendix 3.
- 3.18 A Public Report that includes Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves must be accompanied by a Competent Person compliance statement taking responsibility for the form and context in which it appears.
- 3.19 The Competent Person compliance statement that accompanies a Public Report must include a Competent Person Summary Statement of Relevant Experience to the matter being reported.
- 3.20 Naming and including a Competent Person or Specialist in the Public Report without their explicit written consent or in accordance with Clause 3.16, constitutes a breach of the JORC Code by the reporting company.
- 3.21 Where a company is re-issuing information previously issued with the written consent of the Competent Person(s) and Specialists(s), the company must:
  - state the original Public Report name, the name(s) of the Competent Person(s) and Specialist(s) responsible for the original Public Report;
  - state the date and reference the location of the original Public Report for public access;

- confirm that the form and context in which the Competent Person(s) and Specialist(s) findings were presented in the original Public Report have not been materially modified;
- confirm that the company making the Public Report is not aware of any new information or data that materially affects the information included in the original Public Report; and
- in the case of Mineral Resources or Ore Reserves, confirm that all material
  assumptions and technical parameters underpinning the Mineral Resources or Ore
  Reserves in the original Public Report continue to apply and have not materially
  changed.
- 3.22 It is the responsibility of the company acting through its Board of Directors to ensure the requirements of Clauses 3.15 to 3.21 are met in full.
- 3.23 Clause 3.21 does not apply to the requirements for Annual Review reporting of Mineral Resources and Ore Reserves which is specifically referenced in Clause 2.35 to 2.38.
- 3.24 Clause 3.21 does not apply to reporting of Exploration Targets which is specifically referenced in Clause 6.13.
- 3.25 Examples of appropriate forms of compliance statements are provided in Appendix 4.

## **Complaints**

- 3.26 Complaints made concerning the professional work of a Competent Person or Specialist will be dealt with under the ethics and disciplinary procedures of the Professional Organisation or RPO to which the Competent Person or Specialist belongs.
- 3.27 Complaints concerning Public Reporting and disclosure by the listed entity (excluding Competent Person complaints as per Clause 3.26) should be made in accordance with the requirements of the relevant securities exchange.

#### 4 REPORTING TERMINOLOGY

## **Defined Terms**

- 4.1 All terms defined in this Code shall have the defined meanings when used in any Documentation or Public Report that is produced in accordance with the JORC Code.
- 4.2 The meaning of Defined Terms shall be equally applicable to the singular and plural forms of the Defined Terms.
- 4.3 Defined terms must be capitalised to make it clear that these terms are used in accordance with the JORC Code.
- 4.4 Documentation and Public Reports must only use the following Defined Terms:
  - Exploration Targets;
  - Exploration Results;
  - Mineral Resources;
  - Inferred Mineral Resources;
  - Indicated Mineral Resources;
  - Measured Mineral Resources;
  - Ore Reserves;
  - Probable Ore Reserves;
  - Proved Ore Reserves.
- 4.5 Use of any other terms to denote the potential, quality, grade, or tonnage, such as 'mining inventory', 'mineable tonnes' or 'non-JORC Resource' are prohibited.

#### **Classification Framework**

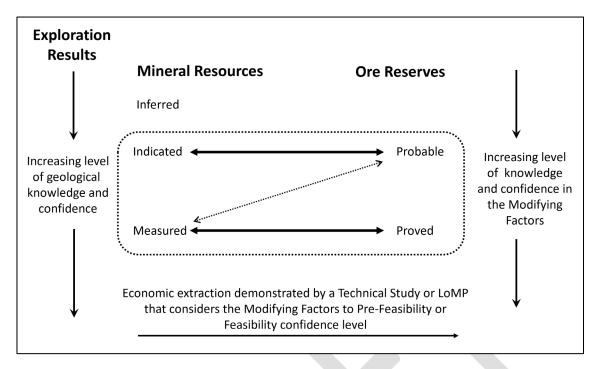


Figure 1: General relationship between Exploration Results, Mineral Resources, and Ore Reserves.

4.6 The framework for classifying estimates for Public Reporting in accordance with the JORC Code is shown in **Figure 1** and reflects the different levels of geological confidence and different degrees of technical and economic evaluation to be considered.

## **Modifying Factors**

- 4.7 'Modifying Factors' are considerations used to assess and estimate <u>Exploration Targets</u>, <u>Mineral Resources</u>, and/or <u>Ore Reserves</u>.
  - Modifying Factors include, but are not restricted to mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governance (ESG) and regulatory factors.
- 4.8 The effects of Modifying Factor variability on the reasonable prospects for economic extraction of a Mineral Resource, or on the likely economic viability and/or on the estimation and classification of an Ore Reserve, must be disclosed and discussed.
- 4.9 ESG factors must be given equal prominence to other Modifying Factors. This requirement acknowledges the nature of evolving knowledge in these areas and requires that the available and material knowledge at any reporting stage is applied in the Public Report.
- 4.10 All Public Reports of Exploration Targets, Exploration Results, Mineral Resources, Ore Reserves and Technical Studies must include the consideration and reporting of the ESG factors that could have a material effect on the outcome of the exploration assessment, project, or operation.
- 4.11 Material risks and potential impacts of a Modifying Factor must be disclosed. Refer to the requirements contained in Clauses 5.4 to 5.7.

4.12 Refer to the requirements for reporting Mineral Resources contained in Clauses 8.1 to 8.37 and requirements for reporting Ore Reserves contained in Clauses 9.1 to 9.35.



#### 5 RISK: OPPORTUNITIES AND THREATS

- 5.1 'Risk' is the effect of uncertainty on <u>Exploration Targets</u>, <u>Mineral Resources</u>, and <u>Ore Reserves</u> and comprises <u>Opportunities</u> and <u>Threats</u>.
- 5.2 An 'Opportunity' is considered as a potential upside, positive effect or positive outcome, on <a href="Exploration Targets">Exploration Targets</a>, Mineral Resources, and Ore Reserves.
- 5.3 A 'Threat' is considered as a potential downside, negative effect, or negative outcome, on Exploration Targets, Mineral Resources, and Ore Reserves.
- The Competent Person must consider all identified Risks related to the reported Exploration Targets, Mineral Resources, and Ore Reserves, analyse the potential effects, and likelihood of impacts on the technical or economic viability of Exploration Targets, Mineral Resources, and Ore Reserves, and evaluate which Opportunities and/ or Threats are material. The Competent Person must ensure that the discussion is appropriately balanced.
- 5.5 The Competent Person must address the criteria in Table 1 Section 9.
- 5.6 Public Reporting of initial or materially changed Exploration Targets, Mineral Resources, and Ore Reserves must disclose and describe material Opportunities and Threats.
- 5.7 Annual Review reporting of Mineral Resources and Ore Reserves must disclose and describe material Opportunities and Threats (refer to requirements of Clause 2.36).

