



Reserves and Resources Disclosure Rules for Mining and Oil & Gas Companies:

Draft ASX Listing Rules and Guidance Notes for Enhanced
Disclosure

Consultation Paper

September 2012

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<p>Invitation to comment</p> <p>ASX is seeking submissions on the draft amendments to the Listing Rules and the draft Guidance Notes attached to this paper by 26 October 2012. Submissions should be sent to:</p> <p>regulatorypolicy@asx.com.au</p> <p>or</p> <p>Regulatory & Public Policy ASX Limited 20 Bridge Street Sydney NSW 2000</p> <p>Attention: Ms Diane Lewis</p> <p>ASX prefers to receive submissions in electronic form.</p> <p>Submissions not marked as ‘confidential’ will be made publicly available on ASX’s website.</p> <p>If you would like your submission, or any part of it, to be treated as ‘confidential’, please indicate this clearly in your submission.</p>	<p>Contacts</p> <p>If you have any enquiries regarding the consultation, please contact:</p> <p>Ms Diane Lewis Senior Policy Analyst, Regulatory & Public Policy Unit T: 02 9227 0154 E: diane.lewis@asx.com.au</p> <p>Media enquiries, please contact:</p> <p>Ms Kristen Kaus Media and Communications Executive T: 02 9227 0410 E: kristen.kaus@asx.com.au</p>
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1. Executive summary

This paper exposes for public comment proposed amendments to the ASX Listing Rules, and the associated Guidance Notes, applicable to reserves and resources reporting by ASX-listed mining and oil and gas exploration and production companies (resources companies). These new requirements provide a more robust and transparent regime for reserves and resources reporting to investors. ASX's objective is to promote investor confidence and market integrity in the reporting of these important assets to support efficient capital formation for ASX-listed resources companies.

The new reporting requirements have been developed following extensive consultation conducted over the last 2 years with ASX-listed resources companies, the Joint Ore Reserves Committee (JORC), industry groups, investor groups, professionals responsible for estimating reserves and resources, and ASIC. The reporting requirements are based on the regulatory objectives set out in the October 2011 ASX Consultation Paper 'ASX Listing Rules Review Issues Paper: Reserves and Resources Disclosure Rules for Mining and Oil & Gas Companies'. Feedback from the 122 written submissions received and in the 54 roundtables and consultation meetings held by ASX across Australia during late 2011 and early 2012 has been considered in the development of the new Listing Rules and guidance.

In parallel to this ASX initiative, JORC has prepared a revised and updated JORC Code (Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves), which, together with the Petroleum Resources Management System¹ (SPE-PRMS) for oil and gas companies, will underpin these new requirements in the ASX Listing Rules. JORC is also currently consulting on its proposed revisions to the JORC Code, which is available at: <http://www.jorc.org>.

ASX is proposing a 12 month transition period for companies to comply with the new reporting requirements following regulatory clearance for the amendments. ASX is seeking comments on the amendments to the Listing Rules and the draft Guidance Notes, including whether there are any other matters where guidance would be helpful. Views on whether a 12 month transition period is adequate are also sought.

2. The new reporting framework

In April 2012, ASX published the Report on Consultation Feedback 'Reserves and Resources Disclosure Rules for Mining and Oil & Gas Companies'. There was broad support for updating the ASX Listing Rules to create better alignment with international best reporting practices and to facilitate greater transparency in reporting. There was also strong support for the introduction of a requirement to report petroleum resources in accordance with SPE-PRMS. The new reporting requirements seek to ensure that sufficient information relating to exploration activities and the material assumptions and technical parameters underpinning reserves and resources estimates are disclosed to enable investors and their advisors to make informed investment decisions.

The proposed amendments to the ASX Listing Rules set out in Appendix 1 provide a consistent reporting framework for resources companies across both the mining and oil and gas industries. The new reporting framework comprises the following:

- **mining companies** - a requirement to report in accordance with the JORC Code and additional reporting requirements for material disclosures by mining companies in relation to their resource assets;
- **oil and gas companies** - a requirement to report in accordance with SPE-PRMS and additional reporting requirements for material disclosures by oil and gas companies in relation to their resource assets; and
- **both mining and oil and gas companies** - a requirement to have an annual mineral resources and ore reserves statement or an annual petroleum reserves statement (as the case may be) in the annual report.

2.1 Mining company reporting

New reporting requirements for company level production targets and for production targets for material projects for mining companies are also proposed. The disclosure obligations are being strengthened to ensure there is greater transparency of a company's basis for longer term projections of future production. These will provide more information to investors on the underlying material assumptions so that they can make more informed assessments of these targets.

The new requirements for the disclosure of additional information are triggered in relation to the reporting of specific matters – that is, exploration results, estimates of ore reserves and mineral resources, production targets, historical or foreign estimates – for material projects of the reporting entity to strike an appropriate balance between managing compliance costs for listed companies and providing meaningful information to investors about their reserves and resources assets.

2.2 Oil and gas company reporting – introduction of industry definitions and a comprehensive classification system

In relation to reporting by oil and gas companies, a number of general requirements applicable to all public reporting of petroleum resources will be introduced to complement the requirement to report in accordance with SPE-PRMS. The general reporting requirements will promote the use of standardised terminology and a consistent framework for the classification of petroleum resources. They will also reduce the potential for the disclosure of petroleum resources information that may confuse or mislead investors.

The new requirements for the disclosure of additional information are triggered in relation to the reporting of estimates of reserves, contingent resources and prospective resources for material projects of the reporting entity to strike an appropriate balance between managing compliance costs for listed companies and providing meaningful information to investors about their reserves and resources assets.

2.3 A principles and disclosure-based approach

In developing the new reporting requirements, ASX has taken a principles and disclosure-based approach underpinned by the central role played by the competent person or qualified petroleum reserves and resources evaluator (as the case may be) in the estimation and classification process. This is necessary because the reporting framework applies across a range of commodities in the mining industry, across both conventional and unconventional resources in the oil and gas industry, throughout the different stages of development of a project and to a range of different types of companies from junior explorers to globally diversified producers. The Guidance Notes included in this paper, the JORC Code, the SPE-PRMS and the November 2011 Guidelines for Applications of the Petroleum Resources Management System provide the guidance required to support the new principles and disclosure-based requirements.

3. Mineral resources and ore reserves reporting by mining companies

The proposed new requirements in Chapter 5 of the Listing Rules relate to the reporting of the following matters:

- disclosure of exploration results for material projects;
- disclosure of estimates of mineral resources for material projects;
- disclosure of estimates of ore reserves for material projects;
- disclosure of historical and foreign estimates of mineralisation for material projects;
- disclosure of production targets; and
- annual mineral resources and ore reserves statement.

In addition to the reporting issues identified in the October 2011 Consultation Paper, the draft amendments to the ASX Listing Rules address the following two issues raised in the consultation:

- the administrative benefits of streamlining the requirements for the prior written consent of a competent person for the subsequent reporting of exploration results and estimates of mineral resources and ore reserves that have previously been reported with all supporting information provided that all material assumptions continue to apply and there is no new information; and
- the regulatory efficiency benefits of introducing rules that provide for the reporting of material historical and foreign estimates of mineralisation that cannot be reported in accordance with the JORC Code.

In parallel to these ASX disclosure initiatives, JORC has released for consultation a revised and updated JORC Code. The proposed revisions to the JORC Code include, among other things, updated requirements for reporting exploration targets and a new requirement for a preliminary feasibility study (at a minimum) to be prepared to support a maiden ore reserve declaration.

3.1 Disclosure of exploration results for material projects

ASX proposes to introduce additional reporting requirements applicable to the reporting of exploration results for material mining projects. When reporting a set of exploration results for the first time for a material mining project, companies will be required to disclose:

- on an 'if not, why not' basis, a report based on section 1 'sampling techniques and data' and section 2 'reporting of exploration results' of Table 1 of the JORC Code; and
- for material drill-holes, a table setting out specific drill-hole and intercept information (easting and northing, elevation or RL, dip and azimuth, down hole width and depth and end of hole) or an explanation of why the company has determined that this information is not material to understanding the reported results.

Prior written consent from a competent person for the disclosure of the exploration results and the supporting information set out above will be required the first time the exploration results are reported to the market. This also applies to any new exploration results for a material mining project. This prior written consent of the competent person and the supporting information will not be required when the same set of exploration results are included in subsequent public reports, provided there is no new information or data that materially affects the exploration results or the information included in the original market announcement. The subsequent public report must also cross-refer to the original market announcement with the competent person statement and the supporting information set out above.

3.2 Disclosure of estimates of mineral resources for material projects

ASX proposes to introduce additional reporting requirements applicable to the reporting of estimates of inferred, indicated or measured mineral resources for material mining projects the first time they are reported to the market or when previously reported estimates for material mining projects are materially changed. In these circumstances, companies will be required to include in a market announcement a summary of all information material to understanding the reported estimates in relation to the following items:

- geology and geological interpretation;
- sampling and sub-sampling techniques;
- drilling techniques;
- the criteria used for classification, including drill and data spacing and distribution;
- 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 considered to date.

The matters identified above are the main matters that respondents in the consultation process considered were generally important for the purpose of providing investors with additional information in summary form in the main body of the market announcement in support of the estimates being reported.

The market announcement must also attach a report based on section 1 (sampling techniques and data), section 2 (reporting of exploration results), and section 3 (estimation and reporting of mineral resources) of Table 1 of the JORC Code, prepared on an 'if not, why not' basis.

Prior written consent from a competent person for the disclosure of the estimates of mineral resources for material projects and the supporting information set out above will be required the first time the estimates (or materially changed estimates) are reported to the market. This prior written consent and the supporting information will not be required when the same estimates are included in subsequent public reports, provided that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The subsequent public report must also cross-refer to the previous market announcement with the competent person statement and the supporting information set out above.

3.3 Disclosure of estimates of ore reserves for material projects

ASX proposes to introduce additional reporting requirements applicable to the reporting of estimates of probable and proved ore reserves for material mining projects the first time they are reported to the market or when previously reported estimates for material projects are materially changed. In these circumstances, companies will be required to include in a market announcement a summary of all information material to understanding the reported estimates in relation to the following items:

- the material assumptions and the outcomes from the preliminary feasibility study or the feasibility study (as the case may be);
- the criteria used for classification, including drill and data spacing and distribution;
- 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;
- estimation methodology; and
- material modifying factors, including the status of environmental approvals, mining tenements and approvals, other governmental factors and infrastructure requirements for selected mining methods and for transportation to market.

The matters identified above are the main matters that respondents in the consultation process considered were generally important for the purpose of providing investors with additional information in summary form in the main body of the market announcement in support of the estimates being reported.

Draft Guidance Note 31 provides guidance in relation to commercially sensitive economic assumptions and the requirement for companies to disclose sufficient information on the methodology used to determine those assumptions where they are commercially sensitive.

The market announcement must also attach a report based on section 1 (sampling techniques and data), section 2 (reporting of exploration results), section 3 (estimation and reporting of mineral resources), and section 4 (estimation and reporting of ore reserves) of Table 1 of the JORC Code, prepared on an 'if not, why not' basis.

Prior written consent from a competent person for the disclosure of the estimates of ore reserves and the supporting information set out above will be required the first time the estimates (or materially changed estimates) are reported to the market. This prior written consent and the supporting information will not be required when the same estimates are included in subsequent public reports, provided that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The subsequent public report must also cross-refer to the previous market announcement with the competent person statement and the supporting information set out above.

3.4 Disclosure of historical and foreign estimates of mineralisation for material projects

ASX proposes to introduce an exception to the requirement under the Listing Rules for companies to report mineral resources and ore reserves in accordance with the JORC Code for companies seeking to report historical estimates or foreign estimates of mineralisation for a material project. Currently, companies that believe they have an obligation to report historical or foreign estimates of mineralisation that cannot be reported in accordance with the JORC Code are required to apply to ASX for a waiver of the Listing Rules. ASX Companies Update 11/07 set out the circumstances in which ASX would consider granting such a waiver. The intention of the new reporting requirements is to codify these circumstances and remove the requirement to apply for a waiver.

A company reporting historical or foreign estimates of mineralisation for a material project will be required to disclose supporting information on a number of matters, including the relevance and reliability of the estimates, the source and date of the estimates, to the extent known, a summary of the work programs and key assumptions on which the estimates are based, and the evaluation and/or exploration work that needs to be undertaken to verify the estimates as mineral resources or ore reserves in accordance with the JORC Code. A statement by a competent person attesting that the supporting information is an accurate representation of the available data and studies relating to that mineralisation will also be required together with a proximate cautionary statement highlighting the following:

- that the estimates are not reported in accordance with the JORC Code;
- that the competent person has not done sufficient work to classify the estimates as mineral resources or ore reserves in accordance with the JORC Code; and
- that it is uncertain that following evaluation and/or exploration work that the estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code.

Companies that have publicly reported historical or foreign estimates of mineralisation which have not subsequently been verified and reported as mineral resources or ore reserves in accordance with the JORC Code will be required to explain in their annual report the progress made in evaluating those historical or foreign estimates and the status of any further exploration work required to verify the estimates as mineral resources or ore reserves in accordance with the JORC Code. If after three years of initially reporting historical or foreign estimates those estimates have not been verified and reported as mineral resources or ore reserves in accordance with the JORC Code, an explanation will be required in the annual report of why those estimates have not been verified and reported as mineral resources or ore reserves in accordance with the JORC Code and what the company's intention is with regard to verifying those estimates.

Companies will be prohibited from including historical and foreign estimates in economic studies and will also be prohibited from basing production targets on these estimates given the uncertainty associated with them.

3.5 Disclosure of production targets

ASX proposes to introduce additional reporting requirements applicable to the reporting of longer term projections of future production and associated forecast financial information for the company as a whole or for material projects where those projections are not underpinned by an operating mine and ore reserves or a combination of ore reserves and measured mineral resources.

Companies will be prohibited from disclosing production targets and associated forecast financial information based on historical and foreign estimates of mineralisation and solely on an exploration target on the basis of the level of uncertainty associated with the mineralisation.

Companies reporting production targets and associated forecast financial information that extends beyond the current or forthcoming year and which are not underpinned by an operating mine and ore reserves or a combination of ore reserves and measured mineral resources will be required to disclose supporting information that provides greater transparency of the basis for the production target. The supporting information that will be required to be disclosed includes the material assumptions, the relevant proportions of each of the categories of mineral resources and ore reserves, and any exploration potential, which underpin the production target and associated forecast financial information.

Where a company is reporting a production target and associated forecast financial information that includes inferred mineral resources and an exploration target, the company will be required to include the relevant proximate cautionary statements highlighting the low level of geological confidence associated with the mineralisation and the uncertainty that the production target will be realised. The company will also be required to disclose the factors that lead it to believe that it has a reasonable basis for disclosing a production target that includes an exploration target.

Draft Guidance Note 31 also emphasises that production targets and associated forecast financial information must be based on reasonable grounds or else they will be deemed to be misleading under the *Corporations Act 2001*. The draft Guidance Note sets out that ASX considers that it is only in exceptional circumstances that a company might form the view that it has reasonable grounds for a production target and associated forecast financial information based solely on inferred mineral resources or a combination of inferred mineral resources and an exploration target. Where a company considers that it has reasonable grounds for a production target in these circumstances, the company will be required to disclose the factors that lead it to believe that it has a reasonable basis for disclosing a production target in that context, and also disclose a technical report prepared by, or under the supervision of, a named independent competent person that supports the production target.

3.6 Annual mineral resources and ore reserves statement

ASX proposes to introduce a requirement for mining companies to include a mineral resources and ore reserves statement in their annual reports which provides the following information:

- a summary of the results of the entity's annual review of its mineral resources and ore reserves;
- the company's mineral resources and ore reserves holdings as at the company's end of financial year balance date (or such other appropriate disclosed date);
- a comparison of the company's mineral resources and ore reserves holdings against that from the previous year with an explanation of any material changes;
- where a company reports its mineral resources and ore reserves holdings at a date that is not its financial year balance date, a brief explanation of any material changes in its holdings between that date and its financial year balance date; and
- a summary of the governance arrangements and internal controls that have been put in place with respect to its mineral resources and ore reserves and the estimation process.

4. Petroleum resources reporting by oil and gas companies

The proposed new requirements in Listing Rules relate to the following:

- reporting in accordance with SPE-PRMS and other general requirements applicable to all public reporting of petroleum resources;
- the disclosure of exploration and drilling information;
- the disclosure of petroleum reserves for material projects;
- the disclosure of contingent resources for material projects;
- the disclosure of prospective resources for material projects;
- an annual reserves statement; and
- a qualified petroleum reserves and resources evaluator.

4.1 General reporting requirements

ASX proposes to introduce a general requirement for publicly reported petroleum resources to be classified and reported in accordance with SPE-PRMS. ASX also proposes to introduce a number of other general reporting requirements applicable to all public reporting of petroleum resources to provide for greater consistency in reporting and to minimise the potential for the disclosure of petroleum resources information to confuse or mislead investors. The general reporting requirements are focused on ensuring:

- the term reserves can only be used in connection with estimates of commercially recoverable quantities of petroleum and publicly reported estimates of reserves have a high degree of confidence in the commercial producibility of the reservoir;

- petroleum resources are classified and reported in the most specific resource class – reserves, contingent resources or prospective resources – to ensure that investors are aware of the limitations and different risk profiles associated with the relevant estimates;
- reserves, contingent resources and prospective resources are reported in the most specific category reflecting the degree of uncertainty associated with the estimates (for example, in relation to reserves: 1P, 2P, 3P);
- that when high estimates of petroleum resources are reported, the low and best estimates are also reported;
- mean estimates of reserves and contingent resources are not reported;
- the method of aggregating petroleum resources will be disclosed (probabilistic or deterministic) and aggregation of estimates beyond the field, project or property level is undertaken by arithmetic summation by category;
- estimates of petroleum resources are reported net of in-kind and volume-based royalties;
- estimates of reserves are reported net of lease fuel;
- the reference point used to calculate reserves is disclosed;
- the conversion factor is disclosed when estimates are reported in units of equivalency between oil and gas; and
- when estimates of prospective resources are reported, a cautionary statement is included in the disclosure documentation highlighting that the estimates have both an associated risk of discovery and a risk of development.