#### 6 REPORTING OF EXPLORATION TARGETS

- An 'Exploration Target' is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade or quality, relates to potential mineralisation for which there has been insufficient exploration to estimate a <u>Mineral Resource</u>.
- 6.2 A Public Report, statement or any such information relating to an Exploration Target must be expressed so that it cannot be confused, misrepresented, or misconstrued as an estimate of a Mineral Resource or Ore Reserve. The terms Resource or Reserve must not be used in this context.
- 6.3 All disclosures of an Exploration Target must clarify whether the target is based on historical data, Exploration Results, or on proposed exploration programs.
- An Exploration Target tonnage or grade must not be reported as a 'headline statement' in a Public Report, due to the level of uncertainty surrounding the supporting data. This includes the mentioning of Exploration Target tonnes and grades in the 'headline bullet points'.
- 6.5 In the generation of Exploration Targets, available, and appropriate Modifying Factor assumptions should be reasonably applied.
- There must be a clarification statement within the same paragraph as the first reference of the Exploration Target in the Public Report, stating that the potential quantity and grade are conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.
- 6.7 In any statement referring to potential quantity and grade of the target, these must both be expressed as ranges and represented as approximations and must include a detailed explanation of the basis for the assumptions made and procedures used to estimate the range of tonnage and grade or quality, and extent.
- 6.8 The Exploration Target Technical Summary must contain a detailed explanation of the basis for the target including a specific discussion of the geological setting and exploration planning, exploration activity already completed and the presence of or lack of the following attributes:
  - mineralised outcrops and assays;
  - surface geochemical and physical sampling results;
  - surface and subsurface geophysical survey results; and
  - drill holes, test pits, and underground workings.
- 6.9 If a Public Report includes an Exploration Target, the proposed exploration activities designed to test the validity of the Exploration Target must be detailed and the timeframe within which those activities are expected to be completed must be specified.
- 6.10 If an Exploration Target is based on or supported by geophysical surveying, modelling, or interpretation, the type of geophysical survey, modelling and interpretation techniques must be described and supported by appropriate figures and/or diagrams that include relevant legend, colour scales, and data ranges they represent.
- 6.11 If an Exploration Target is shown pictorially as figures or diagrams (for instance as cross sections or maps) or with a graph, it must be accompanied by text that meets the requirements

- of Clause 6.7. All figures, diagrams, maps, and graphs must include clear images, an appropriate legend, north arrow, scale bar(s), coordinate system(s) and grids. All text and numbers in an included image must be legible.
- 6.12 The Competent Person must not remain silent on any material matter, including any applicable Modifying Factors, that would cause the Public Report of the Exploration Target to be 'misleading by omission' in accordance with Clause 2.16.
- 6.13 A Public Report that includes an Exploration Target must be accompanied by a Competent Person statement taking responsibility for the form and context in which the Exploration Target appears.



#### 7 REPORTING OF EXPLORATION RESULTS

- 7.1 'Exploration Results' include data and information generated by exploration and other work programs that might be of interest to investors, but which do not form part of a declaration of Mineral Resources or Ore Reserves.
- 7.2 Exploration Results include, but are not limited to, geological observations and visual estimates of contained minerals of interest, geochemical results such as results of outcrop sampling, assays of drill hole intersections, field portable instrument readings, and bulk samples or metallurgical composites, geometallurgical results, geophysical survey results and interpretations, basic geotechnical data, hydrogeological results, and metallurgical test results.
- 7.3 Public Reporting of Exploration Results is common in the early stages of exploration when the quantity of data available is generally not sufficient to allow any reasonable estimates of Mineral Resources.
  - When publicly reporting on Exploration Results for a Project, some initial consideration must be given to the prospects for future economic extraction. Available data with respect to potential project parameters, including material ESG threats and opportunities should be taken into consideration in reporting Exploration Results. If there are known issues related to the preliminary project parameters, particularly metallurgical recovery or ESG aspects, that could represent significant threats or opportunities with respect to the prospects for future economic extraction, these issues may be material information and should be discussed in the Public Report.
- 7.4 Public Reporting of Exploration Results that are not part of a formal declaration of Mineral Resources or Ore Reserves must not be presented in a way that unreasonably implies the discovery of potential economic mineralisation.
- 7.5 When publicly reporting Exploration Results in relation to mineralisation not classified as a Mineral Resource or an Ore Reserve, estimates of tonnages and grade must not be assigned to the mineralisation unless the situation is covered by Clause 6.7, and then only in strict accordance with the requirements of Clauses 6.2 to 6.13.
- 7.6 Public Reports of Exploration Results must have a proximate statement noting that: "The information provided in this report/statement/release constitutes Exploration Results. It is inappropriate for the reader to use the information presented for deriving estimates of tonnage and grade or quality".
- 7.7 Public Reports of Exploration Results must contain sufficient information and context to allow a considered and balanced judgement of their significance, including provision of a Table 1 for Exploration prepared on an 'if not, why not' basis.
- 7.8 Public Reports must include an Exploration Results Technical Summary including relevant information such as:
  - exploration context,
  - geological setting,
  - exploration type,
  - method of sampling,
  - relevant sample intervals, and locations,

- distribution, dimensions, and relative location of all relevant assay data,
- methods of digestion and analysis,
- data aggregation methods,
- land tenure status,
- relevant metallurgical testwork and results, including selection and representivity of composites,
- project ESG considerations, plus
- information on any of the other criteria listed in Table 1 that are material to an assessment and could reasonably influence an investment decision based upon Exploration Results.

As required under clause 2.16, the Competent Person must not remain silent on any issue for which the presence or absence of comment could affect the public perception of the Exploration Result.

- 7.9 The Public Report must include a table of drillholes, which includes:
  - easting and northing of the drillhole collar;
  - elevation or RL of the drillhole collar;
  - dip and azimuth of the hole;
  - down-hole width and depth of the reported intersection; and
  - end of hole depth.
- 7.10 Where assay and analytical results are reported, they must use one of the following methods, selected as the most appropriate by the Competent Person, either:
  - by listing all results, along with sample intervals (or size, in the case of bulk samples);
     or
  - by reporting weighted average grades of mineralised zones, indicating clearly how the grades were calculated, for all drillholes including drillholes with zero intercepts.
- 7.11 If true widths of mineralisation are not reported, an appropriate qualification must be included in the Public Report.
- 7.12 Where historical assay and analytical results exist, but have not been publicly reported, the Competent Person must discuss the results in the context of the newly reported results.
- 7.13 Clear diagrams and maps designed to represent the geological context must be included in the Public Report. These must include, but not be limited to, a plan view of drill hole collar locations and appropriate sectional views. All figures, diagrams, maps, and graphs must include clear, legible images, and appropriate legend, north arrow, scale bar(s), coordinate system(s) and grids.
- 7.14 Relevant historical exploration information/results are to be included on any plans and sections even if the location is an estimate, with the level of locational confidence and data reliability for historical exploration to be discussed.
- 7.15 Reporting of selected information such as geological observations, isolated assays, isolated drill holes, assays of panned concentrates, visual estimates, or results from supergene-enriched soils or surface samples, without placing them in perspective and providing adequate discussion of significance is unacceptable.