4.2 Disclosure of exploration and drilling information

ASX proposes to remove the guidance from Guidance Note 8 'Continuous Disclosure: Listing Rule 3.1' which sets out the expectation that companies adopt a regime of structured reporting at regular intervals for each drilling programme following disclosure of progress in that programme under listing rule 3.1. As a result of removing this guidance, reporting on the progress of a drilling programme will only be required under the Listing Rules when the company expects the information to have a material effect on the price or value of its securities. Companies may continue to voluntarily report on drilling progress provided those reports comply with the following proposed updated requirements applicable to the reporting of exploration information and drilling progress:

- the name and type of well;
- the location of the well and the details of the permit or lease in which the well is located;
- the entity's working interest in the well;
- if the gross pay thickness is reported for an interval of conventional resources, the net pay thickness;
- the geological rock type of the formation drilled;
- the depth of the zones tested;
- the types of test(s) undertaken and the duration of the tests(s);
- the hydrocarbon phases recovered in the test(s);
- any other recovery, such as, formation water and water, associated with the test(s) and their respective proportions;

- the choke size used, the flow rates and, if measured, the volumes of the hydrocarbon phases measured;
- if applicable, the number of fracture stimulation stages and the size and nature of fracture stimulation applied;
- any material volumes of non-hydrocarbon gases, such as, carbon dioxide, nitrogen, hydrogen sulphide and sulphur; and
- any other information that is material to understanding the reported results.

4.3 Disclosure of petroleum reserves for material projects

ASX proposes to introduce additional reporting requirements applicable to the reporting of estimates of reserves for material projects the first time they are reported to the market or when previously reported estimates for material projects are materially changed. When reporting estimates of reserves for material projects for the first time, companies will be required to include the following information in a market announcement:

- material economic assumptions used to calculate the estimates. Where those assumptions are commercially sensitive, an explanation of the methodology used to determine the assumptions will be required to be disclosed;
- whether the company has operator or non-operator interests and, if the company has non-operator interests, the name of the operator;
- the types of permits or licences held with respect to the reported estimates;
- a brief description of: the basis for confirming commercial producibility; the analytical procedures used to estimate the reserves; the proposed extraction method; and, if applicable, any specialised processing required following extraction;
- the estimated quantities (in aggregate) to be recovered from existing wells and facilities (developed reserves) and those to be recovered through future investments (undeveloped reserves);
- where the estimates relate to undeveloped reserves, a brief statement on: the status of the project; when development is anticipated; the marketing arrangements that justify development; access to transportation and infrastructure; and environmental approvals required;
- where the estimates relate to unconventional resources, the land area and number of wells for which the estimates are provided;
- where 1P is zero for the reported estimates, a brief explanation of why 1P reserves is zero and why estimates of 2P reserves and 3P reserves were determined and reported in these circumstances.

When reporting for first time estimates of reserves for material projects that have materially changed from when those estimates were previously reported, companies will be required in a market announcement to provide an explanation of how the new data and information has affected the estimates and explain any changes or additions to the supporting information set out above, which was included in the previous market announcement.

Prior written consent from a qualified petroleum reserves and resources evaluator for the disclosure of the reserves estimates for material projects and the supporting information set out above will be required the first time the estimates (or materially changed estimates) are reported to the market. This prior written consent and supporting information will not be required when the same estimates are included in subsequent public reports, provided all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The subsequent public report must also cross-refer to the previous market announcement with the qualified petroleum reserves and resources evaluator statement and the supporting information set out above.

4.4 Disclosure of contingent resources for material projects

ASX proposes to introduce additional reporting requirement applicable to the reporting of estimates of contingent resources for material projects the first time they are reported to the market or when previously reported estimates for material projects are materially changed. When reporting estimates of contingent resources for material projects for the first time, companies will be required to include the following information in a market:

- the types of permits or licences held with respect to the reported estimates;
- a basis for confirming the existence of a significant quantity of potentially moveable hydrocarbons and the determination of a discovery;
- a brief description of: the analytical procedures used to estimate the contingent resources; the key contingencies; and any further appraisal drilling and evaluation work to be undertaken to assess the potential for a commercial recovery;
- where the reported estimates of contingent resources are contingent on technology under development, a brief explanation of: whether the technology is under active development; whether a pilot is planned and budgeted; and whether the technology has been demonstrated to be commercially viable; and
- where the estimates relate to unconventional resources, the land area and number of wells for which the estimates are provided.

When reporting for first time estimates of contingent resources for material projects that have materially changed from when those estimates were previously reported, companies will be required in a market announcement to provide an explanation of how the new data and information has affected the estimates, and explain any changes or additions to the supporting information set out above, which was included in the previous market announcement.

Prior written consent from a qualified petroleum reserves and resources evaluator for the disclosure of the contingent resources estimates for material projects and the supporting information set out above will be required the first time the estimates (or materially changed estimates) are reported to the market. This prior written consent and supporting information will not be required when the same estimates are included in subsequent public reports, provided all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The subsequent public report must also cross-refer to the previous market announcement with the qualified petroleum reserves and resources evaluator statement and the supporting information set out above.

4.5 Disclosure of prospective resources for material projects

ASX proposes to introduce additional reporting requirement applicable to the reporting of estimates of prospective resources for material projects the first time they are reported to the market or when previously reported estimates for material projects are materially changed. When reporting estimates of prospective resources for material projects for the first time, companies will be required to include the following information in a market announcement:

- the types of permits or licences held with respect to the reported estimates;
- a brief description of: the basis on which the prospective resources are estimated; and any further exploration activities, including exploration drilling, to be undertaken and the expected timing of those activities;
- the company's assessment of the chance of discovery and the chance of development associated with the reported estimates; and
- where risked estimates are reported, an explanation of how the estimates were adjusted for risk.

When reporting for the first time estimates of prospective resources for material projects that have materially changed from when those estimates were previously reported, companies will be required in a market announcement to provide an explanation of how the new data and information has affected the estimates, and explain any changes or additions to the supporting information set out above, which was included in the previous market announcement.

Prior written consent from a qualified petroleum reserves and resources evaluator for the disclosure of the prospective resources estimates and the supporting information set out above will be required the first time the estimates (or materially changed estimates) are reported to the market. This prior written consent and supporting information will not be required when the same estimates are included in subsequent public reports, provided all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The subsequent public report must also cross-refer to the previous market announcement with the qualified petroleum reserves and resources evaluator statement and the supporting information set out above.

4.6 Annual reserves statement

ASX proposes to introduce a requirement for oil and gas companies to include an annual reserves statement in their annual reports which provides the following information as at their end of financial year balance date:

- the company's total 1P reserves and 2P reserves, which also splits out developed and undeveloped 1P reserves and 2P reserves;
- the company's total 1P reserves and 2P reserves by product;
- the company's aggregated 1P reserves and 2P reserves by product and geographical area, which also splits out developed and undeveloped 1P reserves and 2P reserves;
- the proportion of total 1P reserves and 2P reserves that are based on unconventional resources;
- a reconciliation of the company's total 1P reserves and 2P reserves by product against that from the previous year with an explanation of any material changes;
- where a company reports its holdings of contingent resources in its reserves statement in its annual report, the company's total 2C contingent resources by product, the company's aggregated 2C contingent resources by product and geographical area, and a reconciliation of the company's total 2C contingent resources against that from the previous year with an explanation for any material changes;
- where any material concentrations of undeveloped reserves in material oil and gas projects have remained undeveloped after 5 years from the date that they were initially reported, an explanation of why they have not been developed and a statement of the company's intention with regard to their future development; and
- a summary of the governance arrangements and internal controls that have been put in place, including the frequency and scope of any reviews or audits undertaken, with respect to its reserves and the estimation process.

4.7 Qualified petroleum reserves and resources evaluator requirements

ASX proposes to update the minimum professional qualifications and experience required to be recognised as a qualified petroleum reserves and resources evaluator for the purpose of preparing estimates of publicly reported petroleum resources and providing prior written consent for the disclosure of those estimates and the supporting information. To be recognised as a qualified petroleum reserves and resources evaluator, the individual will need to satisfy each of the following:

- has obtained a bachelors or advanced degree in petroleum engineering, geology, geophysics or other discipline of engineering or physical science;
- has a minimum of five years practical experience in petroleum engineering, petroleum production geology or petroleum geology, with at least three years of such experience being in the evaluation and estimation of petroleum reserves, contingent resources and prospective resources; and
- is a member of good standing of a professional organisation of engineers, geologists or other geoscientists whose professional practice includes petroleum reserves, contingent resources and prospective resources evaluations and/or audits. The professional organisation must:
 - require members to comply with the professional standards of competence and ethics prescribed by the organisation that are relevant to the estimation, evaluation, review or audit of petroleum reserves, contingent resources and prospective resources data; and
 - have disciplinary powers, including the power to suspend or expel a member.

ASX also proposes to streamline the requirements for the prior written consent of a qualified petroleum reserves and resources evaluator for the disclosure of all estimates of reserves, contingent resources and prospective resources so that the requirement to obtain prior written consent only applies to the first time the estimates for a project (or materially changed estimates) are publicly report. Prior written consent will not be required when the same estimates are included in subsequent public reports, provided all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The subsequent public report must also cross-refer to the previous market announcement with the qualified petroleum reserves and resources evaluator statement.

¹ The Petroleum Resources Management System (SPE-PRMS) is sponsored by the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG), the World Petroleum Council (WPC) and the Society of Petroleum Evaluation Engineers (SPEE).

Appendix 1 – Chapter 5 ‘Additional reporting on mining and oil and gas production and exploration activities’

Chapter 5

Additional reporting on mining and oil and gas production and exploration activities

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Explanatory note

This chapter sets out additional reporting and disclosure requirements for +mining entities and +oil and gas entities, and other +entities reporting on mining and oil and gas activities.

Information to be given to ASX for release to the market must be given to ASX's +company announcements office.

Quarterly reporting

Mining producing entities

- 5.1 A +mining producing entity must complete a report concerning each quarter of its financial year and give it to ASX for release to the market. It must do so no later than 1 month after the end of the quarter. The report must include all of the following information.
- 5.1.1 Details of the activities of the +mining producing entity and all +child entities (on a consolidated basis) relating to mining production and development and a summary of the expenditure incurred on those activities. If there have been no activities relating to production or development, that fact must be stated.
- 5.1.2 A summary of the activities of the +mining producing entity and all +child entities (on a consolidated basis) relating to +exploration and a summary of the expenditure incurred on those activities. If there have been no activities relating to +exploration, that fact must be stated.

Oil and gas producing entities

- 5.2 An +oil and gas producing entity must complete a report concerning each quarter of its financial year and give it to ASX for release to the market. It must do so no later than 1 month after the end of the quarter. The report must include all of the following information.
- 5.2.1 Details of the activities of the +oil and gas producing entity and all +child entities (on a consolidated basis) relating to oil and gas production and development and a summary of the expenditure incurred on those activities. If there have been no activities relating to oil and gas production or development, that fact must be stated.
- 5.2.2 A summary of the activities of the +oil and gas producing entity and all +child entities (on a consolidated basis) relating to oil and gas +exploration and a summary of the expenditure incurred on those activities. If there have been no activities relating to oil and gas +exploration, that fact must be stated.

Mining exploration entities

- 5.3 A +mining exploration entity must complete a report concerning each quarter of its financial year and give it to ASX for release to the market. It must do so no later than 1 month after the end of the quarter. The report must include all of the following information.
- 5.3.1 Details of the activities of the +mining exploration entity and all +child entities (on a consolidated basis) relating to +exploration and a summary of the expenditure incurred on those activities. If there have been no activities relating to +exploration, that fact must be stated.
- 5.3.2 Details of the activities of the +mining exploration entity and all +child entities (on a consolidated basis) relating to mining production and development and a summary of the expenditure incurred on those activities. If there have been no activities relating to production or development, that fact must be stated.
- 5.3.3 All of the following information in relation to the +mining exploration entity and all +child entities (on a consolidated basis).
- The +mining tenements held at the end of the quarter and their location.
 - The +mining tenements +acquired and +disposed of during the quarter and their location.
 - The beneficial percentage interests held in farm-in or farm-out agreements at the end of the quarter.
 - The beneficial percentage interests in farm-in or farm-out agreements +acquired or +disposed of during the quarter.

Oil and gas exploration entities

- 5.4 An +oil and gas exploration entity must complete a report concerning each quarter of its financial year and give it to ASX for release to the market. It must do so no later than 1 month after the end of the quarter. The report must include all of the following information.
- 5.4.1 Details of the activities of the +oil and gas exploration entity and all +child entities (on a consolidated basis) relating to oil and gas +exploration and a summary of the expenditure incurred on those activities. If there have been no activities relating to +exploration, that fact must be stated.
- 5.4.2 Details of the activities of the +oil and gas exploration entity and all +child entities (on a consolidated basis) relating to oil and gas production and development and a

summary of the expenditure incurred on those activities. If there have been no activities relating to production or development, that fact must be stated.

5.4.3 All of the following information in relation to the +oil and gas exploration entity and all +child entities.

- The +petroleum tenements held at the end of the quarter and their location.
- The +petroleum tenements +acquired and +disposed of during the quarter and their location.
- The beneficial percentage interests at the end of the quarter in farm-in or farm-out agreements.
- The beneficial percentage interests in farm-in or farm-out agreements +acquired or +disposed of during the quarter.

Mining exploration entity and oil and gas exploration entity to complete Appendix 5B (Quarterly report)

5.5 A +mining exploration entity and an +oil and gas exploration entity must also complete Appendix 5B and give it to ASX. It must do so immediately the information is available, and in any event within 1 month after the end of each quarter of its financial year.

Reporting on mining activities

Requirements applicable to all public reporting

5.6 Subject to rule 5.10, a public report prepared by an +entity must be prepared in accordance with rules 5.7 to 5.24 if applicable and Appendix 5A (JORC Code) if the report includes a statement relating to any of the following.

- +Exploration targets.
- +Exploration results.
- +Mineral resources or +ore reserves.
- +Production targets.

Note: this rule is not confined to reports under chapter 5. It also applies to all public reports, including prospectuses, product disclosure statements, information memoranda, bidder's statements, annual reports, financial statements, technical papers, presentations, website content and information given to ASX for release to the market under other chapters of these rules.

Requirements applicable to reports of exploration results for material mining projects

5.7 An +entity publicly reporting in relation to a +material mining project, either:

- (a) + exploration results for the first time; or
- (b) any new +exploration results,

must include all of the following information in a market announcement and give it to ASX for release to the market.

5.7.1 As an appendix to the market announcement, a separate report providing all information that is material to understanding the +exploration results, in relation to each of the criteria in section 1 (sampling techniques and data) and section 2 (reporting of exploration results) of Table 1 in Appendix 5A (JORC Code). An +entity

that determines that one or more of those criteria is not material for this purpose must identify each such criterion and explain why it has determined that it is not material to understanding the +exploration results.

5.7.2 As an appendix to the market announcement, a separate table setting out the following information for material drill-holes unless the +entity determines that the information is not material:

- easting and northing of the drill-hole collar;
- elevation or RL of the drill-hole collar;
- dip and azimuth of the hole;
- down hole width and depth; and
- end of hole.

An +entity that determines that a drill-hole table setting out the information described above is not material, is not required to attach the table to the market announcement but must explain why it has determined that the table is not material to understanding the +exploration results.

Note: clauses 16 and 17 of Appendix 5A set out additional requirements for public reports on +exploration results that also must be complied with (see Listing Rule 5.6). The proposed amendments to the JORC Code also require reporting against Table 1 of Appendix 5A (JORC Code) on an 'if not, why not' basis.

Requirements applicable to reports of mineral resources for material mining projects

5.8 An +entity publicly reporting estimates of +inferred mineral resources, +indicated mineral resources or +measured mineral resources in relation to a +material mining project, either:

- (a) for the first time; or
- (b) that have materially changed from when those estimates were last reported in accordance with this rule,

must include all of the following information in a market announcement and give it to ASX for release to the market.

5.8.1 In the market announcement, a fair and balanced representation of the information contained in the separate report prepared in accordance with rule 5.8.2 including a summary of all information material to understanding the reported estimates of +mineral resources in relation to 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 resource 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 considered to date.

5.8.2 As an appendix to the market announcement, a separate report providing all information that is material to understanding the estimates of +mineral resources, in relation to each of the criteria in:

- section 1 (sampling techniques and data), section 2 (reporting of exploration results), and section 3 (estimation and reporting of mineral resources) of Table 1 of Appendix 5A (JORC Code); and
- section 5 (estimation and reporting of diamonds and other gemstones) of Table 1 of Appendix 5A (JORC Code), for all +entities reporting diamonds and other gemstones.

An +entity that determines that one or more of those criteria is not material for this purpose must identify each such criterion and explain why it has determined that it is not material to understanding the estimates of +mineral resources.

Note: clauses 19 to 27 of Appendix 5A (JORC Code) set out additional requirements for public reports on +mineral resources that also must be complied with (see Listing Rule 5.6). The proposed amendments to the JORC Code also require reporting against Table 1 of Appendix 5A (JORC Code) on an 'if not, why not' basis.

Requirements applicable to reports of ore reserves for material mining projects

5.9 An +entity publicly reporting estimates of +probable ore reserves and +proved ore reserves in relation to a +material mining project, either:

- (a) for the first time; or
- (b) that have materially changed from when those estimates were last reported in accordance with this rule,

must include all of the following information in a market announcement and give it to ASX for release to the market.

5.9.1 In the market announcement, a fair and balanced representation of the information contained in the separate report prepared in accordance with rule 5.9.2 including a summary of all information material to understanding the reported estimates of +ore reserves in relation to the following matters:

- the material assumptions and the outcomes from the +preliminary feasibility study or the +feasibility study (as the case may be);
- 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 +ore reserves (probable and proved) where estimates for more than one category of +ore reserves is reported;
- 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;
- estimation methodology; and

- material modifying factors, including the status of environmental approvals, +mining tenements and approvals, other governmental factors and infrastructure requirements for selected mining methods and for transportation to market.

5.9.2 As an appendix to the market announcement, a separate report providing all information that is material to understanding the estimates of +ore reserves, in relation to each of the criteria in:

- section 1 (sampling techniques and data), section 2 (reporting of exploration results), section 3 (estimation and reporting of mineral resources), and section 4 (estimation and reporting of ore reserves) of Table 1 of Appendix 5A (JORC Code); and
- section 5 (estimation and reporting of diamonds and other gemstones) of Table 1 of Appendix 5A (JORC Code), for all +entities reporting diamonds and other gemstones.

An +entity that determines that one or more of those criteria is not material for this purpose must identify each such criterion and explain why it has determined that it is not material to understanding the estimates of +ore reserves.

Note: clauses 28 to 35 of Appendix 5A (JORC Code) set out additional requirements for public reports on +ore reserves that also must be complied with (see Listing Rule 5.6). The proposed amendments to the JORC Code also require reporting against Table 1 of Appendix 5A (JORC Code) on an 'if not, why not' basis.