#### 8 REPORTING OF MINERAL RESOURCES

8.1 A 'Mineral Resource' is a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction.

The location, quantity, grade or quality, continuity, and other geological characteristics of a Mineral Resource are known, estimated, or interpreted from specific geological evidence and knowledge, including sampling.

Mineral Resources are subdivided, in order of increasing geological confidence, into <u>Inferred</u>, Indicated, and Measured Mineral Resource categories.

- 8.2 Mineral Resources must satisfy the requirement that there are reasonable prospects for economic extraction (i.e., more likely than not), regardless of the classification of the Mineral Resource. Reasonable prospects analysis must reference any available material Modifying Factor data.
- 8.3 Portions of a mineral deposit that do not have reasonable prospects for economic extraction must not be included in a Mineral Resource.
- 8.4 A Mineral Resource cannot be estimated in the absence of subsurface sampling or analysis information.
- 8.5 Geological evidence and knowledge required for the estimation of Mineral Resources must include sampling or analysis data of a type, and at spacings, appropriate to the geological, chemical, physical, and mineralogical complexity of the mineral occurrence, for all classifications of Inferred, Indicated, and Measured Mineral Resources.

## **Reasonable Prospects Assessment**

- 8.6 A 'Reasonable Prospects Assessment' refers to Documentation which is the consideration and appropriate assessment by a <u>Competent Person</u> of reasonably assumed Modifying Factors that are likely to influence the reasonable prospects of economic extraction.
- 8.7 Reasonable Prospects Assessment Documentation must be prepared by the Competent Person to justify whether all or part of the mineralisation has reasonable prospects for economic extraction.
- 8.8 The basis for the reasonable prospects for economic extraction is always a material matter and must be explicitly disclosed and discussed by the Competent Person within the Public Report of Mineral Resources using the criteria listed in Table 1 for guidance. The reasonable prospects disclosure must also include a discussion of the technical and economic support for the cut-off assumptions applied.
- 8.9 The Reasonable Prospects Assessment Documentation cannot be used as the basis for Public Reporting of any financial, economic, or production assessments. The sole purpose is to document that the Competent Person has formally addressed the reasonable prospects requirement.
- 8.10 Reasonable Prospects Assessment Documentation cannot be used as the basis for disclosure of Ore Reserves.

8.11 Where untested practices or emerging technologies are applied in the determination of reasonable prospects, the use of the proposed practices for reporting the Mineral Resource must be discussed and justified by the Competent Person in the Public Report.

#### **Inferred Mineral Resources**

8.12 An 'Inferred Mineral Resource' is that part of a <u>Mineral Resource</u> for which quantity and grade or quality are estimated based on limited geological evidence and sampling.

Geological evidence is sufficient to infer but not demonstrate geological and grade or quality continuity, based on exploration, sampling, and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings, and drill holes.

An Inferred Mineral Resource has a lower level of confidence than that applying to an <a href="Indicated Mineral Resource">Indicated Mineral Resource</a> and cannot be converted to an <a href="Ore Reserve">Ore Reserve</a>. It is reasonably expected that a portion of the Inferred Mineral Resources could be upgraded to <a href="Indicated Mineral Resources">Indicated Mineral Resources</a> with continued exploration.

- 8.13 Where the Mineral Resource being reported is predominantly an Inferred Mineral Resource, sufficient supporting information must be provided to enable the reader to evaluate and assess the risk associated with the reported Mineral Resource.
- 8.14 In circumstances where the estimation of the Inferred Mineral Resource is presented based on extrapolation beyond the nominal sampling spacing and taking into account the style of mineralisation, the Public Report must contain sufficient information and an accompanying diagram to inform the reader of:
  - the maximum distance that the resource is extrapolated beyond the sample points;
  - the portion of the resource that is based on extrapolated data; and
  - the basis on which the resource is extrapolated to these limits.
- 8.15 Inferred Mineral Resources cannot be converted to Ore Reserves and must not be stated as part of the Ore Reserve.

#### **Indicated Mineral Resources**

- 8.16 An 'Indicated Mineral Resource' is that part of a <u>Mineral Resource</u> for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of <u>Modifying Factors</u> in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
  - Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to demonstrate geological and grade or quality continuity between points of observation where data and samples are gathered.
  - An Indicated Mineral Resource has a lower level of confidence than that applying to a <u>Measured Mineral Resource</u> and cannot be converted to a <u>Proved Ore Reserve</u>.
- 8.17 An Indicated Mineral Resource has a higher level of confidence than that applying to an Inferred Mineral Resource.

#### **Measured Mineral Resources**

- 8.18 A 'Measured Mineral Resource' is that part of a <u>Mineral Resource</u> for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of <u>Modifying Factors</u> to support detailed mine planning and final evaluation of the economic viability of the deposit.
  - Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation where data and samples are gathered.
  - A Measured Mineral Resource has a higher level of confidence than that applying to either an <u>Indicated Mineral Resource</u> or an <u>Inferred Mineral Resource</u>. It may be converted to a <u>Proved Ore Reserve</u> or, under certain circumstances, to a <u>Probable Ore Reserve</u>.
- 8.19 A Measured Mineral Resource requires an understanding of the geology, mineralogy, and a range of Modifying Factors including mineability and amenability to processing of the mineral deposit.

## **Selection and Reporting of Mineral Resources**

- 8.20 An appropriate Mineral Resource category or categories must be determined by a Competent Person.
- 8.21 The selection of the reporting category of Mineral Resources depends upon the quantity, distribution, and quality of data.
- 8.22 Public Reports of Mineral Resources must specify one or more of the categories of 'Inferred', 'Indicated' and 'Measured'.
- 8.23 Mineral Resources must not be reported in a combined form unless details for the individual categories are also provided.
- 8.24 Mineral Resources must not be reported in terms of contained metal or mineral content unless corresponding tonnages and grades are also presented.
- 8.25 Mineral Resources must not be aggregated with Ore Reserves.
- 8.26 Public Reports of Mineral Resources must transparently disclose any subset of the total declaration by category, where necessary approvals have not been granted. The Competent Person shall describe the risks, work program(s) and anticipated timeline to obtain outstanding approvals.
- 8.27 Public Reporting of tonnages and grades outside the categories covered by the Code is not permitted unless the situation is covered by Clause 6.7, and then only in strict accordance with the requirements of Clauses 6.2 to 6.13.
- 8.28 In a Public Report of a Mineral Resource for a material mining project, when reporting for the first time, or when those estimates have materially changed from when they were last reported (including classification changes), a Mineral Resources Technical Summary must be included in the body of the Public Report.

This summary must include a summary of all information material to understand the reported estimates of Mineral Resources concerning the following matters:

- geology and geological interpretation;
- sampling and sub-sampling techniques;
- drilling techniques;
- the criteria used for classification, including drill, and data spacing and distribution this
  includes separately identifying the drill spacing used to classify each category of 'Mineral
  Resources' (Inferred, Indicated and Measured) where estimates for more than one
  category of Mineral Resources are reported;
- sample analysis method;
- estimation methodology;
- cut-off grade(s), including the basis for the selected cut-off grade(s); and
- mining and metallurgical methods and parameters, and other material Modifying Factors (including ESG elements) considered to date.
- 8.29 The relevant sections of Table 1 Mineral Resources criteria must be addressed on an 'if not, why not' basis, with all assumptions justified on an 'if so, why so' basis. If a particular criterion is not relevant or material, a disclosure that it is not relevant or material and a brief explanation of why this is the case must be provided.
- 8.30 The benchmark of Materiality is those matters that an investor or their professional advisers would reasonably expect to see explicit comment on from the Competent Person and to provide Transparency so that investors are appropriately informed of the basis for the changes.
- 8.31 The words 'ore' and 'reserves' must not be used in describing Mineral Resource estimates as the terms imply technical and economic viability and are only appropriate when all relevant Modifying Factors have been reported to a Pre-Feasibility or Feasibility level.
- 8.32 Public Reports and estimates should continue to refer to the appropriate category or categories of Mineral Resources until technical feasibility and economic viability have been established.
- 8.33 Mineral Resources must be reviewed annually (refer to requirements of Clauses 2.35 to 2.38).

## **Accuracy of Estimates**

- 8.34 Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape, and continuity of the occurrence, and upon the available sampling results.
- 8.35 Reporting of tonnage and grade figures must reflect the relative uncertainty of the estimate by rounding off to appropriately significant figures.
- 8.36 In the case of Inferred Mineral Resources, tonnage and grade figures should be qualified with terms such as 'approximately'.
- 8.37 To emphasise the imprecise nature of a Mineral Resource the final result should always be referred to as an estimate, not a calculation.

#### 9 REPORTING OF ORE RESERVES

9.1 An 'Ore Reserve' is the economically mineable part of a <u>Measured</u> and/or <u>Indicated Mineral</u> Resource.

An Ore Reserve includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at a <a href="Pre-Feasibility">Pre-Feasibility</a> or <a href="Feasibility">Feasibility</a> level, as appropriate, that include application of Modifying Factors.

Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The reference point at which Ore Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

Ore Reserves are sub-divided in order of increasing confidence into <u>Probable Ore Reserves</u> and Proved Ore Reserves.

- 9.2 A Technical Study to Pre-Feasibility Study or Feasibility Study confidence level must be carried out before the determination of the Ore Reserves.
- 9.3 Ore Reserves are those portions of Indicated Mineral Resources and Measured Mineral Resources which, after the application of all relevant Modifying Factors at a Pre-Feasibility or Feasibility Study confidence level, result in an estimated tonnage and grade or quality which, in the opinion of the Competent Person(s) making the estimates, can be the basis of a viable project or operation.
- 9.4 The key underlying assumptions and outcomes of the Pre-Feasibility Study or Feasibility Study must be disclosed at the time of reporting of a new or materially changed Ore Reserve.
- 9.5 For operating mines, the key underlying assumptions and outcomes of the Pre-Feasibility Study or Feasibility Study or demonstrated operating performance must be disclosed at the time of reporting of a new or materially changed Ore Reserve.
- 9.6 The Technical Study must have determined a mine plan that is technically achievable and economically viable based on reasonable economic assumptions and from which the Ore Reserves can be derived.
- 9.7 In reporting Ore Reserves, information on all Modifying Factors must be included in Public Reports.
- 9.8 All Public Reports of Ore Reserves must include the consideration and reporting of ESG context and factors that could influence the conclusion that extraction could reasonably be justified at the time of reporting. ESG considerations must be balanced across the determination and application of all Modifying Factors.
- 9.9 The Competent Person must disclose which Ore Reserves are supported by full permitting and approvals, and which ones are not. Any portion of an Ore Reserve for which material permits and approvals have not yet been obtained must be disclosed with the risks, work plan, and timeline required to achieve approval described.

9.10 All Public Reports of Ore Reserves must include information on estimated mineral processing recovery factors including payability, mining dilution, mining loss, and other mining and mineral processing assumptions.

## Life of Mine Planning

- 9.11 A Life of Mine Plan (LoMP) is a design and financial/economic study of an existing operation in which appropriate assessments have been made of all <u>Modifying Factors</u>, which are considered in sufficient detail (to a minimum of <u>Pre-Feasibility</u> level) to demonstrate that continued extraction is reasonably justified.
- 9.12 A LoMP of at least Pre-Feasibility confidence level can be used, as the basis for reporting Ore Reserves, in an operating mine where there is no significant capital expenditure required.
- 9.13 It is accepted that mine design and planning in a LoMP may include a proportion of Inferred Mineral Resources. If this category is considered in mine design, mine planning, or economic studies, the results of which are publicly reported, full disclosure must be made and the effect on the results of the studies must be stated.
- 9.14 Modifying Factors and assumptions applied to the Inferred Mineral Resources must reflect a risk analysis taking into account their lower geological knowledge and confidence.
- 9.15 A LoMP must be economically viable without reliance on Inferred Mineral Resources to support the declaration of Ore Reserves.
- 9.16 Where a material amount of mining in the LoMP includes Inferred Mineral Resources:
  - a comparison of the results with and without these Inferred Mineral Resources must be shown;
  - the rationale (including a risk assessment) behind their inclusion must be explained; and
  - the proportion of Inferred Resources included in the LoMP must be reported.

#### **Probable Ore Reserves**

- 9.17 A 'Probable Ore Reserve' is the economically mineable part of an <u>Indicated Mineral Resource</u> and in some circumstances, a <u>Measured Mineral Resource</u>.
  - The confidence in the <u>Modifying Factors</u> applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.
- 9.18 A Probable Ore Reserve has a lower level of confidence than a Proved Ore Reserve but is sufficiently reliable to demonstrate that, at the time of reporting, extraction could reasonably be justified.

#### **Proved Ore Reserves**

- 9.19 A 'Proved Ore Reserve' is the economically mineable part of a <u>Measured Mineral Resource</u>. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.
- 9.20 A Proved Ore Reserve represents the highest confidence category of Ore Reserve estimate and implies a high degree of confidence in geological and grade continuity, and in the Modifying Factors.