Requirements applicable to reports of historical estimates and foreign estimates of mineralisation for material mining projects

- 5.10 An +entity reporting +historical estimates or +foreign estimates of mineralisation in relation to a +material mining project to the public is not required to comply with rule 5.6 provided the +entity complies with rules 5.12, 5.13 and 5.14.
- 5.11 An +entity must not include +historical estimates or +foreign estimates of mineralisation in an economic analysis (including a +scoping study, +preliminary feasibility study, or a +feasibility study) of the +entity's +mineral resources and ore reserves holdings.
- 5.12 Subject to rule 5.13, an +entity reporting +historical estimates or +foreign estimates of mineralisation in relation to a +material mining project must include all of the following information in a market announcement and give it to ASX for release to the market.
- 5.12.1 The source and date of the +historical estimates or +foreign estimates.
- 5.12.2 Whether the +historical estimates or +foreign estimates use categories of mineralisation other than those defined in Appendix 5A (JORC Code) and if so, an explanation of the differences.
- 5.12.3 The relevance and materiality of the +historical estimates or +foreign estimates to the +entity.
- 5.12.4 The reliability of the +historical estimates or +foreign estimates, including by reference to any of the criteria in Table 1 of Appendix 5A (JORC Code) which are relevant to understanding the reliability of the +historical estimates or +foreign estimates.
- 5.12.5 To the extent known, a summary of the work programs on which the +historical estimates or +foreign estimates are based and a summary of the key assumptions, mining and processing parameters and methods used to prepare the +historical estimates or +foreign estimates.
- 5.12.6 Any more recent estimates or data relevant to the reported mineralisation available to the +entity.

- 5.12.7 The evaluation and/or exploration work that needs to be completed to verify the +historical estimates or +foreign estimates as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code).
- 5.12.8 The proposed timing of any evaluation and/or exploration work that the +entity intends to undertake and a comment on how the + entity intends to fund that work.
- 5.12.9 A cautionary statement proximate to, and with equal prominence as, the reported +historical estimates or +foreign estimates stating that:
- the estimates are +historical estimates or +foreign estimates and are not reported in accordance with the JORC Code;
 - a +competent person has not done sufficient work to classify the +historical estimates or +foreign estimates as +mineral resources or +ore reserves in accordance with the JORC Code; and
 - it is uncertain that following evaluation and/or further exploration work that the +historical estimates or +foreign estimates will be able to be reported as +mineral resources or +ore reserves in accordance with the JORC Code.
- 5.12.10 A statement by a named +competent person or persons that the information in the market announcement provided under rules 5.12.2 to 5.12.7 is an accurate representation of the available data and studies for the +material mining project. The statement must include the information referred to in rule 5.22(b) and (c).
- 5.13 An +entity that has issued a market announcement under rule 5.12 is not required to include the information set out in rule 5.12 in any subsequent public report in relation to the +historical estimates or +foreign estimates provided all of the following conditions are satisfied.
- 5.13.1 The subsequent public report cross-references the initial market announcement referred to in rule 5.12.
- 5.13.2 The +entity is not in possession of any new information or data relating the +historical estimates or +foreign estimates that materially impacts on the reliability of the estimates or the +mining entity's ability to verify the +historical estimates or +foreign estimates as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code).
- 5.13.3 The +entity confirms in the subsequent public report that the supporting information provided in the initial market announcement referred to in rule 5.12 continues to apply and has not materially changed.
- 5.13.4 The subsequent public report includes a cautionary statement proximate to, and with equal prominence as, the reported +historical estimates or +foreign estimates stating the matters contained in rule 5.12.9.
- 5.14 An +entity that has publically reported +historical estimates or +foreign estimates in accordance with rule 5.12 which have not subsequently been verified and reported as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code), must comply with all of the following conditions.
- 5.14.1 The +entity must include each year in its +annual report (if applicable, in its mineral resources and ore reserves statement), a statement on:
- the progress made in evaluating the previously reported +historical estimates or +foreign estimates; and
 - the status of any further evaluation and/or exploration work required to verify the +historical estimates or +foreign estimates as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code).

5.14.2 If the +historical estimates or +foreign estimates have not been verified and reported as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code) after 3 years from the date the +historical estimates or +foreign estimates were initially reported, the +annual report (if applicable, in its mineral resources and ore reserves statement) for that year and every subsequent year must include:

- an explanation of why the +historical estimates or +foreign estimates have not been verified and reported as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code); and
- a statement of the +entity's intention with regard to verifying and reporting the +historical estimates or +foreign estimates as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code).

Note: Listing Rule 5.20 provides that a +mining entity must include a mineral resources and ore reserves statement in its +annual report.

Requirements applicable to reports of production targets

5.15 An +entity must not issue a public report containing or referring to a +production target that is based:

- (a) solely on an +exploration target; or
- (b) solely or partly on +historical estimates or +foreign estimates of mineralisation.

5.16 Subject to rules 5.18 and 5.19, a public report by an +entity containing a +production target relating to:

- (a) the +mineral resources and ore reserves holdings of the +entity (an entity level +production target); or
- (b) a +material mining project of the +entity (or two or more +mining projects which together are material to the +entity),

must include all of the following information and be given to ASX for release to the market.

5.16.1 All material assumptions on which the +production target is based.

5.16.2 A statement that the estimated +ore reserves and/or +mineral resources underpinning the +production target have been prepared by a +competent person or persons in accordance with the requirements in Appendix 5A (JORC Code).

5.16.3 The relevant proportions of:

- +probable ore reserves and +proved ore reserves;
- +inferred mineral resources, +indicated mineral resources and +measured mineral resources; and
- an +exploration target,

underpinning the +production target.

- 5.16.4 If a proportion of the +production target is based on +inferred mineral resources, a cautionary statement proximate to, and with equal prominence as, the reported +production target, stating that:

“There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised”.

- 5.16.5 If a proportion of the +production target is based on an +exploration target, a statement of the factors that lead the +entity to believe that it has a reasonable basis for reporting a +production target in that context, and a cautionary statement proximate to, and with equal prominence as, the reported +production target, stating that:

“The potential quantity and grade of an exploration target is conceptual in nature, there has been insufficient exploration to determine a mineral resource and there is no certainty that further exploration work will result in the determination of mineral resources or that the production target itself will be realised”.

- 5.16.6 If the +production target is based solely on +inferred mineral resources or solely on a combination of +inferred mineral resources and an +exploration target:

- a statement of the factors that lead the +entity to believe that it has a reasonable basis for reporting a +production target based solely on +inferred mineral resources or solely on a combination of +inferred mineral resources and an +exploration target;
- the level of confidence with which the +inferred mineral resources are estimated and the basis for that level of confidence;
- a technical report of a sufficient level of confidence to support the +production target. The technical report must be prepared by, or under the supervision of, a named independent +competent person or persons and include the information referred to in rule 5.22(b) and (c); and
- a cautionary statement proximate to, and with equal prominence as, the reported +production target, stating that:

“There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised. The stated production target is not a ‘prediction’ that with any confidence will be met, and should not be relied upon by investors when making investment decisions. It is provided to give investors a better idea of the company’s future plans, prospects and development path. Further evaluation work and appropriate studies are required to establish sufficient confidence that this target will be met.”

- 5.17 Subject to rules 5.18 and 5.19, a public report by an +entity containing forecast financial information derived from a +production target relating to:

- (a) the +mineral resources and ore reserves holdings of the +entity (an entity level +production target); or
- (b) a +material mining project of the +entity (or two or more +mining projects which together are material to the +entity),

must include all of the following information and be given to ASX for release to the market.

- 5.17.1 All material assumptions on which the forecast financial information is based.

- 5.17.2 The +production target from which the forecast financial information is derived (including all the information contained in rule 5.16).
- 5.17.3 If a significant proportion of the +production target is based on an +exploration target, the implications for the forecast financial information of not including the +exploration target in the +production target.
- 5.18 A public report by an +entity containing a +production target, or forecast financial information derived from a +production target, relating to an operating mine(s) underpinned solely by +ore reserves or solely by a combination of +ore reserves and +measured mineral resources, is not required to comply with rules 5.16 or 5.17 (as the case may be) in relation to that +production target or forecast financial information.
- 5.19 An +entity that has issued a public report under rules 5.16 or 5.17 is not required to include the information set out in rules 5.16 and 5.17 in any subsequent public report in relation to a +production target, or forecast financial information derived from a +production target, provided all of the following conditions are satisfied.
- 5.19.1 The subsequent public report cross-references the initial public report referred to in rule 5.16 or rule 5.17 (as the case may be).
- 5.19.2 The +entity confirms in the subsequent public report that all the material assumptions underpinning the +production target, or the forecast financial information derived from a +production target, in the initial public report referred to in rule 5.16 or rule 5.17 (as the case may be) continue to apply and have not materially changed.
- 5.19.3 If the +production target is based solely on +inferred mineral resources or solely on a combination of +inferred mineral resources and an +exploration target, the subsequent public report includes a cautionary statement proximate to, and with equal prominence as, the reported +production target, or the forecast financial information derived from a +production target, which includes the statement set out in rule 5.16.4.
- 5.19.4 If a proportion of the +production target is based on an +exploration target, the subsequent public report includes a cautionary statement proximate to, and with equal prominence as, the reported +production target, or forecast financial information derived from a +production target, which includes the statement set out in rule 5.16.5.

Annual report requirements

- 5.20 A +mining exploration entity must include in its +annual report:
- (a) the +mining tenements held by the +mining exploration entity and its +child entities and their location; and
 - (b) the percentage interest it or they hold in each +mining tenement.
- 5.21 A +mining entity must include a mineral resources and ore reserves statement in its +annual report which includes all of the following information.
- 5.21.1 A summary of the results of the +mining entity's annual review of its +ore reserves and +mineral resources.
- 5.21.2 As at the +mining entity's end of financial year balance date (or such other appropriate disclosed date), the +mining entity's +mineral resources and ore reserves holdings in tabular form reported on the following basis:
- by commodity type, including the grade or quality;
 - by +ore reserve category and +mineral resource category; and

- by +mining project (if material) or geographical area based on the materiality of the +mineral resources and ore reserves holdings to the +mining entity.

Note: +mineral resources and ore reserves holdings include +mineral resources and +ore reserves in which the +mining entity or any of its +child entities has an economic interest.

5.21.3 If the +mining entity reports as at a date other than its end of financial year balance date, the +mining entity must include a brief explanation of any material changes in the +mineral resources and ore reserves holdings in the period between the date of annual review of its +ore reserves and +mineral resources and the end of financial year balance date.

5.21.4 A comparison of the +mining entity's +mineral resources and ore reserves holdings against that from the previous year on the following basis:

- by commodity type, including the grade or quality; and
- total +ore reserves and total +mineral resources by +mining project (if material) or geographical area based on the materiality of the +mineral resources and ore reserves holdings to the +mining entity,

including an explanation of any material changes in the +mineral resources and ore reserves holdings from the previous year.

5.21.5 A summary of the governance arrangements and internal controls that the +mining entity has put in place with respect to its estimates of +mineral resources and +ore reserves and the estimation process.

Note: compliance with this rule satisfies the requirement in clause 14 of Appendix 5A (JORC Code) for a +mining entity to publicly report on +mineral resources and +ore reserves annually.

Competent person requirements

5.22 Subject to rule 5.23, a market announcement by an +entity containing +exploration results or estimates of +mineral resources or +ore reserves in relation to a +material mining project must state:

- that it is based on, and fairly represents, information and supporting documentation prepared by a named +competent person or persons;
- in each case, whether the +competent person is an employee of the +mining entity or a +related party and, if not, the name of the +competent person's employer; and
- in each case, the name of the professional organisation of which the +competent person is a member.

The market announcement must only be issued with the prior written consent of the +competent person or persons as to the form and context in which the +exploration results or estimates of +mineral resources or +ore reserves (as the case may be) and the supporting information are presented in the market announcement.

Note: this requirement applies to market announcements containing +exploration results under rule 5.7 or estimates (original or updated) of +mineral resources or +ore reserves under rule 5.8 or 5.9.

5.23 The requirements in rule 5.22 only apply the first time an +entity publically reports +exploration results in accordance with rule 5.7 or estimates (original or updated) of +mineral resources or +ore reserves in accordance with rule 5.8 or 5.9 (as the case may be) provided all of the following conditions are satisfied.

5.23.1 Any subsequent public report that refers to those +exploration results or estimates of +mineral resources or +ore reserves cross-references the relevant market announcement containing the statements and consent referred to in rule 5.22.

5.23.2 The +entity confirms in the subsequent public report that it is not aware of any new information or data that materially affects the information included in the relevant 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.

5.24 The mineral resources and ore reserves statement in a +mining entity's +annual report must include:

- (a) a statement that it is based on, and fairly represents, information and supporting documentation prepared by a +competent person or persons; and
- (b) a statement that the mineral resources and ore reserves statement as a whole has been approved by a named +competent person or persons, as well as the information referred to in rule 5.22(b) and (c) in relation to the named +competent person or persons.

The mineral resources and ore reserves statement must only be issued with the prior written consent of the named +competent person or persons referred to in paragraph (b) as to the form and context in which it appears in the +annual report.

Note: the named +competent person or persons referred to in paragraph (b) may be a different to the +competent person or persons referred to in paragraph (a).

Reporting on oil and gas activities

Requirements applicable to all public reporting

5.25 An +entity publicly reporting +petroleum resources, including estimates of:

- (a) +petroleum reserves;
- (b) +contingent resources; or
- (c) +prospective resources,

must ensure all of the following requirements are complied with in the report.

5.25.1 The date at which the estimates are reported must be disclosed in the report.

Note: the date referred to in rule 5.25.1 may be referenced as the "evaluation date".

5.25.2 +Petroleum resources must be classified in accordance with +SPE-PRMS and reported in the most specific resource class in which +petroleum resources can be classified under +SPE-PRMS.

Note: the specific classes for petroleum resources are mentioned in section 1.1 of +SPE-PRMS. They are production, reserves, contingent resources, prospective resources and unrecoverable petroleum. Additional guidance on petroleum resource classification is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.25.3 The disclosure of total petroleum initially-in-place, total resource base, estimated ultimate recovery, remaining recoverable resources or hydrocarbon endowment is prohibited unless all of the following information is included in the report proximate to that disclosure:

- an estimate of +petroleum reserves;
- an estimate of +contingent resources;

- an estimate of +prospective resources; and
- whether and how each of the resource classes in the summation were adjusted for risk.

Note: +SPE-PRMS defines 'total petroleum initially-in-place' in section 1.1 and Appendix A, 'estimated ultimate recovery' in section 1.1 and Appendix A, and 'recoverable resources' in section 1.2 and Appendix A. Additional guidance on total petroleum initially-in-place is provided in section 2.2 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.25.4 The disclosure of discovered petroleum-initially-in-place is prohibited unless all of the following information is included in the report proximate to that disclosure.

- an estimate of +petroleum reserves;
- an estimate of +contingent resources; and
- whether and how each of the resource classes in the summation were adjusted for risk.

Note: +SPE-PRMS defines 'discovered petroleum initially-in-place' in section 1.1 and Appendix A.

5.25.5 Estimates of +petroleum reserves, +contingent resources and +prospective resources must:

- be reported according to the +entity's economic interest in the +petroleum reserves, +contingent resources and +prospective resources, including its entitlements under production-sharing contracts and risked-service contracts;
- be reported net of:
 - (a) royalties that the +entity is required by agreement (including overriding royalties provided for in farm-out agreements) to give in-kind to the royalty owner; or
 - (b) those volumes that the +entity is allowed to lift and sell on behalf of the royalty owner; and
- not be reported in relation to pure service contracts.

Note: +SPE-PRMS defines 'production-sharing contract' in section 3.3.2 and Appendix A and 'risked-service contract' in section 3.3.2 and Appendix A. Additional guidance on production-sharing contracts (in section 10.33) and risked-service contracts (in section 10.4) is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.25.6 The +entity must disclose whether the deterministic or probabilistic method was used to prepare the estimates of +petroleum reserves, +contingent resources and +prospective resources in the report.

Note: +SPE-PRMS defines the 'deterministic estimation method' and the 'probabilistic estimation method' in section 4.2 and Appendix A. Additional guidance on the deterministic estimation method (in sections 2.2, 3.1, 6.2 and 7.1) and the probabilistic estimation method (in sections 5.3 and 7.1) is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.25.7 If estimates of +petroleum reserves, +contingent resources and +prospective resources are reported in units of equivalency between oil and gas, the +entity must disclose in the report the conversion factor used to convert:

- gas to oil, where the estimates are reported in +BOEs; and

- oil to gas, where the estimates are reported in +McfGEs.

Note: additional guidance on +BOEs is provided in sections 4.12 and 9.13 in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.26 An +entity publicly reporting estimates of +petroleum reserves must ensure all of the following requirements are complied with in that report.

5.26.1 The +entity must have a high degree of confidence in the commercial producibility of the reservoir.

5.26.2 The term 'reserves' must only be used in connection with estimates of commercially recoverable quantities of +petroleum and must not be used in connection with estimated quantities of +petroleum that are not commercially recoverable.

5.26.3 +Petroleum reserves must be categorised and reported in the most specific category that reflects the degree of uncertainty in the estimated quantities of recoverable +petroleum, that is, +1P, +2P or +3P. If an estimate of +3P is reported, estimates of +2P and +1P must also be reported.

5.26.4 If +petroleum reserves are not reported net of +lease fuel up to the +reference point, the report must disclose the portion of the +petroleum reserves estimates that will be consumed as fuel in production and lease plant operations.

Note: additional guidance on +lease fuel (in section 9.1) and +reference points (in sections 7.1 and 9.13) is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.26.5 The +entity must disclose the +reference point used for the purpose of measuring and assessing the estimated +petroleum reserves.

Note: additional guidance is provided on +reference points in sections 7.1 and 9.13 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.26.6 The disclosure of a mean estimate of +petroleum reserves is prohibited.

5.26.7 Where reported +petroleum reserves represent aggregated estimates of +petroleum reserves, the method of aggregation must be disclosed which must be either:

- arithmetic summation by category (that is, +1P, +2P or +3P); or
- statistical aggregation of uncertainty distributions up to the field, property or project level.

Note: +SPE-PRMS defines 'aggregated' in section 4.2.1 and Appendix A.

5.26.8 If +petroleum reserves are reported beyond the field, property or project level, estimates of +petroleum reserves must be aggregated by arithmetic summation by category beyond that level of reporting. In this case, the +entity must include a note in the report cautioning that the aggregate +1P may be a very conservative estimate and the aggregate +3P may be a very optimistic estimate due to the portfolio effects of arithmetic summation.