## **Selection and Reporting of Ore Reserves**

- 9.21 The appropriate Ore Reserve category must be determined by the Competent Person.
- 9.22 The selection of the reporting category of Ore Reserves is determined by the relevant level of confidence in the Mineral Resource and confidence in the Modifying Factors.
- 9.23 An Indicated Mineral Resource cannot be converted to a Proved Ore Reserve.
- 9.24 Public Reports of Ore Reserves must specify one or more of the categories of Proved and Probable Ore Reserves.
- 9.25 Reports must not contain combined Proved and Probable Ore Reserve figures unless the relevant figures for each of the categories are also provided.
- 9.26 Reports must not present contained metal or mineral content figures unless corresponding tonnage and grade figures are also given.
- 9.27 Public Reporting of tonnage and grade outside the categories covered by the Code is not permitted unless the situation is covered by Clause 6.7, and then only in strict accordance with the requirements of Clauses 6.2 to 6.13.
- 9.28 In a Public Report of an Ore Reserve estimate for a material mining project, when reporting for the first time, or when those estimates have materially changed from when they were last reported (including classification changes), the relevant sections of Table 1 must be provided. The report must also include an Ore Reserves Technical Summary disclosing information material to understand the reported estimates of Ore Reserves concerning the following matters:
  - The material assumptions and the outcomes from the Pre-Feasibility Study or the
    Feasibility Study (as the case may be), or discussion of demonstrated operating
    performance. If the economic assumptions are commercially sensitive to the mining
    entity, an explanation of the methodology used to determine the assumptions rather
    than the actual figures can be reported.
  - The criteria used for classification, including the classification of the Mineral Resources on which the Ore Reserves are based and the confidence in the Modifying Factors applied.
  - The mining method selected and other mining assumptions, including mining recovery factors and mining dilution factors.
  - The processing method selected and other processing assumptions, including the recovery factors applied, and the allowances made for deleterious elements.
  - The basis of the cut-off grade(s) or quality parameters applied.
  - The estimation methodology.
  - Any other material Modifying Factors, including the status of environmental permits and approvals, mining tenure, and development approvals, other governmental factors, and infrastructure requirements for the selected mining methods and transportation of product/s to market.
- 9.29 Table 1 criteria must be addressed on an 'if not, why not' basis, with all assumptions justified on an 'if so, why so' basis. If a particular criterion is not relevant or material, a disclosure that it is not relevant or material and a brief explanation of why this is the case must be provided.

- 9.30 The benchmark of Materiality is that which an investor or their professional advisers would reasonably expect to see an explicit comment from the Competent Person and to provide Transparency so that investors are appropriately informed of the basis for the changes.
- 9.31 Ore Reserve estimates must not be aggregated with Mineral Resource estimates to report a single combined figure.
- 9.32 In situations where figures for both Mineral Resources and Ore Reserves are reported, a statement must be included in the Public Report which clearly indicates whether the Mineral Resources are inclusive of, or additional to those Mineral Resources that have been converted into the Ore Reserves.
- 9.33 If re-evaluation indicates that the Ore Reserves are no longer viable, the Ore Reserves must be reclassified as Mineral Resources or removed from Mineral Resource/Ore Reserve statements.
- 9.34 Ore Reserves must be reviewed annually (refer to requirements of Clauses 2.35 to 2.38).

### **Accuracy of Estimates**

9.35 Ore Reserve estimates are not precise calculations. Reporting of tonnage and grade figures must reflect the relative uncertainty of the estimate by rounding off to appropriately significant figures. Refer also to Clause(s) 8.34 to 8.37.

#### 10 RECONCILIATION

- 10.1 The term 'Reconciliation' refers to the comparison of an estimate to a prior estimate, such as a <u>Mineral Resource</u> and/or an <u>Ore Reserve</u>, or the comparison of the extracted part of an estimate to the mine production results.
- The prior estimate comparison, between the revised Mineral Resource or Ore Reserve with its predecessor, is required to address Clauses 2.37, 8.28 and 9.28. The production reconciliation involves a comparison of estimates and production outcomes. Both prior estimate and production reconciliations must be disclosed by the Competent Person in Table 1 and discussed in the Public Report.
- 10.3 For any prior estimate comparison, the Competent Person should disclose, discuss, and quantify any material differences and the potential impact on the Ore Reserve.
- 10.4 Where an Ore Reserve has been publicly reported for an operating mine, the results of both production reconciliation and any prior estimate comparison must also be included in the annual Mineral Resources and Ore Reserves statement. Refer to Clause 2.36. The relationships and variables being reconciled must be described in plain language or depicted graphically and must include reconciliations of both the Mineral Resources and Ore Reserves.



#### 11 TECHNICAL STUDIES

11.1 'Technical Studies' analyse and assess geological, engineering, economic, and other Modifying Factors with increasing detail and accuracy.

## **Scoping Study**

- 11.2 A 'Scoping Study' is an order-of-magnitude <u>Technical Study</u> of the potential economic viability of a <u>Mineral Resource</u>. It includes appropriate assessments of realistically assumed <u>Modifying Factors</u> together with any other relevant operational factors that are necessary at the time of reporting to demonstrate and provide justification for further investment and technical work, and more comprehensive <u>Technical Studies</u>.
  - A Scoping Study is at a lower confidence level than a Pre-Feasibility Study.
- 11.3 A Scoping Study must not be used as the basis for the estimation of Ore Reserves.

## **Pre-Feasibility Study**

11.4 A 'Pre-Feasibility Study' is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where the preferred methods of extraction and beneficiation have been determined. It includes a financial analysis based on reasonable and demonstrated assumptions on the Modifying Factors and the evaluation of any other relevant factors which are sufficient for a Competent Person to determine if all or part of the Mineral Resource may be converted to an Ore Reserve at the time of reporting. A Pre-Feasibility Study is at a lower degree of detail and a lower confidence level than a Feasibility Study.

## **Feasibility Study**

11.5 A 'Feasibility Study' is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed economic analysis that are necessary to demonstrate at the time of reporting that economic extraction is reasonably justified. The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of a Feasibility Study is higher than that of a Pre-Feasibility Study.

## **Reporting Results of Technical Studies**

- 11.6 When publicly reporting the results of a Technical Study, the Public Report must reference the Public Report disclosing the Mineral Resource or Ore Reserve estimate on which the Technical Study is based, and state there has been no material change to the Mineral Resources estimate.
- 11.7 If the Technical Study is based on, or results in, a materially revised Mineral Resources or Ore Reserves estimate, the disclosure requirements relating to materially revised estimates apply.
- 11.8 Public Reporting the results of a Scoping Study must include a cautionary statement in the same paragraph as, or immediately following, the disclosure of the Scoping Study:
  - 'The Scoping Study referred to in this report is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of

- an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised.'
- 11.9 If the outcome of a Scoping Study is partially supported by Inferred Mineral Resources and/or an Exploration Target, the Public Report must disclose the non-aggregated quantity and grade of the Inferred Mineral Resources and/or the non-aggregated range of tonnes and a range of grade of the Exploration Target within the Scoping Study as a proportion of the total tonnage reported.
- 11.10 Refer also to the requirements regarding Modifying Factors in Clauses 4.7 to 4.12 including ESG considerations, requirements for reporting Mineral Resources contained in Clauses 8.1 to 8.37 and requirements for reporting Ore Reserves contained in Clauses 9.1 to 9.35.



## 12 REPORTING OF METAL EQUIVALENTS

- 12.1 Public Reporting of Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves for polymetallic deposits in terms of metal equivalents (a single equivalent grade of one major metal) must show details of all material factors contributing to the net value derived from each constituent.
- 12.2 The following minimum information must be disclosed within any Public Report that includes reference to metal equivalents.
  - Individual grades for all metals that are included in the metal equivalent calculation.
  - Assumed commodity prices for all metals (the Competent Person must disclose the
    assumed prices. It is not sufficient to refer to a spot price without disclosing the price
    used in calculating the metal equivalent. However, where the actual prices used are
    commercially sensitive, the company must disclose sufficient information, perhaps in
    narrative rather than numerical form, for investors to understand the methodology
    it has used to determine these prices).
  - Assumed metallurgical recoveries and payabilities for all metals and discussion of the basis on which the assumed recoveries and payabilities are derived (metallurgical test work, detailed mineralogy, similar deposits, etc.).
  - A clear statement that it is the Competent Person's opinion that all the elements included in the metal equivalent calculation have a reasonable potential to be recovered and sold.
  - The calculation formula used.
- 12.3 In most circumstances, the metal chosen for reporting on an equivalent basis should be the one that contributes most to the metal equivalent calculation. If this is not the case, a clear explanation of the logic of choosing another metal must be included in the Public Report.
- 12.4 Public Reporting based on metal equivalents is not appropriate if metallurgical recovery information is not available or able to be estimated with reasonable confidence. For many projects at the Exploration Results stage, metallurgical recovery information may not be available or able to be estimated with reasonable confidence. In such cases, reporting of metal equivalents may be misleading.

#### 13 REPORTING OF *IN SITU* OR IN-GROUND VALUATIONS

- 13.1 The publication of *in situ* or 'in-ground' financial valuations breaches the principles of the Code (refer to Clause 2.10) since the use of these terms is not transparent and lacks material information. It is also contrary to the intent of Clause 8.31 of the Code.
- Such *in situ* or in-ground financial valuations must not be reported by companies in relation to Exploration Targets, Exploration Results, Mineral Resources, Ore Reserves, or deposit size.

# 14 REPORTING OF MINERALISED FILL, REMNANTS, PILLARS, LOW-GRADE MINERALISATION, STOCKPILES, DUMPS AND TAILINGS

14.1 The Code applies to Public Reporting of all potentially economic mineralised material. This can include mineralised fill, remnants, pillars, low-grade mineralisation, stockpiles, dumps, and tailings (remnant materials) where there are reasonable prospects for economic extraction in the case of Mineral Resources, and where extraction is reasonably justifiable in the case of Ore Reserves. Unless otherwise stated, all other Clauses of the Code (including Figure 1) apply.

#### 15 COMMODITY PRICING AND ECONOMIC ASSUMPTIONS

- 15.1 Commodity prices and sales volume expectations used for the determination of Mineral Resources and Ore Reserves must be based on forward-looking estimates reflecting reasonable and defendable, short-, and long-term expectations as supported by available evidence, which may include consensus forecasts, three-year trailing averages, sales contracts, or other price analyses.
- To demonstrate the economic viability of an Ore Reserve, the projected prices, combined with Modifying Factors, must only be applied to Measured and Indicated Mineral Resources.
- Disclosure in Public Reports of the commodity prices and economic assumptions used for Ore Reserve estimation is generally required.
- 15.4 In some cases, it will be appropriate for a Public Report to exclude some commercially sensitive information. A decision to exclude commercially sensitive information would be a decision for the company issuing the Public Report, and such a decision should be made in accordance with any relevant corporations regulations in that jurisdiction.
- 15.5 In cases where commercially sensitive information is excluded from a Public Report, the Public Report should:
  - provide summary information (for example the methodology used to determine economic assumptions where the numerical value of those assumptions is commercially sensitive), and
  - provide context to inform investors or potential investors and their advisers.

#### APPENDIX 1 – TABLE 1 ASSESSMENT AND REPORTING CRITERIA

Table 1 is a high-level checklist of reporting and assessment criteria to be used as a reference by those preparing Competent Person's Documentation on Exploration Targets, Exploration Results, Mineral Resources, and Ore Reserves, to ensure they have addressed all the necessary aspects and can provide justification of assumptions used.

The JORC Code includes a requirement to publicly report against Table 1 on an 'if not, why not' basis for initial declarations and when a material change in the declaration has occurred for material projects. This approach ensures that it is clear to the reader of the Public Report to what degree items have been considered or whether they have yet to be addressed or resolved.

As always, Transparency, Materiality, and Competence are overriding principles that determine what information should be publicly reported. The Competent Person must disclose and discuss all matters that may affect a reader's understanding or interpretation of the results or estimates being reported. This is particularly important where inadequate or uncertain data affect the reliability of, or confidence in, a statement of Exploration Results or an estimate of Exploration Targets, Mineral Resources, or Ore Reserves.

It is the responsibility of the Competent Person and Specialist to consider all the criteria listed and any additional criteria that should apply to a particular project or operation. The relative importance of the criteria will vary with the project and the legal and economic conditions at the time of determination.

The criteria in Table 1 can be reported against in either table or document format within the Public Report but must address all criteria, on an 'if not, why not' basis.

The following templates are provided to assist the Competent Person in meeting their disclosure and Public Reporting requirements:

- Competent Person Documentation Checklist;
- Table 1 for Exploration (Targets and Results);
- Table 1 for Mineral Resources; and
- Table 1 for Ore Reserves.

For the purposes of this review document, Table 1 has been provided as a separate Excel table.



### **APPENDIX 2 – GENERIC TERMS AND EQUIVALENTS**

Throughout the Code, certain words are used in a general sense when a more specific meaning might be attached to them by particular commodity groups within the industry. To avoid unnecessary duplication, a non-exclusive list of generic terms is tabulated below together with other terms that may be regarded as synonymous for this document.

Generic Term	Synonyms or similar terms	Intended generalised meaning
assumption	value judgements	The Competent Person in general makes value judgements when making assumptions regarding information not fully supported by test work.
Competent Person	Qualified Person (Canada, USA), Registered Qualified Professional (Brazil)	Refer to Clause 3.1 for the definition of a Competent Person. Within the Code, the singular (Competent Person) includes the plural (Competent Person(s) and vice-versa.
cut-off grade	Product specifications	The grade, or quality, quality range, of mineralised material that qualifies as economically mineable and available in a given deposit.  May be defined based on economic evaluation, or on physical or chemical attributes that define an acceptable product specification and that product specification is directly linked to the ore mined (for example, direct shipped iron ore).
CV of Record	Résumé, Curriculum Vitae	Online Curriculum Vitae outlining membership details, areas of practice, supporting experience, and evidence of Induction for the Competent Person. The CV of Record is hosted on the JORC website.
Documentation	Competent Person Documentation, Competent Person Report	Documentation or report prepared by a Competent Person and used as a basis to support a Public Report of Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves.
diamond	gemstones	Diamonds and other gemstones with the same characteristics.
grade	quality, assay, analysis (that is value returned by the analysis)	Any physical or chemical measurement of the characteristics of the material of interest in samples or products. Note that the term quality has a special meaning for diamonds and other gemstones. The units of measurement should be stated when figures are reported. Other appropriate equivalent terms may be used for specific commodity reporting.
Induction	Induction into the current JORC Code version	Online induction into JORC linked to CV of Record database.
Material mining project	Material project, significant project	An exploration or mineral development project that has or could have a significant influence on the market value or operations of the listed company, and/or has specific prominence in Public Reports and announcements.  Also refer to ASX Listing Rule 5 and Guidance Note 31 Section 2.
Metal equivalent	Grade equivalent	Metal equivalents provide a useful and concise indication of the value of mineralisation that contains more than one valuable metal or mineral. They provide a single number that reflects the contributions of two or more assay results, providing a simpler presentation of information.