Note: additional guidance is provided on aggregation in sections 1.1, 2.1, 4.1, 5.1, 6.26 and 8.1 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.26.9 If a +petroleum reserves replacement ratio is reported, the +entity must include an explanation of how the petroleum reserves replacement ratio was calculated in the report.

5.27 An +entity publicly reporting estimates of +contingent resources must ensure all of the following requirements are complied with in that report.

- 5.27.1 +Contingent resources must be categorised and reported in the most specific category that reflects the degree of uncertainty in the estimated quantities of potentially recoverable +petroleum, that is, +1C, +2C or +3C. If an estimate of +3C is reported, estimates of +2C and +1C must also be reported.
- 5.27.2 The disclosure of a mean estimate of +contingent resources is prohibited.
- 5.27.3 Where reported +contingent resources represent aggregated estimates of +contingent resources, the method of aggregation must be disclosed and must be either:
- arithmetic summation by category (that is, +1C, +2C or +3C); or
 - statistical aggregation of uncertainty distributions up to the field, property or project level.
- 5.27.4 If +contingent resources are reported beyond the field, property or project level, estimates of +contingent resources must be aggregated by arithmetic summation by category beyond that level of reporting. In this case, the +entity must include a note in the report cautioning that the aggregate +1C may be a very conservative estimate and the aggregate +3C may be a very optimistic estimate due to the portfolio effects of arithmetic summation.

Note: Additional guidance is provided on aggregation in sections 1.1, 2.1, 4.1, 5.1, 6.26 and 8.1 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

- 5.28 An +entity publicly reporting estimates of +prospective resources must ensure all of the following requirements are complied with in that report.
- 5.28.1 +Prospective resources must be categorised and reported in the most specific category that reflects the degree of uncertainty in the estimated quantities of potentially recoverable +petroleum, that is, +low estimate, +best estimate or +high estimate. If a +high estimate of +prospective resources is reported, the +best estimate and +low estimate of +prospective resources must also be reported.
- 5.28.2 A cautionary statement proximate to, and with equal prominence as, the reported +prospective resources must be included in the report, stating that:
- “The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons”.*

Requirements applicable to reporting on geophysical surveys

- 5.29 A public report by an +entity on any geophysical survey in relation to +petroleum must include the name, nature and status of the survey, and the permit under which the survey is being conducted.

Requirements applicable to reporting exploration and drilling information

- 5.30 An +entity publicly reporting +exploration and drilling information in relation to +petroleum resources must include all of the following information in that report and give the report to ASX for release to the market.
- (a) The name and type of well.
 - (b) The location of the well and the details of the permit or lease in which the well is located.
 - (c) The +entity's working interest in the well.

- (d) If the gross pay thickness is reported for an interval of conventional resources, the net pay thickness.
- (e) The geological rock type of the formation drilled.
- (f) The depth of the zones tested.
- (g) The types of test(s) undertaken and the duration of the test(s).
- (h) The hydrocarbon phases recovered in the test(s).
- (i) Any other recovery, such as, formation water and water, associated with the test(s) and their respective proportions.
- (j) The choke size used, the flow rates and, if measured, the volumes of the hydrocarbon phases measured.
- (k) If applicable, the number of fracture stimulation stages and the size and nature of fracture stimulation applied.
- (l) Any material volumes of non-hydrocarbon gases, such as, carbon dioxide, nitrogen, hydrogen sulphide and sulphur.
- (m) Any other information that is material to understanding the reported results.

Requirements applicable to reporting petroleum reserves for material oil and gas projects

- 5.31 The first time an +entity publicly reports estimates of +petroleum reserves in relation to a +material oil and gas project, the +entity must include all of the following information in a market announcement and give it to ASX for release to the market.
- 5.31.1 All material economic assumptions used to calculate the estimates of +petroleum reserves. If those economic assumptions are commercially sensitive to the +oil and gas entity, an explanation of the methodology used to determine the assumptions rather than the actual figure can be reported.
 - 5.31.2 Whether the +entity has operator or non-operator interests in the +material oil and gas project. If the +entity has non-operator interests, the name of the operator.
 - 5.31.3 The types of permits or licences held by the +entity in respect of the reported estimates of +petroleum reserves.
 - 5.31.4 A brief description of:
 - the basis for confirming commercial producibility and booking +petroleum reserves;
 - the analytical procedures used to estimate the +petroleum reserves;
 - the proposed +extraction method; and
 - if applicable, any specialised processing required following +extraction.

5.31.5 The estimated quantities (in aggregate) to be recovered:

- from existing wells and facilities (developed +petroleum reserves); and
- through future investments (undeveloped +petroleum reserves).

Note: +SPE-PRMS defines 'developed reserves' and 'undeveloped reserves' in section 2.1 and Appendix A. Additional guidance is provided on developed reserves and undeveloped reserves in section 3.1, 6.1 and 8.1 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.31.6 If the reported estimates of +petroleum reserves relate to undeveloped petroleum reserves, a brief statement regarding:

- the status of the +material oil and gas project;
- when development is anticipated;
- the marketing arrangements that justify development;
- access to transportation infrastructure; and
- environmental approvals required.

5.31.7 If the reported estimates of +petroleum reserves relate to unconventional +petroleum resources, the land area and the number of wells for which the estimates of +petroleum reserves are provided.

Note: +SPE-PRMS defines 'unconventional resources' in section 2.4 and Appendix A. Additional guidance on unconventional petroleum resources is provided in sections 1.1 and 8.6 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.31.8 If +1P is zero for the reported estimates of +petroleum reserves, a brief explanation of why +1P is zero and why, in the absence of +1P, +3P and +2P have been determined and reported.

5.32 The first time an +oil and gas entity publicly reports estimates of +petroleum reserves in relation to a +material oil and gas project that have materially changed from when those estimates were previously reported, the +entity must include all of the following information in a market announcement and give it to ASX for release to the market.

5.32.1 An explanation of the new data and information.

5.32.2 An explanation of how the new data and information has affected the estimates of +petroleum reserves.

5.32.3 Any changes or additions to the information provided under rules 5.31.1 to 5.31.7.

Requirements applicable to reporting contingent resources for material oil and gas projects

5.33 The first time an +entity publicly reports estimates of +contingent resources in relation to a +material oil and gas project, the +entity must include all of the following information in a market announcement and give it to ASX for release to the market.

5.33.1 The types of permits or licences held by the +entity in respect of the reported estimates of +contingent resources.

5.33.2 The basis for confirming the existence of a significant quantity of potentially moveable hydrocarbons and the determination of a discovery.

5.33.3 A brief description of:

- the analytical procedures used to estimate the +contingent resources;
- the key contingencies that prevent the +contingent resources from being classified as +petroleum reserves; and
- any further appraisal drilling and evaluation work to be undertaken to assess the potential for commercial recovery, and to progress the +material oil and gas project.

5.33.4 If the reported estimates of +contingent resources are contingent on technology under development, a brief explanation of:

- whether the technology is under active development;
- whether a pilot for that technology is planned and budgeted; and
- whether the technology has been demonstrated to be commercially viable in analogous reservoirs and, if not, whether it has been demonstrated to be commercial viable in other reservoirs.

5.33.5 If the reported estimates of +contingent resources relate to unconventional +petroleum resources, the land area and the number of wells for which the estimates of +contingent resources are provided.

Note: +SPE-PRMS defines 'unconventional resources' in section 2.4 and Appendix A. Additional guidance on unconventional petroleum resources (in sections 1.1 and 8.6) and on the key contingencies for a classification of +contingent resources is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

5.34 The first time an +entity publicly reports estimates of +contingent resources in relation to a +material oil and gas project that have materially changed from when those estimates were previously reported, the +entity must include all of the following information in a market announcement and give it to ASX for release to the market.

5.34.1 An explanation of the new data and information.

5.34.2 An explanation of how the new data and information has affected the estimates of +contingent resources.

5.34.3 Any changes or additions to the information provided under rules 5.33.1 to 5.33.5.

Requirements applicable to reporting prospective resources for material oil and gas projects

5.35 The first time an +entity publicly reports estimates of +prospective resources in relation to a +material oil and gas project, the +entity must include all of the following information in a market announcement and give it to ASX for release to the market.

5.35.1 The types of permits or licences held by the +entity in respect of the reported estimates of +prospective resources.

5.35.2 A brief description of:

- the basis on which the +prospective resources are estimated; and
- any further +exploration activities, including studies, further data acquisition and evaluation work, and +exploration drilling to be undertaken and the expected timing of those +exploration activities.

- 5.35.3 The +entity's assessment of the chance of discovery and the chance of development associated with the reported estimates of +prospective resources.
- 5.35.4 If risked estimates of +prospective resources are reported, an explanation of how the estimates were adjusted for risk.

Note: additional guidance on +prospective resources is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

- 5.36 The first time an +entity publicly reports estimates of +prospective resources in relation to a +material oil and gas project that have materially changed from when those estimates were previously reported, the +entity must include all of the following information in a market announcement and give it to ASX for release to the market.
- 5.36.1 An explanation of the new data and information.
- 5.36.2 An explanation of how the new data and information has affected the estimates of +prospective resources.
- 5.36.3 Any changes or additions to the information provided under rules 5.35.1 to 5.35.4.

Annual report requirements

- 5.37 An +oil and gas exploration entity must include in its +annual report:
- (a) the +petroleum tenements held by the +oil and gas exploration entity and its +child entities and their location; and
- (b) the percentage interest it or they hold in each +petroleum tenement.
- 5.38 An +oil and gas entity that reports to the Securities and Exchange Commission (SEC) of the United States of America and files SEC compliant Forms 10-K and 20-F Reports with the SEC annually, is not required to comply with the annual reserves statement requirements under rules 5.39 and 5.40.

Note: the US Securities Exchange Act of 1934 requires certain companies to file Forms 10-K and 20-F with the SEC. ASX may ask an +oil and gas entity to provide evidence that it has filed SEC compliant Forms 10-K and 20-F with the SEC.

- 5.39 Subject to rule 5.38, an +oil and gas entity must include a reserves statement in its +annual report which includes all of the following information.
- 5.39.1 As at the +oil and gas entity's end of financial year balance date, the +oil and gas entity's +petroleum reserves holdings in tabular form reported on the following basis:
- subject to rule 5.39.2, by the +oil and gas entity's total +1P +petroleum reserves and +2P +petroleum reserves (split between developed and undeveloped +petroleum reserves and by product); and
 - by total aggregated +1P +petroleum reserves and +2P +petroleum reserves by product and geographical area (split between developed and undeveloped +petroleum reserves by geographical area).

Note: +petroleum reserves holdings include +petroleum reserves in which the +oil and gas entity or any of its +child entities have an economic interest.

- 5.39.2 If the +oil and gas entity has material unconventional +petroleum resources, it must separately identify the portion of the total +1P +petroleum reserves and +2P +petroleum reserves reported under the first bullet point of rule 5.39.1 that are based on unconventional +petroleum resources.

Note: +SPE-PRMS defines 'developed reserves' and 'undeveloped reserves' in section 2.1 and Appendix A and 'unconventional resources' in section 2.4 and Appendix A. Additional guidance on developed and undeveloped reserves (in sections 2.1, 6.1 and 8.2) and unconventional resources (in sections 1.1 and 8.6) is provided in the Guidelines for Application of the Petroleum Resources Management System (November 2011).

- 5.39.3 A reconciliation of the +oil and gas entity's +petroleum reserves holdings against that from the previous year on the basis of the +oil and gas entity's total +1P +petroleum reserves and +2P +petroleum reserves by product, including an explanation of any material changes in those holdings from the previous year.

- 5.39.4 If any material concentrations of undeveloped +petroleum reserves in +material oil and gas projects have remained undeveloped after 5 years from the date they were initially reported, the +oil and gas entity's reserves statement in the +annual report for that year and every subsequent year must include:

- an explanation of why the undeveloped +petroleum reserves have not been developed; and
- a statement of the +oil and gas entity's intention with regard to the future development of the undeveloped +petroleum reserves.

Note: +SPE-PRMS defines 'undeveloped reserves' in section 2.1 and Appendix A. Additional guidance is provided on undeveloped reserves in section 3.1, 6.1 and 8.1 of the Guidelines for Application of the Petroleum Resources Management System (November 2011).

- 5.39.5 A summary of the governance arrangements and internal controls that the +oil and gas entity has put in place, including the frequency and scope of any reviews or audits undertaken, with respect to its estimates of +petroleum reserves and the estimation process.

- 5.40 If an +oil and gas entity reports on +oil and gas entity level and other aggregated estimates of +contingent resources in its reserves statement in its +annual report, the statement must include all of the following information.

- 5.40.1 As at the +oil and gas entity's end of financial year balance date, the +oil and gas entity's +contingent resources holdings in tabular form reported on the following basis:

- total +2C +contingent resources by product; and
- aggregated +2C +contingent resources by product and geographical area.

- 5.40.2 A reconciliation of the +oil and gas entity's total +2C +contingent resources holdings against that from the previous year, including an explanation of any material changes in those holdings from the previous year.

Note: +contingent resources holdings include +contingent resources in which the +oil and gas entity and all its +child entities have an economic interest.

Qualified petroleum reserves and resources evaluator requirements

- 5.41 An +entity publically reporting on estimates of +petroleum reserves, +contingent resources and +prospective resources must ensure that those estimates are prepared by a +qualified petroleum reserves and resources evaluator.

- 5.42 Subject to rule 5.43, a public report by an +entity containing estimates of +petroleum reserves, +contingent resources and +prospective resources must state:
- (a) that it is based on, and fairly represents, information and supporting documentation prepared by a named +qualified petroleum reserves and resources evaluator or evaluators;
 - (b) whether the +qualified petroleum reserves and resources evaluator is an employee of the +oil and gas entity or a +related party and, if not, the name of the +qualified petroleum reserves and resources evaluator's employer; and
 - (c) the name of the professional organisation of which the +qualified petroleum reserves and resources evaluator is a member.

The report must only be issued with the prior written consent of the +qualified petroleum reserves and resources evaluator as to the form and context in which the estimated +petroleum reserves, +contingent resources and +prospective resources and the supporting information are presented in the public report.

Note: this requirement applies (but is not limited) to public reports containing estimates of +petroleum reserves or materially changed estimates of +petroleum reserves in accordance with rules 5.31 or 5.32, estimates of +contingent resources or materially changed estimates of +contingent resources in accordance with rules 5.33 or 5.34 and estimates of +prospective resources or materially changed estimates of +prospective resources in accordance with rules 5.35 or 5.36.

- 5.43 The requirements in rule 5.42 only apply the first time an +entity publically reports estimates of +petroleum reserves, +contingent resources or +prospective resources (original or updated) provided all of the following conditions are satisfied.

- 5.43.1 Any subsequent public report that refers to those estimates of +petroleum reserves, +contingent resources or +prospective resources cross-references the relevant market announcement containing the statements and consent referred to in rule 5.42.
- 5.43.2 The +entity confirms in the subsequent public report that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

- 5.44 The reserves statement in an +oil and gas entity's +annual report in accordance with rule 5.39 must include:

- (a) a statement that it is based on, and fairly represents, information and supporting documentation prepared by a +qualified petroleum reserves and resources evaluator or evaluators; and
- (b) a statement that the reserves statement as a whole has been approved by a named +qualified petroleum reserves and resources evaluator or evaluators, as well as the information referred to in rule 5.42(b) and (c) in relation to the named +qualified petroleum reserves and resources evaluator or evaluators.

The reserves statement must only be issued with the prior written consent of the named +qualified petroleum reserves and resources evaluator or evaluators referred to in paragraph (b) as to the form and context in which it appears in the +annual report.

Note: the named +qualified petroleum reserves and resources evaluator or evaluators referred to in paragraph (b) may be different to the +qualified petroleum reserves and resources evaluator or evaluators referred to in paragraph (a).

Terms of a mining tenement and a petroleum tenement joint venture

- 5.45 An +entity must not, and must ensure that all its +child entities do not, enter a joint venture agreement to investigate or explore a +mining tenement or a +petroleum tenement, unless the agreement provides that if the +entity requires it, the operator of the joint venture will give the +entity all the information the +entity requires to comply with the Listing Rules; and that the information may be given to ASX for release to the market if necessary for the +entity to comply with the Listing Rules.