Generic Term	Synonyms or similar terms	Intended generalised meaning
metallurgy	processing, beneficiation, preparation, concentration, separation	Physical and/or chemical separation of constituents of interest from a larger mass of material. Methods employed to prepare a final marketable product from material as mined include crushing, screening, grinding, flotation, magnetic separation, leaching, washing, roasting, smelting, refining, etc.  Processing is generally regarded as broader than metallurgy and may apply to non-metallic materials where the term metallurgy would be inappropriate.
Mineral		Material of economic interest, when used in the context of Mineral Resource and Reserve determination, includes mineralisation, including dumps, and tailings, mineral brines, and other resources extracted on or within the earth's crust. It does not include oil and gas resources resulting from oil and gas-producing activities, gases (e.g., helium and carbon dioxide), geothermal fields, or water.
Mineralisation	Type of deposit, orebody, style of mineralisation.	Any single mineral or combination of minerals occurring in a mass, or deposit, of economic interest. The term is intended to cover all forms in which mineralisation might occur, whether by class of deposit, mode of occurrence, genesis, or composition.
Mining	Quarrying	All activities related to extraction of metals, minerals, and gemstones from the earth whether surface or underground, and by any method (e.g., quarries, open cast, open cut, solution mining, dredging etc.).
Ore Reserves	Mineral Reserves	'Ore Reserves' is preferred under the JORC Code but 'Mineral Reserves' is in common use in other countries and is generally accepted. Other descriptors can be used to clarify the meaning (e.g., Coal Reserves, Diamond Reserves, etc.).
recovery	Extraction, distribution	The percentage of material of interest that is extracted during mining and/or processing. A measure of mining or processing efficiency. Recovery is typically calculated as the Mass of X in the product divided by the Mass of X in the feed.
Summary Statement of Relevant Experience		A short summary of relevant Competent Person experience to the matter being disclosed in the Public Report. This would focus only on the areas relevant to the specific report, with the general CV of Record being already a public document.
tonnage	quantity, volume	An expression of the amount of material of interest irrespective of the units of measurement (which should be stated when figures are reported).
Yield	Mass Recovered	Yield is a term used in a limited number of situations and is usually the mass of a product as a percentage of the mass of feed. For example, the lump iron ore yield is 40% meaning out of every 100 t of ore mined, 40 t is recovered as the lump.

#### APPENDIX 3 – COMPETENT PERSON AND SPECIALIST CONSENT FORMS

Companies reporting Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves are reminded that while a Public Report is the responsibility of the company acting through its Board of Directors (Clause 3.12), Clause 3.13 requires that any such report 'must be based on, and fairly reflect the Documentation prepared by or under the direction of and signed by the Competent Person(s)'. Clause 3.16 requires that "The issue of a Public Report requires the consent of the Competent Person(s) and the Specialist(s) in writing prior to the release of the Public Report, as to the form, and context in which it appears."

The roles and accountabilities of a Specialist supporting a Competent Person are outlined in Clauses 3.10 to 3.11.

To assist Competent Persons and companies to comply with these requirements, and to emphasise the requirement for companies to obtain the prior written consent of each Competent Person /Specialist for their material to be included in the form and context in which it appears in the Public Report, the ASX, together with JORC, have developed Competent Persons', and Specialists Consent Forms that incorporate the requirements of the JORC Code.

Having the Consent Form witnessed by a peer member of a Professional Organisation is considered leading practice and is strongly encouraged.

The Competent Persons' and Specialists' Consent Form(s), or other evidence of the written consent, must be retained by the company and the Competent Person /Specialist to ensure that the written consent can be promptly provided if required.

[Letterhead of Competent Person or Competent Person's Employer]

### **Competent Person's Consent Form**

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 3 of the JORC Code 2024 Edition (Written Consent Statement)

Report Name
(Insert the exact name or heading of the Public Report to be released) ('Report')
(Insert the name of the company releasing the Report)
(Insert name of the deposit to which the Report refers)
If there is insufficient space, complete the following sheet, and sign it in the same manner as this origin
sheet.
(Date of Report)

# **Competent Persons' Statement**

l,
(Insert full name(s))
<ul> <li>Confirm that I am the Competent Person for the Report and:</li> <li>I am a Competent Person as defined by the JORC Code 2024 Edition, having five years' experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.</li> <li>I am a Member or Fellow of the Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists or a 'Recognised Professional Organisation' (RPO).</li> <li>I have completed the Induction into the JORC Code, 2024 Edition, and have understood the requirements for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code, 2024 Edition).</li> <li>I have submitted my current CV of Record to the JORC website which outlines the areas of practice and experience that supports my assessment to act as a Competent Person.</li> <li>I have outlined my specific professional experience relevant to this report.</li> </ul>
<ul> <li>I have reviewed the Public Report to which this Consent Statement applies.</li> <li>I am a full-time employee of</li> </ul>
(Insert company name) Or I am a consultant working for
(Insert company name)
And have been engaged by
(Insert company name)
To prepare the Documentation for
(Insert deposit/project name)
On which the Public Report is based, for the period dated

(Insert date of Exploration Results/Mineral Resource or Ore Reserve Public Report)

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Public Report in the form and context in which it appears, is based on, and reasonably reflects the information in my supporting Documentation relating to the Exploration Targets, Exploration Results, Mineral Resources, and/or Ore Reserves (select as appropriate).

Signature and Date of Consent to form and context of Public Report

(Insert signature and date of consent)

## **Competent Persons' Consent**

I consent to the release of the Report and this Consent Statement by the directors of:

(Insert company reporting name)

Signature of Competent Person

Date

Professional Membership: (insert organisation name)

Membership Number

Signature of Witness:

Print Witness Name and Residence (e.g. town/suburb)

Additional deposits covered by the Report for whic responsibility:	ch the Competent Person signing this form is accepting
Additional Reports related to the deposit for which responsibility:	n the Competent Person signing this form is accepting
Signature of Competent Person	Date
Professional Membership: (insert organisation name)	Membership Number
Signature of Witness	Print Witness Name and Residence (e.g. town/suburb)

[Letterhead of Specialist or Specialist's Employer]

## **Specialist Consent Form**

Pursuant to the requirements of ASX Listing Rules 5.6, 5.22 and 5.24 and Clause 3 of the JORC Code 2024 Edition (Written Consent Statement)

Report Name	
(Insert name or heading of Report to be publicly released) ('Report')	
(Insert the name of the company releasing the Report)	
(Insert name of the deposit/project to which the Report refers)	
If there is insufficient space, complete the following sheet, and sign it in the same manner as this original states of the same manner as the sam	ina
sheet.	
(Date of Report)	

# **Specialist Statement**

l,
(Insert full name(s))
Confirm that I am a contributing Specialist for the Report and:
<ul> <li>I am a Specialist as defined by the JORC Code 2024 Edition, having a minimum of five years' relevant and contextual experience to the deposit/project being reported and accept responsibility for the Documentation I have provided to the Competent Person.</li> <li>I am a member of a relevant Professional Organisation which has enforceable ethics and disciplinary processes including the power to expel a member.</li> <li>I have reviewed the Report to which this Consent Statement applies.</li> </ul>
I am a full-time employee of
(Insert company name) Or
I am a consultant working for
(Insert company name)
And have been engaged by
(Insert company name)
To prepare the Documentation for
(Insert deposit/project name)
On which the Public Report is based, for the period dated
(Insert date of Exploration Targets/Exploration Results/Mineral Resource or Ore Reserve Public Report)

I have disclosed to the reporting company the full nature of the relationship between myself and the company, including any issue that could be perceived by investors as a conflict of interest.