Appendix 2 – Definitions for inclusion in Chapter 19 'Interpretation and definitions'

1C	denotes the +low estimate scenario of +contingent resources.
2C	denotes the +best estimate scenario of +contingent resources.
3C	denotes the +high estimate scenario of +contingent resources.
1P	is equivalent to +proved reserves. It denotes a +low estimate scenario of +petroleum reserves.
2P	is equivalent to the sum of +proved reserves plus +probable reserves. It denotes the +best estimate scenario of +petroleum reserves.
3P	is equivalent to the sum of +proved reserves plus +probable reserves plus +possible reserves. It denotes the +high estimate scenario of +petroleum reserves.
best estimate	is the best estimate of the quantity that will actually be recovered from an accumulation by an +oil and gas project. It is the most realistic assessment of recoverable quantities if only a single result were reported. When probabilistic methods are used, there should be at least a 50% probability (P50) that the quantities actually recovered will equal or exceed the best estimate.
BOEs	barrels of oil equivalent.
competent person	the meaning in Appendix 5A (JORC Code).
contingent resources	those quantities of +petroleum estimated, as of a given date, to be potentially recoverable from known accumulations by application of development +oil and gas projects, but which are not currently considered to be commercially recoverable due to one or more contingencies.
contingent resources holdings	aggregate of the economic interests in +contingent resources of an +entity and its +child entities.
exploration	includes geophysical surveys.
exploration target	the meaning in Appendix 5A (JORC Code).
extraction	includes developing the infrastructure to extract +minerals or +petroleum (as the case may be).
feasibility study	the meaning in Appendix 5A (JORC Code).
foreign estimate	an estimate of quantity and grade of mineralisation that was prepared using a mineral resources classification and reporting standard from another jurisdiction prior to an +entity acquiring, or entering into an agreement to acquire, an interest in a +mining tenement that contains the deposit, and which the +entity has not verified as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code).

greenfields mining project	<p>for the purpose of rule 5.16.6, a +mining project located in a new geological area where little +exploration has been conducted previously and which is:</p> <p>(a) not in close proximity to; or</p> <p>(b) does not have reasonable prospects of access to, existing mining and related infrastructure.</p>
high estimate	<p>an optimistic estimate of the quantity that will actually be recovered from an accumulation by an +oil and gas project. When probabilistic methods are used, there should be at least a 10% probability (P10) that the quantities actually recovered will equal or exceed the high estimate.</p>
historical estimate	<p>an estimate of quantity and grade of mineralisation that is based on information and supporting documentation that was prepared prior to the introduction of Appendix 5A and which an +entity has not verified as +mineral resources or +ore reserves in accordance with Appendix 5A (JORC Code).</p>
indicated mineral resources	<p>the meaning in Appendix 5A (JORC Code).</p>
inferred mineral resources	<p>the meaning in Appendix 5A (JORC Code).</p>
lease fuel	<p>oil and/or gas used for field and processing plant operations.</p>
low estimate	<p>a conservative estimate of the quantity that will actually be recovered from an accumulation by an +oil and gas project. When probabilistic methods are used, there should be at least a 90% probability (P90) that the quantities actually recovered will equal or exceed the low estimate.</p>
material mining project	<p>in relation to an +entity, a +mining project which meets the following criteria:</p> <p>(a) the +entity or a +child entity has an economic interest in the +mining project (whether alone or jointly with others); and</p> <p>(b) that interest is, or is likely to be, material in the context of the overall business operations or financial results of the +entity and its +child entities (on a consolidated basis).</p>
material oil and gas project	<p>in relation to an +entity, an +oil and gas project which meets the following criteria:</p> <p>(a) the +entity or a +child entity has an economic interest in the +oil and gas project (whether alone or jointly with others); and</p> <p>(b) that interest is, or is likely to be, material in the context of the overall business operations or financial results of the +entity and its +child entities (on a consolidated basis).</p>
McfGEs	<p>thousand cubic feet of gas equivalent.</p>

measured mineral resources	the meaning in Appendix 5A (JORC Code).
mineral resources and ore reserves holdings	aggregate economic interests in mineral resources and +ore reserves of an +entity and its +child entities.
minerals	means all solid minerals, including diamonds, other gemstones, industrial minerals and coal but does not include +petroleum.
mineral resources	the meaning in Appendix 5A (JORC Code).
mining entity	a +mining exploration entity or a +mining producing entity.
mining exploration entity	an +entity: <ul style="list-style-type: none"> (a) whose main undertaking consists of +exploration for +minerals; or (b) which has been advised by ASX that it is a mining exploration entity for the purposes of the listing rules.
mining producing entity	an +entity: <ul style="list-style-type: none"> (a) whose main undertaking consists of the +extraction of +minerals; or (b) which has been advised by ASX that it is a mining producing entity for the purposes of the listing rules.
mining project	a project to explore for or extract +minerals from a +mining tenement or tenements. <p>Note: the boundaries of what constitutes a +mining project will often be determined by commercial considerations, including development decisions and budget allocations. A +mining project may constitute the development of a single mine, or an incremental development in a producing mine, or the integrated development of a group of several mines and associated facilities with common ownership.</p>
mining tenement	any right to explore for or extract +minerals in a given place.
oil and gas entity	an +oil and gas exploration entity or an +oil and gas producing entity.
oil and gas exploration entity	an +entity: <ul style="list-style-type: none"> (a) whose main undertaking consists of +exploration for +petroleum; or (b) which has been advised by ASX that it is an oil and gas exploration entity for the purposes of the listing rules.

oil and gas producing entity	<p>an +entity:</p> <p>(a) whose main undertaking consists of the +extraction of +petroleum; or</p> <p>(b) which has been advised by ASX that it is an oil and gas producing entity for the purposes of the listing rules.</p>
oil and gas project	<p>a project to explore for or extract +petroleum from a +petroleum tenement or tenements.</p> <p>Note: the boundaries of what constitutes an +oil and gas project will often be determined by commercial considerations, including development decisions and budget allocations. An +oil and gas project may constitute the development of a single reservoir or field, or an incremental development in a producing field, or the integrated development of a group of several fields and associated facilities with common ownership. +SPE-PRMS defines 'project' in Appendix A.</p>
ore reserves	the meaning in Appendix 5A (JORC Code).
petroleum	a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid or solid phase. Petroleum may also contain non-hydrocarbon compounds. Common examples of non-hydrocarbon compounds included in petroleum are carbon dioxide, nitrogen, hydrogen sulphide and sulphur.
petroleum reserves	those quantities of +petroleum anticipated to be commercially recoverable by application of development projects to known accumulations from a given date forward under defined conditions. Petroleum reserves must satisfy four criteria: they must be discovered, recoverable, commercial and remaining based on the development project(s) applied.
petroleum reserves holdings	aggregate economic interests in +petroleum reserves of an +entity and its +child entities.
petroleum resources	all quantities of +petroleum (recoverable and unrecoverable) naturally occurring on or within the Earth's crust, discovered and undiscovered, plus those quantities already produced. It includes all types of +petroleum whether currently considered 'conventional' or 'unconventional'.
petroleum tenement	any right to explore for or extract +petroleum in a given place.
possible reserves	those additional +petroleum reserves which analysis of geoscience and engineering data indicate are less likely to be recoverable than +probable reserves. The total quantities ultimately recovered from the project have a low probability to exceed the sum of +proved reserves plus +probable reserves plus +possible reserves (+3P). When probabilistic methods are used, there should be at least a 10% probability that the actual quantities recovered will equal or exceed the +3P estimate.
preliminary feasibility study	the meaning in Appendix 5A (JORC Code).
probable ore reserves	the meaning in Appendix 5A (JORC Code).

probable reserves	those additional +petroleum reserves which analysis of geoscience and engineering data indicate are less likely to be recovered than +proved reserves but more certain to be recovered than +possible reserves. It is equally likely that actual remaining quantities recovered will be greater than or less than the sum of the estimated +proved reserves plus +probable reserves (+2P). When probabilistic methods are used, there should be at least a 50% probability that the actual quantities recovered will equal or exceed the +2P estimate.
production target	a projection or forecast of the amount of +minerals to be extracted from a particular +mining tenement or tenements for a period that extends past the current year and the forthcoming year.
prospective resources	those quantities of +petroleum which are estimated, as of a given date, to be potentially recoverable from undiscovered accumulations.
proved reserves	those quantities of +petroleum, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods, and government regulations. If deterministic methods are used, the term reasonable certainty is intended to express a high degree of confidence that the quantities will be recovered. When probabilistic methods are used, there should be at least a 90% probability that the quantities actually recovered equal or exceed the estimate.
qualified petroleum reserves and resources evaluator	<p>a person is a qualified petroleum reserves and resources evaluator if he or she:</p> <ul style="list-style-type: none"> (a) has obtained a bachelors or advanced degree in petroleum engineering, geology, geophysics or other discipline of engineering or physical science; (b) has a minimum of five years practical experience in +petroleum engineering, +petroleum production geology or +petroleum geology, with at least three years of such experience being in the evaluation and estimation of +petroleum reserves, +contingent resources and +prospective resources; and (c) is a member of good standing of a professional organisation of engineers, geologists or other geoscientists whose professional practice includes +petroleum reserves, +contingent resources and +prospective resources evaluations and/or audits. The professional organisation must: <ul style="list-style-type: none"> • require members to comply with the professional standards of competence and ethics prescribed by the organisation that are relevant to the estimation, evaluation, review or audit of +petroleum reserves, +contingent resources and +prospective resources data; and • have disciplinary powers, including the power to suspend or expel a member.

reference point	a defined location within a +petroleum +extraction and processing operation where quantities of produced product are measured under defined conditions prior to custody transfer.
scoping study	the meaning in Appendix 5A (JORC Code).
SPE-PRMS	Petroleum Resources Management System sponsored by the Society of Petroleum Engineers (SPE), the American Association of Petroleum Geologists (AAPG), the World Petroleum Council (WPC) and the Society of Petroleum Evaluation Engineers (SPEE).

REPORTING ON MINING ACTIVITIES

<p>The purpose of this Guidance Note</p>	<ul style="list-style-type: none"> To assist listed entities to understand and comply with the reporting requirements for mining activities in Chapter 5 of the Listing Rules
<p>The main points it covers</p>	<ul style="list-style-type: none"> The quarterly reporting obligations that apply to mining entities The general requirements that apply to all public reports of ore reserves or mineral resources The requirements that apply to public reports with information about a geophysical survey The reporting requirements that apply to public reports of exploration results for material mining projects The requirements that apply to public reports with an estimate of mineral resources or ore reserves for material mining projects The requirements that apply to public reports of historical and foreign estimates of mineralisation for material mining projects The requirements that apply to public reports of certain production targets and forecast financial information derived from those production targets The interaction between Chapter 5 and other reporting obligations, including the obligation to give market sensitive information to ASX immediately The requirement for mining exploration entities to include a list of mining tenements in their annual report The requirement for mining entities to include a mineral resources and ore reserves statement in their annual report Competent person requirements
<p>Related materials you should read</p>	<ul style="list-style-type: none"> Appendix 5A of the Listing Rules (the JORC Code) Guidance Note 8: <i>Continuous Disclosure: Listing Rules 3.1 – 3.1B</i>

History: Guidance Note 31 introduced [DD/MM/13].

Important notice: ASX has published this Guidance Note to assist listed entities to understand and comply with their obligations under the Listing Rules. Nothing in this Guidance Note necessarily binds ASX in the application of the Listing Rules in a particular case. In issuing this Guidance Note, ASX is not providing legal advice and listed entities should obtain their own advice from a qualified professional person in respect of their obligations. ASX may withdraw or replace this Guidance Note at any time without further notice to any person.

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1 Introduction

This Guidance Note is published to assist listed entities to comply with the reporting requirements in Chapter 5 of the Listing Rules¹ for mining activities. These requirements are intended to align ASX's framework for reporting mining activities with recognised industry standards and to promote greater consistency in, and quality of, the public reporting of such activities.

The reporting framework for mining entities in Chapter 5 is underpinned by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) prepared by The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals

¹ More specifically, with Listing Rules 5.1, 5.3, 5.5 and 5.6 - 5.24.

Council of Australia.² The objective of Chapter 5 is to be consistent with the JORC Code, however if there are any inconsistencies between the two, Chapter 5 prevails.

2 Some common concepts that apply to the public reporting of mining activities

2.1 What is a 'mining entity'?

'Mining entities' are subject to certain quarterly³ and annual⁴ reporting obligations under the Listing Rules.

There are two types of mining entities under the Listing Rules – a 'mining exploration entity' and a 'mining producing entity'.⁵

The former is an entity whose main undertaking consists of *exploration*⁶ for minerals⁷ or which has been advised by ASX that it is a mining exploration entity for the purposes of the Listing Rules. The latter is an entity whose main undertaking consists of the *extraction*⁸ of minerals or which has been advised by ASX that it is a mining producing entity for the purposes of the Listing Rules.

ASX may exercise its power to advise an entity that it is a mining exploration entity or a mining producing entity for the purposes of the Listing Rules if, in ASX's opinion, that activity comprises, or over time is likely to comprise, such a significant part of the overall business activities of the entity and its child entities (on a consolidated basis) that it is appropriate for the entity to be subject to the quarterly and annual reporting obligations in Chapter 5.

2.2 What is a 'material mining project'?

The requirements for reporting:

- exploration results in Listing Rule 5.7;
- estimates of mineral resources in Listing Rule 5.8;
- estimates of ore reserves in Listing Rule 5.9; and
- historical estimates or foreign estimates of mineralisation in Listing Rules 5.10 – 5.14,

only apply to material mining projects. The requirements for reporting production targets in Listing Rule 5.16 – 5.19 can also apply if the target relates to a material mining project.⁹

A 'mining project' is defined in the Listing Rules as a project to explore for or extract minerals from a mining tenement or tenements.¹⁰

The boundaries that define a project will often be determined by commercial considerations, including development decisions, budget allocations and how particular mining activities are presented in the entity's public disclosures, including in its annual report and on its website. A project for these purposes may include the development of a single mine, an incremental development in a producing mine, or an integrated development of a group of several mines and associated facilities with common ownership.

² The JORC Code is reprinted in Appendix 5A of the Listing Rules.

³ See '3.1. The quarterly reports that must be given to ASX by mining entities'.

⁴ See '10 Requirements applicable to the annual reports of mining entities'.

⁵ These terms, and many of the other mining related terms used in this Guidance Note, are defined in Listing Rule 19.12.

⁶ The term "exploration" is defined in Listing Rule 19.12 to include geophysical surveys.

⁷ The term "minerals" is defined in Listing Rule 19.12 to include all solid minerals, including diamonds, other gemstones, industrial minerals and coal but not to include petroleum.

⁸ The term "extraction" is defined in Listing Rule 19.12 to include developing the infrastructure needed to extract minerals.

⁹ They may also apply to a production forecast that relates to two or more mining projects that together are material to the entity or to an entity level production forecast.

¹⁰ Listing Rule 19.12.

A 'material mining project' is one in which a listed entity or a child entity has an economic interest (whether alone or jointly with others), where that interest is, or is likely to be, material in the context of the overall business operations or financial results of the entity and its child entities (on a consolidated basis).

These definitions are intended to be applied in a sensible and commercial manner. In many cases, it will be readily apparent that a particular mining activity is a material mining project for the purposes of the Listing Rules and therefore the disclosure requirements in Listing Rules 5.7 - 5.19 will apply to any disclosures of exploration results, estimates of mineral resources or ore reserves, historical estimates or foreign estimates of mineralisation, or production targets for that project. Judgment however may need to be exercised where an entity has multiple mining projects or where it has a mix of mining projects and other business activities.

The factors which an entity should consider in determining whether a particular mining project is a material one for these purposes include:

- its market capitalisation;
- whether it would expect the disclosure of information about the project to have a material effect on the price or value of its securities;¹¹
- whether its actual and projected expenditure on the project is, or is likely to be, material in the context of its expenditure on other mining projects and other (non-mining) business activities;
- whether its actual and projected revenue from the project is, or is likely to be, material in the context of its revenue from other mining projects and other (non-mining) business activities;
- whether it considers the project will be a material asset in the medium to long term;
- whether it has made specific announcements in relation to the project which suggest that the project is a significant or important one for the entity; and
- the prominence given to the project on its website, in its annual report and in other promotional material it has distributed.

Entities may also wish to have regard to the materiality guidelines in the Australian Accounting and International Financial Reporting Standards¹² when applying these factors to work out whether or not a mining project is a material one.

An assessment of the materiality of a project has to be made at a point in time, having regard to the entity's business activities and financial position at the time. It may change over time. A project that is not considered material today may become a material one in the future because of the discovery of new mineral resources or other information. Similarly, a project that is considered material today may not be a material one in the future because it is abandoned or exhausted or because the entity has embarked upon other more significant projects.

¹¹ Guidance Note 8: *Continuous Disclosure: Listing Rules 3.1 – 3.1B* has further guidance on what is meant by a material effect on the price or value of an entity's securities.

¹² Under paragraph 15 of Accounting Standard AASB 1031 *Materiality*, an amount which is equal to or greater than 10% of the applicable base amount is generally presumed to be material, and an amount which is equal to or less than 5% of the applicable base amount is generally presumed not to be material, unless, in either case, there is evidence or convincing argument to the contrary.

2.3 What is a material change in estimates?

The requirements for an entity to include certain information in a report of:

- estimates of mineral resources for material mining projects in Listing Rule 5.8; and
- estimates of ore reserves for material mining projects in Listing Rule 5.9,

can be triggered if there is a material change (upwards or downwards) in those estimates from the time they were last reported to the market in accordance with Listing Rule 5.8 or 5.9 (as the case may be). A material change could be in estimates tonnages or in the grade or quality of the mineralisation.

Whether there has been a material change in estimates of mineral resources or ore reserves in relation to a material mining project must be tested by reference to the last reported estimates of those items. These may have been the initial estimates first announced by the entity or some subsequent announcement of materially changed estimates.

An entity must determine whether a change in estimates of mineral resources or ore reserves is material or not taking into account all of the surrounding circumstances, including the style of mineralisation. This includes considering whether the change in estimates is likely have a material effect on the price or value of its securities.¹³

2.4 Disclosure against Table 1 of the JORC Code

The requirements for an entity to report:

- exploration results for material mining projects in Listing Rule 5.7;
- estimates of mineral resources for material mining projects in Listing Rule 5.8; and
- estimates of ore reserves for material mining projects in Listing Rule 5.9,

include an obligation for the entity to disclose against Table 1 of the JORC Code on an “if not, why not” basis.¹⁴ That is, if the entity determines that one or more of the criteria in Table 1 is not information material to understanding its exploration results or estimates of mineral resources or ore reserves (as the case may be), the entity must identify those criteria and include a description in the disclosure as to why it considers the information is not material to understanding those results or estimates.

This means that an entity cannot leave a criterion in Table 1 blank or insert “not applicable” or “not relevant” because it does not think that the information is material to understanding its exploration results or estimates of mineral resources or ore reserves. It must include a clear statement as to why it is not material. For example, under the “Exploration done by other parties” criterion of the “Reporting of Exploration Results” section of Table 1 of the JORC Code, if no other parties have undertaken exploration activities in relation to the relevant mining tenement, the entity must state that fact and any other relevant details.

ASX notes that Table 1 requires the disclosure of mining and metallurgical factors and assumptions when estimating and reporting mineral resources and the disclosure of cost and revenue factors and assumptions and a market assessment when estimating and reporting ore reserves. ASX would not usually expect an entity to have to disclose trade secrets (for example, proprietary mining technology or metallurgical processes) or other commercially sensitive information (for example, pricing or volumes under long term contractual commitments) to meet these particular requirements (although an entity should carefully consider whether this information needs to be disclosed to meet other disclosure requirements¹⁵). However, in such cases, the entity:

¹³ See Listing Rule 3.1.

¹⁴ See Listing Rules 5.7.1, 5.8.2 and 5.9.2 respectively.

¹⁵ For example, if the entity is issuing a prospectus, the requirement in section 710 of the Corporations Act for the prospectus to include all information that investors and their professional advisers would reasonably require to make an informed investment decision and would reasonably expect to find in the prospectus, or the requirement in Listing Rule 3.1 to disclose information that a reasonable person would expect it to have a material effect on the price or value of the entity's securities, where the information does not fall within the exceptions to immediate disclosure in Listing Rule 3.1A.

- should explain why the information is considered a trade secret or commercially sensitive; and
- must disclose sufficient information (perhaps in narrative rather than numerical form, where the numbers are commercially sensitive) for investors to understand the methodology it has used to determine these factors and assumptions and the basis on which it is estimating its mineral resources and ore reserves.

Entities should be careful not to claim that information is commercially sensitive when that is not so. For example, if an entity is not a producing entity and it has not yet entered into any commercially sensitive contracts that underpin its price, capital expenditure or operational expenditure assumptions, it is difficult to see how information about those assumptions could be commercially sensitive.

ASX also notes that to the extent that an estimate of mineral resources or ore reserves involves a representation about future matters, it must be based on reasonable grounds – meaning that the price, capital expenditure and operational expenditure assumptions used to calculate the estimates must also be objectively reasonable – or else the representation could be deemed to be misleading and the entity could face serious legal consequences as a result.¹⁶

2.5 Competent person requirements

The requirements for an entity to report:

- exploration results for material mining projects in Listing Rule 5.7;
- estimates of mineral resources for material mining projects in Listing Rule 5.8; and
- estimates of ore reserves for material mining projects in Listing Rule 5.9,

include an obligation for the entity to include various statements and obtain various consents from a “competent person”.¹⁷

A market announcement by an entity reporting explorations results or estimates of mineral resources or ore reserves (original or updated) for a material mining project for the first time must state:

- that it is based on, and fairly represents, information and supporting documentation prepared by a named competent person or persons;
- whether the competent person is an employee of the entity or a related entity and, if not, the name of the competent person’s employer; and
- the name of the professional organisation of which the competent person is a member,

and it must only be issued with the prior written consent of the competent person or persons as to the form and context in which the exploration results or estimates of mineral resources or ore reserves (as the case may be) and supporting information are presented in the report.¹⁸

Subsequent public reports of the same exploration results or estimates of mineral resources or ore reserves are not be required to include the above statements or consent provided the following conditions are met:¹⁹

- the subsequent report cross-references the relevant market announcement given to ASX for release to the market containing the explorations results or estimates and the required statements and consent referred to above; and

¹⁶ See section 769C of the Corporations Act 2001 (Cth) and section 12BB(1) of the Australian Securities and Investments Commission Act 2001 (Cth), both of which provide that if a person makes a representation with respect to any future matter and the person does not have reasonable grounds for making the representation, the representation is taken to be misleading. Note that under the latter Act, a person making a representation as to the future is taken not to have had reasonable grounds for making the representation unless they adduce evidence to the contrary (section 12BB(2)).

¹⁷ The term “competent person” is defined in Listing Rule 19.12.

¹⁸ Listing Rule 5.22.

¹⁹ Listing Rule 5.23.

- the entity confirms in the subsequent report that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and, in the case of estimates of mineral resources or ore reserves, that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

If an entity is not able to meet these conditions then the subsequent report must include the statements and consent referred to above.²⁰

2.6 Proximate cautionary statements

The requirements for reporting:

- historical estimates or foreign estimates of mineralisation in Listing Rules 5.10 – 5.14, and
- production targets in Listing Rule 5.15 – 5.19,

in some cases require the inclusion of a prescribed cautionary statement that is proximate to, and has equal prominence as, certain information.²¹

Proximate, for this purpose, means on the same page, and in the same paragraph or in the immediately preceding or following paragraph, as the relevant information. Except as set out below, putting the cautionary statement in a footnote or endnote, or in a general disclaimer elsewhere in the report, does not meet the requirement for proximity.

Equal prominence, for this purpose, means being in the same font type, size and colour as the relevant information. Hence, if the relevant information is included in a heading, the cautionary statement must be in the same font type, size and colour as the heading. Similarly, if relevant information is highlighted or emphasised in any way (for example, by being printed in bold, italics or a different colour to the surrounding text), the cautionary statement must be similarly highlighted or emphasised.

In ASX's view, where a public report includes multiple references to the relevant information, the required cautionary statement need only appear once with the prescribed proximity and prominence. This should be wherever the relevant information first appears in the report.²² After the first mention in the report, it is sufficient for any subsequent reference to the relevant information to include a footnote or endnote that cross-refers clearly to the cautionary statement and gives the page number where the cautionary statement appears.²³

3 Quarterly reporting of mining activities

3.1 The quarterly reports that must be given to ASX by mining entities

A mining exploration entity is required to give to ASX a quarterly report giving *details* of its and its child entities' activities relating to mining exploration, as well as a *summary* of its and its child entities' activities relating to mining production and development, and a summary of the expenditure it and they have incurred on both types of activities.²⁴

²⁰ Listing Rule 5.22.

²¹ See Listing Rules 5.12.9, 5.13.4, 5.16.4, 5.16.5, 5.19.3 and 5.19.4.

²² If an entity uses a smaller or less legible font when it first refers to the relevant information than in subsequent references, so that its cautionary statement is correspondingly smaller or less legible than those subsequent references, it will be regarded by ASX as not complying with the spirit and intent of the relevant Listing Rule and therefore in breach of Listing Rule 19.2. Similarly, if an entity first refers to the relevant information in plain font so that its cautionary statement is also in plain font but then uses text with highlight or emphasis for subsequent references to the relevant information, it will be regarded by ASX as not complying with the spirit and intent of the relevant Listing Rule and therefore in breach of Listing Rule 19.2.

²³ For example, in the case of a cautionary statement about a production target based on inferred mineral resources (Listing Rule 5.16.4), a suitable cross-reference would be:

"This production target must be read in conjunction with the cautionary statement on page [insert page number] that "there is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised."

²⁴ Listing Rule 5.3.

A mining producing entity is required to give to ASX a quarterly report giving *details* of its and its child entities' activities relating to mining production and development, as well as a *summary* of its and its child entities' activities relating to mining exploration, and a summary of the expenditure it and they have incurred on both types of activities.²⁵

In each case:

- if there have been no such activities in the relevant quarter, the report must state that fact;
- the report must include information about the mining tenements and the beneficial interests in farm-in and farm-out agreements held by the entity and its child entities as at the end of the quarter and any changes to those over the quarter; and
- the report must be given to ASX for release to the market no later than one month after the end of the relevant quarter.

A mining exploration entity is also required to give to ASX a quarterly cash flow statement in the form set out in Appendix 5B.²⁶ Again, this must be given to ASX for release to the market no later than one month after the end of the relevant quarter.

Mining exploration entities are not required to give to ASX an Appendix 4D (half yearly report)²⁷ or Appendix 4E (preliminary final report).²⁸ This recognises that their main business activity is expending funds on mining exploration and that they are unlikely to have material revenues from that or other activities and so their quarterly report and quarterly cash flow statement, along with any other disclosures they may make under Chapters 3 and 4 of the Listing Rules, will usually provide the market with sufficient financial information to value the entity's securities.

3.2 Quarterly reporting of mining activities by other entities

Some entities that have mining activities but are not mining entities for the purposes of the Listing Rules have a practice of providing quarterly reports on those activities to the market, on the basis that investors will find this information helpful in assessing the value of their securities. ASX has no objection to this practice, provided the reports comply with any applicable requirements in Chapter 5 (see below).

4 Requirements applicable to all public reporting of mining activities

Listing Rule 5.6 requires all public reports that include a statement relating to an exploration target, exploration results, mineral resources or ore reserves to comply with the JORC Code. This rule applies to all listed entities reporting such matters and not just to mining entities within the meaning of the Listing Rules. Unlike some of the other reporting obligations in Chapter 5, it also applies regardless of whether the project being reported on is a 'material mining project' or not.

5 Reporting of exploration results for material mining projects

Listing Rule 5.7 requires an entity publicly reporting exploration results for a material mining project for the first time, and any new explorations results for that project thereafter, to disclose certain information with the exploration results. The disclosure of this information is intended to improve the ability of investors to assess the significance of the exploration results and the likelihood of mineral resources being identified following further work.

Listing Rule 5.7 applies to all listed entities reporting exploration results for a material mining project and not just to mining entities within the meaning of the Listing Rules.

The information required to be disclosed includes a drill-hole table for all material drill-holes, if the information is material to understanding the reported exploration results. The drill-hole table must include the easting and northing, elevation or

²⁵ Listing Rule 5.1.

²⁶ Listing Rule 5.5.

²⁷ Listing Rule 4.2A.3.

²⁸ Listing Rule 4.3A.

RL, dip and azimuth, down hole width and depth and end of hole, in tabular form. If the entity determines that the information in the drill-hole table is not material to understanding its exploration results, it must include a clear and accurate explanation as to why that is so.

It should be noted that clauses 16 and 17 of the JORC Code set out additional requirements for reporting exploration results. Unlike Listing Rule 5.7, these apply to the reporting of all exploration results and not just to the reporting of exploration results for material mining projects.

6 Reporting of mineral resources and ore reserves for material mining projects

Listing Rules 5.8 and 5.9 require an entity publicly reporting estimates of mineral resources or ore reserves for a material mining project for the first time, or that have materially changed from when they were last reported to the market, to disclose certain information in a market announcement and give it to ASX for release to the market.

The information included in the market announcement must be a fair and balanced representation of the information contained in the separate report prepared in accordance with the relevant sections of Table 1 of Appendix 5A (JORC Code), which must be annexed to the market announcement²⁹. In complying with this obligation, ASX does not expect an entity to prepare a summary of all the information contained in the separate report, rather this requirement is intended to capture only information which is material to understanding the estimates of mineral resources or ore reserves contained in the separate report, that is not otherwise included in the body of the market announcement.

An entity reporting estimates of mineral resources is required to include in the market announcement, amongst other information, a summary of all information material to understanding the reported estimates in relation to mining and metallurgical methods and parameters, and other material modifying factors considered by the entity to date.³⁰ In complying with this requirement, ASX does not require entities to complete a comprehensive study of the mining and metallurgical methods and parameters. Instead, the disclosure should be of the mining and metallurgical methods and parameters and material modifying factors considered in the estimation of the mineral resources.

An entity reporting estimates of ore reserves is required to include the material assumptions and outcomes from the relevant preliminary feasibility study or feasibility study.³¹ ASX would not expect an entity to have to disclose commercially sensitive information (for example, pricing or volumes under long term contractual commitments) to meet this particular requirement (although an entity should carefully consider whether this information needs to be disclosed to meet other disclosure requirements³²). However, in such cases, the entity:

- should explain why the information is considered a trade secret or commercially sensitive; and
- must disclose sufficient information (perhaps in narrative rather than numerical form, where the numbers are commercially sensitive) for investors to understand the methodology it has used to determine these factors and assumptions and the basis on which it is estimating its mineral resources and ore reserves.

Entities should be careful not to claim that information is commercially sensitive when that is not so. For example, if an entity is not a producing entity and it has not yet entered into any commercially sensitive contracts that underpin its price, capital expenditure or operational expenditure assumptions, it is difficult to see how information about those assumptions could be commercially sensitive.

It should be noted that clauses 19 to 35 of the JORC Code set out additional requirements for the classification and reporting of mineral resources and ore reserves. Unlike Listing Rules 5.8 and 5.9, these requirements apply to the reporting of all estimates of mineral resources and ore reserves and not just to material mining projects.

²⁹ Listing Rules 5.8.1 and 5.9.1.

³⁰ Listing Rule 5.8.1.

³¹ Listing Rule 5.9.1.

³² For example, if the entity is issuing a prospectus, the requirement in section 710 of the Corporations Act for the prospectus to include all information that investors and their professional advisers would reasonably require to make an informed investment decision and would reasonably expect to find in the prospectus, or the requirement in Listing Rule 3.1 to disclose information that a reasonable person would expect it to have a material effect on the price or value of the entity's securities, where the information does not fall within the exceptions to immediate disclosure in Listing Rule 3.1A.

7 Reporting of historical and foreign estimates of mineralisation for material mining projects

Listing Rule 5.6 generally requires any public report that includes a statement relating to exploration targets, exploration results, mineral resources or ore reserves to be prepared in accordance with the JORC Code.

Listing Rule 5.10 provides an exception to Listing Rule 5.6 for an entity reporting historical estimates or foreign estimates of mineralisation for a material mining project. Historical estimates in this context are those prepared pre-1989, which is when the JORC Code was introduced as Appendix 5A to the Listing Rules. Foreign estimates are those estimates classified under the requirements of a foreign jurisdiction and which do not comply with the JORC Code.

Prior to the introduction of Listing Rule 5.10, if an entity wanted, or believed it was required, to disclose historical estimates or foreign estimates of mineralisation (for example, because it considered the estimates were information that a reasonable person would expect to have a material effect on the price or value of its securities and therefore required to be disclosed under Listing Rule 3.1), it had to apply for a waiver from the requirement in the Listing Rules for all statements relating to mineral resources or ore reserves to comply with the JORC Code. ASX Companies Update 11/07³³ set out the circumstances in which the ASX would consider granting such a waiver. The intention of Listing Rule 5.10 is to codify these circumstances and remove the requirement to apply for a waiver.

The ability to report historical estimates or foreign estimates of mineralisation under Listing Rule 5.10 does not apply to the reporting of historical or foreign estimates for something which is not a material mining project. Nor does it apply to information that does not fall within the letter or the spirit of the definition of "historical estimate" or "foreign estimate" in the Listing Rules.³⁴ This includes:

- situations where the relevant exploration and evaluation programs are incomplete and entities are trying to report "preliminary resources";
- situations where entities are trying to report reserves when the appropriate studies that would be required under the JORC Code to allow the conversion of mineral resources to ore reserves have not yet been completed; and
- referring to historical or foreign estimates of mineralisation for areas adjacent to or near to the entity's mining tenements.

An entity wishing to publicly report historical estimates or foreign estimates of mineralisation under Listing Rule 5.10 must comply with the requirements in Listing Rules 5.12, 5.13 and 5.14. If it is not able to comply with those requirements, it cannot report the estimate.

7.1 Historical and foreign estimates not to be included in an economic analysis of mineral resources or ore reserves

An entity is prohibited from including any historical estimates or foreign estimates of mineralisation in an economic analysis of the entity's mineral resources and ore reserve holdings.³⁵ This includes any scoping study, preliminary feasibility study or feasibility study.

³³ ASX and JORC joint Companies Update 11/07 released on 5 December 2007. See also Companies Update 05/04 released on 25 March 2004.

³⁴ These definitions can be found in Listing Rule 19.12.

³⁵ Listing Rule 5.11.

7.2 Disclosure requirements

Listing Rule 5.12 sets out the disclosure requirements for a public report relating to historical estimates or foreign estimates of mineralisation. They are largely self-explanatory.

One requirement is to identify the source and the date of the estimate.³⁶ This must be the original source and date of the estimate and not a summary or restatement of that information that has, for example, been obtained from a government or other third party database.

7.3 Annual reporting requirements

An entity that has publically reported historical estimates or foreign estimates of mineralisation under Listing Rules 5.10 and 5.13 which have not subsequently been verified and reported as mineral resources or ore reserves in accordance with the JORC Code must include certain disclosures in its annual report.³⁷ These include:

- a statement on its progress in evaluating the previously reported historical estimates or foreign estimates and the status of any further exploration work required to verify the historical estimates or foreign estimates as mineral resources or ore reserves in accordance with the JORC Code; and
- if the historical estimates or foreign estimates have not been verified as mineral resources or ore reserves in accordance with the JORC Code after 3 years from the date they were initially reported, a statement:
 - explaining why the historical estimates or foreign estimates have not been verified as mineral resources or ore reserves in accordance with the JORC Code; and
 - disclosing the entity's intention with regard to verifying the historical estimates or foreign estimates as mineral resources or ore reserves in accordance with the JORC Code.

If the entity is a mining entity and it has a mineral resources and ore reserves statement in its annual report, the disclosures above should be made in that statement. However, save for making these disclosures, historical estimates and foreign estimates of mineralisation must not be included in the entity's mineral resources and ore reserves holdings in that statement, as they do not meet the requirement to be classified as mineral resources or ore reserves under the JORC Code.

ASX would encourage a listed entity that has publically reported historical estimates or foreign estimates of mineralisation under Listing Rules 5.10 and 5.12 to undertake the work required to verify them as mineral resources or ore reserves in accordance with the JORC Code as quickly as it reasonably can.

7.4 Competent person requirements

A public report containing historical estimates or foreign estimates of mineralisation for a material mining project must include a statement by a competent person or persons that certain information in the report³⁸ is an accurate representation of the available data and studies for the mining project. The statement must disclose whether the competent person is an employee of the entity or a related entity and, if not, the name of the competent person's employer. It must also disclose the name of the professional organisation of which the competent person is a member.³⁹

8 Reporting of production targets

Listing Rules 5.15 and 5.17 set out the requirements for reporting certain types of production targets and forecast financial information which is derived from those production targets, respectively.

At the outset, it should be emphasised that production targets, and forecast financial information derived from production targets, are both forward looking statements. As such, they must be based on reasonable grounds or else they will be

³⁶ Listing Rule 5.12.1.

³⁷ Listing Rule 5.14.

³⁸ Being the information provided under Listing Rules 5.12.2 to 5.12.7.

³⁹ Listing Rule 5.12.10.

deemed to be misleading,⁴⁰ with all the significant legal consequences that entails.⁴¹ For this reason, an appropriate level of due diligence needs to be applied to the preparation of a production target. The underlying figures and assumptions should be carefully vetted and signed off at a suitably senior level before the production target is released.

8.1 What is a 'production target'?

The term "production target" is defined for the purposes of Chapter 5 of the Listing Rules to mean a projection or forecast of the amount of minerals to be extracted from a particular mining tenement or tenements for a period that extends past the current year and the forthcoming year.⁴²

8.2 The types of production targets that are covered

The reporting requirements in Listing Rule 5.16 apply to production targets, as defined above, for:

- the mineral resource and ore reserves holdings⁴³ of an entity (an 'entity level production target'); or
- a material mining project of the entity (or two or more mining projects which together are material to the entity),

The reporting requirements in Listing Rule 5.17 to apply to forecast financial information derived from these types of production targets.

8.3 Near-term production guidance and aspirational statements are excluded

The reporting requirements in Listing Rules 5.16 and 5.17 do not apply to the disclosure of near-term production forecasts or guidance, and any forecast financial information derived from near-term production forecasts or guidance, that relate to the current or forthcoming year.⁴⁴

They also do not apply to general aspirational statements of prospective production, such as:

"X Ltd aims to be a global gold producer by [date]";

"X Ltd aims to be a significant gold producer doubling production over the next 5 years"; or

"X Ltd aims to be a 500,000 plus ounces per annum gold producer in 5 years".⁴⁵

8.4 Production targets for operating mines based solely on ore reserves and mineral resources are excluded

The reporting requirements in Listing Rules 5.16 and 5.17 do not apply to the disclosure of a production target, or forecast financial information derived from a production target, that relates to an operating mine or mines that is underpinned solely by ore reserves or solely by a combination of ore reserves and measured mineral resources.⁴⁶

⁴⁰ See note 16 above. See also ASIC Regulatory Guide 170 *Prospective financial information*.

⁴¹ These legal consequences are summarised in Annexure B of Guidance Note 8: *Continuous Disclosure: Listing Rules 3.1 – 3.1B* under the heading 'The statutory prohibitions against false or misleading disclosures'.