I verify that the Public Report in the form and context in which it appears, is based on, and reasonably reflects the information in my supporting Documentation relating to the Exploration Targets, Exploration Results, Mineral Resources, and/or Ore Reserves (select as appropriate).

Signature and Date of Consent to the form and context of Public Report

(Insert signature and date of consent)

### **Specialist Consent**

town/suburb)

Additional deposits covered by the Report for which the Specialist signing this form is accepting responsibility:	
Additional Reports related to the deposit for which responsibility:	the Specialist signing this form is accepting
Signature of Specialist	Date
Professional Membership: (insert organisation name)	Membership Number
Signature of Witness:	Print Witness Name and Residence (e.g. town/suburb)

#### **APPENDIX 4 – COMPLIANCE STATEMENTS**

For **Public Reports** of initial or materially changed Exploration Targets, Exploration Results, Mineral Resources, or Ore Reserves (including material changes as a result of an Annual Review), the compliance statement must be completed for each Competent Person taking responsibility for all or part of the Public Report:

'The information in (insert section reference as applicable) this report / the report to which this statement is attached that relates to Exploration Targets / Exploration Results / Mineral Resources / Ore Reserves is based on information compiled by (insert name of Competent Person), a Competent Person and who is a Member or Fellow of the Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists or a 'Recognised Professional Organisation' (RPO) included in a list that is posted on the ASX website from time to time' (select as appropriate and insert the name of the Professional Organisation of which the Competent Person is a member and the Competent Person's grade of membership).'

'(Insert name of Competent Person) is an employee of the company.' / is employed by (insert name of Competent Person's employer)\*.'

'(Insert name of Competent Person) has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2024 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves'. (Insert name of Competent Person) consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.'

A Summary of '(Insert name of Competent Persons') experience relevant to this report is included below and a full CV of Record is available on the JORC website.'

\*The full nature of the relationship between the Competent Person and the reporting company must be declared together with the Competent Person's details. This declaration must outline and clarify any issue that could be perceived by investors as a conflict of interest.

Where a Competent Person has previously issued written consent to the inclusion of their findings in a report, a company re-issuing that information to the public whether in the form of a presentation or a subsequent announcement must state, the report name, Competent Person's name(s), date, and reference the location of the source Public Report for public access:

'The information is extracted from the report entitled (name report) created on (date) and is available to view on (website name). (Insert names) acted as Competent Person(s). The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.'

In the case of an **Annual Review with no changes** completed by the company, the company must include the following:

'The company confirms it has completed its Annual Review of its Mineral Resources / Ore Reserves on (date). The previous annual statement for the Mineral Resources / Ore Reserves was entitled (name) created on (date) and is available to view on (website name). As a result of the Annual Review the company confirms that it is not aware of any new information or data that materially affects the information included in the previous annual statement, and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the previous annual statement continue to apply and have not materially changed. The company confirms that the annual statement is based on and fairly represents, information, and supporting Documentation prepared by a Competent Person or Persons. The form and context in which the Competent Person's findings were presented have not been materially modified from the previous annual statement.'

'The annual statement of Mineral Resources and Ore Reserves as a whole has been approved by of (insert name of Competent Person) and is issued with the prior written consent of (insert name of Competent Person).'

'(Insert name of Competent Person) is a Competent Person who is a Member or Fellow of the Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists or a 'Recognised Professional Organisation' (RPO) included in a list that is posted on the ASX website from time to time (select as appropriate and insert the name of the Professional Organisation of which the Competent Person is a member and the Competent Person's grade of membership).'

'(Insert name of Competent Person) is an employee of the company.' / is employed by (insert name of Competent Person's employer)\*.'

'(Insert name of Competent Person) has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2024 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves'. (Insert name of Competent Person) consents to the inclusion in the annual statement of Mineral Resources and Ore Reserves of the matters based on their information in the form and context in which it appears.'

'A Summary of '(Insert name of Competent Persons') experience relevant to this report is included below and a full CV of Record is available on the JORC website.'

\*The full nature of the relationship between the Competent Person and the reporting company must be declared together with the Competent Person's details. This declaration must outline and clarify any issue that could be perceived by investors as a conflict of interest.

In the case of an **Annual Review with changes** completed by the company, the company must include the following:

'The company confirms it has completed its Annual Review of its Mineral Resources / Ore Reserves on (date). The Annual Review was conducted by (insert name of Competent Person), a Competent Person who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy or the Australian Institute of Geoscientists or a 'Recognised Professional Organisation' (RPO) included in a list that is posted on the ASX website from time to time (select as appropriate and insert the name of the Professional Organisation of which the Competent Person is a member and the Competent Person's grade of membership).'

'(Insert name of Competent Person) is an employee of the company.' / is employed by (insert name of Competent Person's employer)\*.'

'(Insert name of Competent Person) has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2024 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves'. (Insert name of Competent Person) consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.'

'The Mineral Resources / Ore Reserves estimate(s) updated in conjunction with the Annual Review are entitled (name report) created on (date) and are available to view on (website name).'

'A Summary of '(Insert name of Competent Persons') experience relevant to this report is included below and a full CV of Record is available on the JORC website.'

\*The full nature of the relationship between the Competent Person and the reporting company must be declared together with the Competent Person's details. This declaration must outline and clarify any issue that could be perceived by investors as a conflict of interest.

### **APPENDIX 5 – LIST OF ABBREVIATIONS**

Abbreviation	Description
AIG	Australian Institute of Geoscientists
ASX	Australian Securities Exchange
AusIMM	Australasian Institute of Mining and Metallurgy
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CV	Curriculum Vitae
ESG	Environmental, Social, and Governance
ICMM	International Council on Mining and Metals
IRR	Internal Rate of Return
JORC	Joint Ore Reserves Committee
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves
LoMP	Life of Mine Plan
MCA	Minerals Council of Australia
NPV	Net Present Value
NRO	National Reporting Organisation
NZX	New Zealand's Exchange
OPEX	Operating expenditure
РО	Professional Organisation
PNGX	PNG's National Stock Exchange
QA/QC	Quality assurance/quality control
RL	Reduced Level
RPO	Recognised Professional Organisation
SOP	Standard operating procedures
UNFC	United Nations Framework Classification
VALMIN Code	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code) Current Edition, prepared by the VALMIN Committee.