⁴² Listing Rule 19.12.

⁴³ These include mineral resources and ore reserves held by a child entity.

⁴⁴ Listing Rule 19.12.

⁴⁵ ASX does not regard these types of aspirational statements as falling within the description of a "projection or forecast of the amount of minerals to be extracted from a particular mining tenement or tenements for a period".

⁴⁶ Listing Rule 5.18.

8.5 Production targets based solely on exploration targets or solely or partly on historical estimates or foreign estimates of mineralisation are prohibited

The disclosure of a production target:

- based solely on an exploration target;⁴⁷ or
- based solely or partly on historical estimates or foreign estimates of mineralisation,

is prohibited.⁴⁸ With no confirmed ore reserves or mineral resources in the former case, and mineralisation that has not been confirmed to the standards required by the JORC Code in the latter case, there will be significant uncertainty regarding the entity's ability to achieve the production target. The disclosure of a production target in these circumstances is therefore likely to be misleading.⁴⁹

However, an entity may report a production target that is based on a combination of ore reserves and/or mineral resources and an exploration target, provided it does so in accordance with Listing Rule 5.16 and it has a reasonable grounds for doing so.⁵⁰

8.6 The disclosure requirements for production targets and financial forecasts

Each of the matters required to be reported for a production target in Listing Rule 5.16 must be disclosed at the same time as the headline production target is disclosed to the market and in the same document.

Similarly, each of the matters required to be reported for forecast financial information derived from a production target in Listing Rule 5.17 must be disclosed at the same time as the headline forecast is disclosed to the market and in the same document.

Listing Rules 5.16 and 5.17 require an entity to disclose the material assumptions underpinning the production target or the forecast financial information the first time the entity reports that information. The aim of this disclosure is to facilitate greater transparency of the basis for the production target or forecast.

Again, ASX would not usually expect an entity to have to disclose commercially sensitive information (for example, pricing or volumes under long term contractual commitments) to meet this particular requirement (although an entity should carefully consider whether this information needs to be disclosed to meet other disclosure requirements, such as prospectus or continuous disclosure requirements⁵¹). However, in such cases, the entity:

- should explain why the information is considered commercially sensitive; and
- must disclose sufficient information (perhaps in narrative rather than numerical form, where the numbers are commercially sensitive) for investors to understand the methodology it has used to determine these assumptions and the basis on which it is calculating its production target or financial forecast.

Entities should be careful not to claim that information is commercially sensitive when that is not so. For example, if an entity is not a producing entity and it has not yet entered into any commercially sensitive contracts that underpin its price, capital expenditure or operational expenditure assumptions, it is difficult to see how information about those assumptions could be commercially sensitive.

ASX also notes that as a production target or forecast financial information derived from a production target involves a representation about future matters, it must be based on reasonable grounds – meaning that the assumptions

⁴⁷ The term "exploration target" is defined in Listing Rule 19.12.

⁴⁸ Listing Rule 5.15.

⁴⁹ See notes 38 and 39 above and the accompanying text.

⁵⁰ See notes 38 and 39 above and the accompanying text.

⁵¹ If the entity is issuing a prospectus, the requirement in section 710 of the Corporations Act for the prospectus to include all information that investors and their professional advisers would reasonably require to make an informed investment decision and would reasonably expect to find in the prospectus, or the requirement in Listing Rule 3.1 to disclose information that a reasonable person would expect it to have a material effect on the price or value of the entity's securities, where the information does not fall within the exceptions to immediate disclosure in Listing Rule 3.1A.

underpinning it must also be objectively reasonable – or else the representation could be deemed to be misleading and the entity could face serious legal consequences as a result.⁵²

Subsequent public reports by an entity that refer to a previously reported production target, or forecast financial information derived from a production target, do not have to provide all the information set out in Listing Rules 5.17 and 5.18 provided certain conditions are satisfied. One of these conditions is that the subsequent report must cross refer the report containing the production target or forecast and all the supporting information.⁵³

Where a proportion of the production target is based on inferred mineral resources or an exploration target, the disclosure document containing the production target must include a prescribed cautionary statement that is proximate to the reported production target.⁵⁴

Where a proportion of a production target is based on an exploration target, the disclosure document containing the production target must also include a statement of the factors that lead the entity to believe that it has a reasonable basis for reporting a production target in that context.⁵⁵

If the entity has published forecast financial information derived from a production target where a significant proportion of the production target is based on an exploration target, the implications on the forecast financial information of not including the exploration target in the production target must also be disclosed.⁵⁶ For these purposes, ASX interprets the phrase “significant proportion” to mean 25% or more of the mineralisation underpinning the production target is generated from an exploration target.

8.7 Production targets based solely on inferred mineral resources or solely on a combination of inferred mineral resources and an exploration target

As noted previously, under the Corporations Act, a statement about a production target will be deemed to be misleading unless the person making the statement has reasonable grounds for making the statement.⁵⁷

ASX considers that it is only in exceptional circumstances that an entity might form the view that it has reasonable grounds for a production target, or a financial forecast derived from a production target, when that production target, or forecast financial information, is based solely on inferred mineral resources or solely on a combination of inferred mineral resources and an exploration target.

Where a production target is based solely on inferred mineral resources or solely on a combination of inferred mineral resources and an exploration target, the following additional requirements must be satisfied:⁵⁸

- disclosure of a statement of the factors that lead the entity to believe that it has a reasonable basis for reporting a production target based solely on inferred mineral resources or solely on a combination of inferred mineral resources and an exploration target. This should include disclosure of the reasons why the project is not being progressed through to a higher confidence level of mineralisation (because it cannot be progressed by conventional exploration alone) prior to release of a production target;
- disclosure of the level of confidence associated with the estimates of inferred mineral resources and the basis for the level of confidence. The basis for the level of confidence should be described in narrative form and be descriptive enough to inform the market of the reasons why the entity holds this confidence level;

⁵² See notes 40 and 41 above and the accompanying text.

⁵³ It would be helpful in this case if the entity includes a copy of the original report containing all the supporting information available on its website and includes a hyper link to that report in the subsequent report.

⁵⁴ Listing Rules 5.16.4 and 5.16.5 respectively. See also '2.6. Proximate cautionary statements'.

⁵⁵ Listing Rule 5.16.5.

⁵⁶ Listing Rule 5.17.3.

⁵⁷ See notes 40 and 41 above and the accompanying text.

⁵⁸ Listing Rule 5.16.6.

- completion and public release of an independent technical report that supports the production target. The technical report must be prepared by, or under the supervision of a competent person or persons and include the name of the competent person or persons and their employer; and
- a cautionary statement in the terms set out in Listing Rule 5.16.6.

A technical report produced by an independent competent person or persons for purposes of Listing Rule 5.16.6 should have regard to the guidelines for independent experts' reports in ASIC Regulatory Guides 111 ('Content of expert reports') and 112 ('Independence of experts') to the extent those guidelines are applicable.

Under Listing Rule 5.17.2, an entity reporting forecast financial information derived from a production target must include the underlying production target and all the information contained in Listing Rule 5.16 in the public report. For the avoidance of doubt, this requires an entity reporting forecast financial information based solely on inferred mineral resources or solely on a combination of inferred mineral resources and an exploration target to satisfy the additional requirements (which are outlined above) in relation to that forecast financial information that it would have been required to satisfy if it was reporting the underlying production target⁵⁹.

8.8 Updating production targets

If an entity becomes aware that its production results for a period will differ materially (downwards or upwards) from any target it has published, it may have a legal obligation to notify the market of that fact. This obligation may arise under Listing Rule 3.1 and section 674 of the Corporations Act,⁶⁰ if the difference is of such magnitude that a reasonable person would expect it to have a material effect on the price or value of the entity's securities. It may also arise under section 1041H of the Corporations Act, because failing to inform the market that its published target is no longer accurate could constitute misleading conduct on its part.

9 The interaction between Chapter 5 and other reporting obligations

The reporting requirements for mining activities in Chapter 5 are an adjunct to, and operate in tandem with, the reporting and disclosure requirements in Chapter 3 (continuous disclosure) and Chapter 4 (periodic disclosure) of the Listing Rules.

For example, where an entity is required to disclose market sensitive information⁶¹ involving mining activities to ASX under Listing Rule 3.1, the information disclosed must comply not only with that rule but also with any applicable requirements in Chapter 5.

It should be noted that information required to be disclosed under Listing Rule 3.1 must be disclosed immediately. ASX has given guidance in Guidance Note 8: *Continuous Disclosure: Listing Rules 3.1 – 3.1B* that:

- "Immediately" does not mean "instantaneously", but rather "promptly and without delay".
- ASX recognises that the speed with which an entity can disclose information under Listing Rule 3.1 will vary, depending on factors such as where and when the information originated, the forewarning (if any) the entity had of the information, the amount and complexity of the information concerned, the need in some cases to verify the accuracy or bona fides of the information, and (importantly in this context):

"the need in some cases to comply with specific legal and Listing Rule requirements, such as the requirement for an announcement that relates to mining or oil and gas activities to comply with Chapter 5 of the Listing Rules."

⁵⁹ Additional requirements are contained in Listing Rule 5.16.6.

⁶⁰ See ASIC Advisory 10-198AD, involving an infringement notice against a listed entity for not informing the market about a material reduction in its gold production compared to a production forecast it had released earlier. It should be noted that the fact that a listed entity complies with an infringement notice is not to be taken as an admission of guilt or liability (see section 1317DAF).

⁶¹ 'Market sensitive information' is a short-hand expression referring to information of the type required to be disclosed under Listing Rule 3.1 (namely, information that a reasonable person would expect it to have a material effect on the price or value of an entity's securities). For further guidance on the meaning of the term, see Guidance Note 8 *Continuous Disclosure: Listing Rules 3.1 – 3.1B*.

- ASX will take these factors into account, as well as whether or not the entity has promptly requested a trading halt to minimise the period that the market is trading on an uninformed basis, in assessing whether an entity has complied with its obligation to disclose information in a timely manner under Listing Rule 3.1.

All other things being equal, ASX considers that the requirement for an entity to disclose market sensitive information about a mining activity under Listing Rule 3.1, which is also subject to the reporting requirements in Chapter 5, will generally only be triggered when the entity is in possession of all of the information that it is required to include in a market announcement about that activity under Chapter 5. Prior to it having all of that information, ASX considers that whatever market sensitive information it may have about the activity will generally be insufficiently definite to warrant disclosure. Therefore, provided the market sensitive information is and remains confidential, ASX has not formed the view that it has ceased to be confidential, and a reasonable person would not otherwise expect it to be disclosed, it will generally fall within the carve-out to immediate disclosure in Listing Rule 3.1A.

Guidance Note 8 *Continuous Disclosure: Listing Rules 3.1 – 3.1B* has more detailed guidance on when information is confidential, when ASX may form the view that information has ceased to be confidential, and when a reasonable person would expect information to be disclosed for purposes Listing Rule 3.1A.

As mentioned in that Guidance Note, ASX may form the view that information about a mining activity has lost confidentiality if there is:

- a media or analyst report about the matter;
- a rumour known to be circulating the market about the matter; or
- a sudden and significant movement in the market price or traded volumes of the entity's securities that cannot be explained by other events or circumstances.

Each of these is evidence that the matter is no longer confidential and therefore Listing Rule 3.1A no longer applies.

An entity which has potentially market sensitive information about a mining activity and which is in the process of compiling the information that it is required to include in a market announcement about that activity under Chapter 5 should therefore as a matter of course be monitoring:

- the market price of its securities;
- major national and local newspapers;
- news wire services; and
- enquiries from analysts or journalists.

If the entity detects signs that the information may no longer be confidential, it may need to request a trading halt to stop trading in its securities while it completes an announcement about the matter that meets the requirements of both Listing Rule 3.1 and Chapter 5.

10 Requirements applicable to the annual reports of mining entities

10.1 List of tenements

A mining exploration entity is required to include in its annual report:

- the mining tenements held by it and its child entities and their location; and
- the percentage interest it or they hold in each mining tenement.⁶²

⁶² Listing Rule 5.20.

10.2 Annual mineral resources and ore reserves statement

A mining entity that has any mineral resources or ore reserves is required to include an annual mineral resources and ore reserves statement in its annual report.⁶³

This information includes the mining entity's (and any child entity's⁶⁴) mineral resource and ore reserve holdings in tabular form with that information broken down into each commodity type (including the grade or quality), the mineral resource category (inferred, indicated and measured) and ore reserve category (probable and proved), and by project (if material) or geographical area, based on the materiality of the mineral resource and ore reserve holdings to the mining entity.⁶⁵

The geographical areas by which a mining entity chooses to report its aggregated mineral resources and ore reserves holdings is a matter for it to determine, having regard to its individual circumstances and the materiality of the mineral resources and ore reserves in question. For example, some entities may choose to report by continent, by country, by state/territory or by other regions. Others may choose to report holdings for a particular property, project or deposit, if that is material, with a mix of other geographical areas.

The date at which a mining entity must report its mineral resource and ore reserve holdings in the annual mineral resources and ore reserves statement can be either its end of financial year balance date or another appropriate date (such as a date that aligns with its annual review of mineral resources and ore reserves and corporate planning cycle). Whatever the date is, it must be disclosed in the annual mineral resources and ore reserves statement.⁶⁶ If it is a date other than its end of financial year balance date, the annual mineral resources and ore reserves statement must include a brief explanation of any material changes to its mineral resource and ore reserve holdings between the date of the review and its end of financial year balance date.

A mining entity should report its mineral resource and ore reserve holdings as at the same time each year to promote effective year-on-year comparisons.

The annual mineral resources and ore reserves statement must include a comparison of the entity's reported aggregated mineral resource and ore reserve holdings for the current year against the corresponding aggregated mineral resource and ore reserve holdings for the previous year, with an explanation of material changes between the two.⁶⁷ For the purposes of this comparison, ASX does not require the mining entity to disclose the previous year holdings broken down into each mineral resource category and ore reserve category (such as probable ore reserves and proved ore reserves). The comparison only needs to be provided by commodity (including grade or quality) for total ore reserves and total mineral resources, by project (if material) or geographic region based on materiality.

The annual mineral resources and ore reserves statement in a mining entity's annual report must include:

- a statement that it is based on, and fairly represents, information and supporting documentation prepared by a competent person or persons; and
- a statement that the mineral resources and ore reserves statement as a whole has been approved by a named competent person or persons (who may be different competent persons to the ones referred to in the previous bullet point), as well as information about their employer and the professional organisation of which they are a member.⁶⁸

The annual mineral resources and ore reserves statement must only be issued with the prior written consent of the named competent person or persons who have approved the statement as a whole as to the form and context in which it appears in the annual report.

⁶³ Listing Rule 5.22.

⁶⁴ The definition of "mineral resources and ore reserves holdings" in Listing Rule 19.12 includes the holdings of the mining entity and its child entities.

⁶⁵ Listing Rule 5.22.2.

⁶⁶ Listing Rule 5.21.2.

⁶⁷ Listing Rule 5.21.4.

⁶⁸ Being the information referred to in Listing Rule 5.22(b) and (c).

REPORTING ON OIL & GAS ACTIVITIES

<p>The purpose of this Guidance Note</p>	<ul style="list-style-type: none"> To assist listed entities to understand and comply with the reporting requirements for oil and gas activities in Chapter 5 of the Listing Rules
<p>The main points it covers</p>	<ul style="list-style-type: none"> The quarterly reporting obligations that apply to oil and gas entities The general requirements that apply to all public reports of petroleum resources The requirements that apply to public reports with information about a geophysical survey The requirements that apply to public reports with information about an exploration and drilling program for petroleum resources The requirements that apply to public reports with estimates of petroleum reserves, contingent resources or prospective resources for material oil and gas projects The interaction between Chapter 5 and other reporting obligations, including the obligation to give market sensitive information to ASX immediately The requirement for oil and gas exploration entities to include a list of petroleum tenements in their annual report The requirement for oil and gas entities with petroleum reserves to include a reserves statement in their annual report Qualified petroleum reserves and resources evaluator requirements
<p>Related materials you should read</p>	<ul style="list-style-type: none"> Petroleum Resources Management System (SPE-PRMS) <i>Guidelines for Application of the Petroleum Resources Management System</i> (November 2011 edition) Guidance Note 8: <i>Continuous Disclosure: Listing Rules 3.1 – 3.1B</i>

History: Guidance Note 32 introduced [DD/MM/13].

Important notice: ASX has published this Guidance Note to assist listed entities to understand and comply with their obligations under the Listing Rules. Nothing in this Guidance Note necessarily binds ASX in the application of the Listing Rules in a particular case. In issuing this Guidance Note, ASX is not providing legal advice and listed entities should obtain their own advice from a qualified professional person in respect of their obligations. ASX may withdraw or replace this Guidance Note at any time without further notice to any person.

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1 Introduction

This Guidance Note is published to assist listed entities to comply with the reporting requirements in Chapter 5 of the Listing Rules¹ for oil and gas activities. These requirements are intended to align ASX's framework for reporting oil and gas activities with global industry standards and to promote greater consistency in, and quality of, the public reporting of such activities.

The reporting framework for oil and gas activities in Chapter 5 is underpinned by the Petroleum Resources Management System (SPE-PRMS) sponsored by the Society of Petroleum Engineers, the American Association of Petroleum Geologists, the World Petroleum Council and the Society of Petroleum Evaluation Engineers. SPE-PRMS is an industry-sponsored set of guidelines that provide standardised definitions and a comprehensive classification system for petroleum resources. The objective of Chapter 5 is to be consistent with SPE-PRMS, however if there are any inconsistencies between the two, the Listing Rules prevail.

¹ More specifically, with Listing Rules 5.2, 5.4, 5.5 and 5.26 - 5.46.

2 Some common concepts that apply to the public reporting of mining activities

2.1 What is an 'oil and gas entity'?

'Oil and gas entities' are subject to certain quarterly² and annual³ reporting obligations under the Listing Rules.

There are two types of oil and gas entities under the Listing Rules – an 'oil and gas exploration entity' and an 'oil and gas producing entity'.⁴

The former is an entity whose main undertaking consists of *exploration*⁵ for petroleum⁶ or which has been advised by ASX that it is an oil and gas exploration entity for the purposes of the Listing Rules. The latter is an entity whose main undertaking consists of the *extraction*⁷ of petroleum or which has been advised by ASX that it is an oil and gas producing entity for the purposes of the Listing Rules.

ASX may exercise its power to advise an entity that it is an oil and gas exploration entity or an oil and gas producing entity for the purposes of the Listing Rules if, in ASX's opinion, that activity comprises, or over time is likely to comprise, such a significant part of the overall business activities of the entity and its child entities (on a consolidated basis) that it is appropriate for the entity to be subject to the quarterly and annual reporting obligations in Chapter 5.

2.2 What is a 'material oil and gas project'?

The requirements for reporting estimates of petroleum reserves, contingent resources or prospective resources in Listing Rules 5.31 – 5.36 only apply to material oil and gas projects.

An 'oil and gas project' is defined in the Listing Rules as a project to explore for or extract petroleum from a petroleum tenement or tenements.⁸

The boundaries that define a project will often be determined by commercial considerations, including development decisions, budget allocations and how particular oil and gas activities are presented in the entity's public disclosures, including in its annual report and on its website. A project for these purposes may include the development of a single reservoir or field, an incremental development in a producing field, or an integrated development of a group of several fields and associated facilities with common ownership.

A 'material oil and gas project' is defined in the Listing Rules as one in which an oil and gas entity or a child entity has an economic interest (whether alone or jointly with others), where that interest is, or is likely to be, material in the context of the overall business operations or financial results of the entity and its child entities (on a consolidated basis).

These definitions are intended to be applied in a sensible and commercial manner. In many cases, it will be readily apparent that a particular oil and gas activity is a material oil and gas project for the purposes of the Listing Rules and therefore the disclosure requirements in Listing Rules 5.31 - 5.36 will apply to estimates of petroleum resources for that project. Judgment however may need to be exercised where an entity has multiple oil and gas projects or where it has a mix of oil and gas projects and other business activities.

² See '3.1 The quarterly reports that must be given to ASX by oil and gas entities'.

³ See '9. Requirements applicable to the annual reports of oil and gas entities'.

⁴ These terms, and many of the other oil and gas related terms used in this Guidance Note, are defined in Listing Rule 19.12.

⁵ The term "exploration" is defined in Listing Rule 19.12 to include geophysical surveys.

⁶ The term "petroleum" is defined in Listing Rule 19.12 to mean a naturally occurring mixture consisting of hydrocarbons in the gaseous, liquid or solid phase. Petroleum may also contain non-hydrocarbon compounds. Common examples of non-hydrocarbon compounds included in petroleum are carbon dioxide, nitrogen, hydrogen sulphide and sulphur.

⁷ The term "extraction" is defined in Listing Rule 19.12 to include developing the infrastructure needed to extract petroleum.

⁸ Listing Rule 19.12.

The factors which an oil and gas entity should consider in determining whether a particular oil and gas project is a material one for these purposes include:

- its market capitalisation;
- whether it would expect the disclosure of information about the project to have a material effect on the price or value of its securities;⁹
- whether its actual and projected expenditure on the project is, or is likely to be, material in the context of its expenditure on other oil and gas projects and other (non-oil and gas) business activities;
- whether its actual and projected revenue from the project is, or is likely to be, material in the context of its revenue from other oil and gas projects and other (non-oil and gas) business activities;
- whether it considers the project will be a material asset in the medium to long term;
- whether it has made specific announcements in relation to the project which suggest that the project is a significant or important one for the entity; and
- the prominence given to the project on its website, in its annual report and in other promotional material it has distributed.

Entities may also wish to have regard to the materiality guidelines in the Australian Accounting and International Financial Reporting Standards¹⁰ when applying these factors to work out whether or not an oil and gas project is a material one.

An assessment of the materiality of a project has to be made at a point in time, having regard to the entity's business activities and financial position at that time. It may change over time. A project that is not considered material today may become a material one in the future because of the discovery of new petroleum resources or other information. Similarly, a project that is considered material today may not be a material one in the future because it is abandoned or exhausted or because the entity has embarked upon other more significant projects.

2.3 What is a material change in estimates?

Listing Rules 5.32, 5.34 and 5.36 require certain information to be disclosed where there has been material change (upwards or downwards) in estimates of petroleum reserves, contingent resources or prospective resources in relation to a material oil and gas project, compared to when they were previously reported.

Whether there has been a material change in estimates of petroleum reserves, contingent resources or prospective resources in relation to a material oil and gas project must be tested by reference to the last reported estimates of those items. These may have been the initial estimates first announced by the entity or some subsequent announcement of materially changed estimates.

A material change could be in the form of a material improvement or regression in terms of:

- the estimated recoverable quantities for petroleum reserves;
- the estimated potentially recoverable quantities or the chance of commercial development for contingent resources and prospective resources; or
- the chance of discovery of prospective resources.

⁹ Guidance Note 8: *Continuous Disclosure: Listing Rules 3.1 – 3.1B* has further guidance on what is meant by a material effect on the price or value of an entity's securities.

¹⁰ Under paragraph 15 of Accounting Standard AASB 1031 *Materiality*, an amount which is equal to or greater than 10% of the applicable base amount is generally presumed to be material, and an amount which is equal to or less than 5% of the applicable base amount is generally presumed not to be material, unless, in either case, there is evidence or convincing argument to the contrary.

An entity must determine whether a change in estimates of its petroleum reserves, contingent resources or prospective resources is material or not taking into account all of the surrounding circumstances. This includes considering whether the change in estimates is likely have a material effect on the price of its securities.¹¹

3 Quarterly reporting of oil and gas activities

3.1 The quarterly reports that must be given to ASX by oil and gas entities

An oil and gas exploration entity is required to give to ASX a quarterly report giving *details* of its and its child entities' activities relating to oil and gas exploration, as well as a *summary* of its and its child entities' activities relating to oil and gas production and development, and a summary of the expenditure it and they have incurred on both types of activities.¹²

An oil and gas producing entity is required to give to ASX a quarterly report giving *details* of its and its child entities' activities relating to oil and gas production and development, as well as a *summary* of its and its child entities' activities relating to oil and gas exploration, and a summary of the expenditure it and they have incurred on both types of activities.¹³

In each case:

- if there have been no such activities in the relevant quarter, the report must state that fact;
- the report must include information about the petroleum tenements and the beneficial interests in farm-in and farm-out agreements held by the entity and its child entities as at the end of the quarter and any changes to those over the quarter; and
- the report must be given to ASX for release to the market no later than one month after the end of the relevant quarter.

An oil and gas exploration entity is also required to give to ASX a quarterly cash flow statement in the form set out in Appendix 5B.¹⁴ Again, this must be given to ASX for release to the market no later than one month after the end of the relevant quarter.

Oil and gas exploration entities are not required to give to ASX an Appendix 4D (half yearly report)¹⁵ or Appendix 4E (preliminary final report).¹⁶ This recognises that their main business activity is expending funds on oil and gas exploration and that they are unlikely to have material revenues from that or other activities and so their quarterly report and quarterly cash flow statement, along with any other disclosures they may make under Chapters 3 and 4 of the Listing Rules, will usually provide the market with sufficient financial information to value the entity's securities.

3.2 Quarterly reporting of oil and gas activities by other entities

Some entities that have oil and gas activities but are not oil and gas entities for the purposes of the Listing Rules have a practice of providing quarterly reports on those activities to the market, on the basis that investors will find this information helpful in assessing the value of their securities. ASX has no objection to this practice, provided the reports comply with any applicable requirements in Chapter 5 (see below).

¹¹ See Listing Rule 3.1.

¹² Listing Rule 5.4.

¹³ Listing Rule 5.2.

¹⁴ Listing Rule 5.5.

¹⁵ Listing Rule 4.2A.3.

¹⁶ Listing Rule 4.3A.

4 Requirements applicable to all public reporting of petroleum resources

Listing Rules 5.25 – 5.28 set out general requirements which apply to all public reports of petroleum resources. These rules apply to all listed entities reporting petroleum resources and not just to oil and gas entities within the meaning of the Listing Rules. Unlike some of the other reporting obligations in Chapter 5, they also apply regardless of whether the project being reported on is a ‘material oil and gas project’ or not.

Under these rules, petroleum resources are required to be classified in accordance with the scheme for classification in SPE-PRMS (that is, as petroleum reserves, contingent resources or prospective resources) and reported in the most appropriate resource category under that scheme.¹⁷ In complying with this requirement, ASX would encourage entities to refer to the *Guidelines for Application of the Petroleum Resources Management System* (November 2011 edition), which has additional guidance on how to classify petroleum resources in accordance with SPE-PRMS.¹⁸

Estimates of petroleum resources of necessity will be made as at a particular date and that date must be stated in the public report with those estimates.¹⁹ Various other information must also be included in the report, depending on the class or category of petroleum resources being reported.

ASX believes that the reporting requirements in Listing Rules 5.25 – 5.28 are largely self-explanatory and do not require further guidance, except possibly in relation to the following issues.

4.1 The requirement for a proximate cautionary statement where prospective resources are reported

Where an entity reports an estimate of prospective resources, the report must include a cautionary statement that:

“The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.”

This statement must be proximate to, and have equal prominence as, the reported estimate of prospective resources.²⁰

Proximate, for this purpose, means on the same page, and in the same paragraph or in the immediately preceding or following paragraph, as the estimate in question. Except as set out below, putting the cautionary statement in a footnote or endnote, or in a general disclaimer elsewhere in the report, does not meet the requirement for proximity.

Equal prominence, for this purpose, means being in the same font type, size and colour as the estimate of prospective resources. Hence, if an estimate of prospective resources is included in a heading, the cautionary statement must be in the same font type, size and colour as the heading. Similarly, if an estimate of prospective resources is highlighted or emphasised in any way (for example, by being printed in bold, italics or a different colour to the surrounding text), the cautionary statement must be similarly highlighted or emphasised.

In ASX’s view, where a public report includes multiple references to an estimate of prospective resources, the required cautionary statement need only appear once with the prescribed proximity and prominence. This should be wherever the estimate of prospective resources first appears in the report.²¹ After the first mention in the report, it is sufficient for any

¹⁷ Listing Rule 5.25.2.

¹⁸ Available online at http://www.spe.org/industry/docs/PRMS_Guidelines_Nov2011.pdf.

¹⁹ Listing Rule 5.26.1. Under SPE-PRMS, this point in time is referred to as the ‘evaluation date’.

²⁰ Listing Rule 5.28.2.

²¹ If an entity uses a smaller or less legible font when it first refers to an estimate of prospective resources than in subsequent references, so that its cautionary statement is correspondingly smaller or less legible than those subsequent references, it will be regarded by ASX as not complying with the spirit and intent of Listing Rule 5.28.2 and therefore in breach of Listing Rule 19.2. Similarly, if an entity first refers to an estimate of prospective resources in plain font so that its cautionary statement is also in plain font but then uses text with highlight or emphasis for subsequent references to the estimate of prospective resources, it will be regarded by ASX as not complying with the spirit and intent of Listing Rule 5.28.2 and therefore in breach of Listing Rule 19.2.

subsequent reference to the estimate of prospective resources to include a footnote or endnote that cross-refers clearly to the cautionary statement and gives the page number where the cautionary statement appears.²²

4.2 The requirement for a proximate reporting of petroleum reserves, contingent resources and prospective resources when certain matters are reported

The disclosure of total petroleum initially-in-place, total resource base, estimated ultimate recovery, remaining recoverable resources or hydrocarbon endowment²³ is prohibited unless all of the following information is included in the report proximate to that disclosure:

- an estimate of petroleum reserves;
- an estimate of contingent resources;
- an estimate of prospective resources; and
- whether and how each of the resource classes in the summation were adjusted for risk.²⁴

Similarly, the disclosure of discovered petroleum-initially-in-place²⁵ is prohibited unless all of the following information is included in the report proximate to that disclosure:

- an estimate of petroleum reserves;
- an estimate of contingent resources; and
- whether and how each of the resource classes in the summation were adjusted for risk.²⁶

Proximate, for this purpose, again means on the same page, and in the same paragraph or in the immediately preceding or following paragraph, as the disclosure in question. Putting the required additional information in a footnote or endnote does not meet the requirement for proximity.

In this case, the required additional information must appear wherever there is any reference to an otherwise prohibited disclosure.

4.3 Reporting unconventional resources

Estimated quantities of petroleum sourced from unconventional resources (for example, coal seam gas, coal bed methane, shale gas, oil shale, tight gas formations, or bitumen) must be reported to ASX in accordance with SPE-PRMS.²⁷ This is despite the fact that under some State and Territory legislation, entities may be required to report to regulatory agencies in accordance with the JORC Code.²⁸

²² A suitable cross-reference would be:

"This estimate of prospective petroleum resources must be read in conjunction with the cautionary statement on page [insert page number] that the estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons."

²³ SPE-PRMS defines 'total petroleum initially-in-place' in section 1.1 and Appendix A, 'estimated ultimate recovery' in section 1.1 and Appendix A, and 'recoverable resources' in section 1.2 and Appendix A. Additional guidance on total petroleum initially-in-place is provided in section 2.2 of the *Guidelines for Application of the Petroleum Resources Management System* (November 2011).

²⁴ Listing Rule 5.25.3.

²⁵ SPE-PRMS defines 'discovered petroleum initially-in-place' in section 1.1 and Appendix A.

²⁶ Listing Rule 5.25.4.

²⁷ Listing Rule 5.25.2.

²⁸ The Australian Code for Reporting of Mineral Resources and Ore Reserves (JORC Code), a copy of which is included in Appendix 5A of the Listing Rules.

5 Reporting of geophysical survey information

Listing Rule 5.29 requires a public report with information about a geophysical survey for petroleum to include the name, nature and status of the survey, and the permit under which the survey has been conducted. It applies to all listed entities reporting geophysical survey information and not just to oil and gas entities within the meaning of the Listing Rules. Unlike some of the other reporting obligations in Chapter 5, it also applies regardless of whether the project being reported on is a 'material oil and gas project' or not.

6 Reporting of exploration and drilling information

Listing Rule 5.30 sets out general reporting requirements which apply to all public reports with information about an exploration and drilling program for petroleum. It applies to all listed entities reporting information about an exploration and drilling program for petroleum and not just to oil and gas entities within the meaning of the Listing Rules. Unlike some of the other reporting obligations in Chapter 5, it also applies regardless of whether the project being reported on is a 'material oil and gas project' or not.

Again, the reporting requirements in Listing Rule 5.30 are largely self-explanatory.

Generally speaking, a public report with information about an exploration and drilling program for petroleum should be presented in a factual and balanced manner and contain sufficient information to allow investors and their advisers to make an informed judgement of its significance. Care should be taken to ensure that it does not suggest, without reasonable grounds, that commercially recoverable or potentially recoverable quantities of petroleum have been discovered, in the absence of determining and reporting estimates of petroleum reserves or contingent resources in accordance with the disclosure requirements in Chapter 5 of the Listing Rules.

7 Reporting of petroleum resources for material oil and gas projects

Listing Rules 5.31 – 5.36 require an entity publicly reporting estimates of petroleum reserves, contingent resources or prospective resources in relation to a material oil and gas project – either for the first time, or for the first time after they have materially changed from when they were last reported – to do so in the form of a market announcement that includes certain information. They apply to all listed entities reporting such estimates and not just to oil and gas entities within the meaning of the Listing Rules.

ASX believes that the reporting requirements in Listing Rules 5.31 – 5.36 are largely self-explanatory and do not require further guidance, except possibly in relation to the following issues.

7.1 Reports of petroleum reserves

The first time an entity publicly reports an estimate of petroleum reserves for a material oil and gas project, it is required to include in its market announcement a brief description of the basis for confirming commercial producibility and booking petroleum reserves.²⁹ The type of information ASX would generally expect an entity to disclose for this item is a summary description of the types of tests performed, such as production and/or formation testing, and other analysis undertaken to determine commercial producibility of the accumulation. In the absence of production and/or formation testing, this could be on the basis of well logs and/or core analysis that indicates that the zone is hydrocarbon-bearing and where it is analogous to other reservoirs in the immediate area that have demonstrated commercial producibility by actual production and/or formation testing.

The first time an entity publicly reports an estimate of petroleum reserves for a material oil and gas project, it is also required to disclose all of the material economic assumptions used to calculate those estimates.³⁰

²⁹ Listing Rule 5.31.4.

³⁰ Listing Rule 5.31.1.

ASX would not expect an entity to have to disclose commercially sensitive information (for example, pricing or volumes under long term contractual commitments) to meet this particular requirement (although an entity should carefully consider whether this information needs to be disclosed to meet other disclosure requirements³¹). However, in such cases, the entity:

- should explain why the information is considered a trade secret or commercially sensitive; and
- must disclose sufficient information (perhaps in narrative rather than numerical form, where the numbers are commercially sensitive) for investors to understand the methodology it has used to determine these factors and assumptions and the basis on which it is estimating its petroleum resources.

Entities should be careful not to claim that information is commercially sensitive when that is not so. For example, if an entity is not a producing entity and it has not yet entered into any commercially sensitive contracts that underpin its price, capital expenditure or operational expenditure assumptions, it is difficult to see how information about those assumptions could be commercially sensitive.

ASX also notes that to the extent an estimate of petroleum reserves involves a representation about future matters, it must be based on reasonable grounds – meaning that the economic assumptions used to calculate the estimates must also be objectively reasonable – or else the representation could be deemed to be misleading and the entity could face serious legal consequences as a result.³²

7.2 Reports of contingent resources

The first time an entity publicly reports an estimate of contingent resources for a material oil and gas project, it is required to include in its market announcement a brief description of the basis for confirming a discovery and of the key contingencies that prevent the contingent resources being classified as petroleum reserves.³³ Examples of key contingencies requiring petroleum resources to be classified as contingent resources include:

- where there is no viable market at the time of the disclosure;
- where commercial recovery is dependent on technology under development;
- where evaluation of the accumulation is insufficient to clearly assess commerciality;
- where current and forecast economic conditions do not support a commercially viable oil and gas project; or
- where there is not sufficient certainty relating to legal, environmental, social or governmental factors.

7.3 Reports of prospective resources

The first time an entity publicly reports an estimate of prospective resources for a material oil and gas project, it is required to include in its market announcement a brief description of the basis on which the prospective resources are estimated.³⁴ The type of information ASX would generally expect an entity to disclose to comply with this requirement includes the supporting data (including analogous information and any analysis of seismic surveys and non-seismic surveys), analytical processes and assumptions (such as recovery efficiency) that have been used to evaluate the prospective resources.

³¹ For example, if the entity is issuing a prospectus, the requirement in section 710 of the Corporations Act for the prospectus to include all information that investors and their professional advisers would reasonably require to make an informed investment decision and would reasonably expect to find in the prospectus, or the requirement in Listing Rule 3.1 to disclose information that a reasonable person would expect it to have a material effect on the price or value of the entity's securities, where the information does not fall within the exceptions to immediate disclosure in Listing Rule 3.1A.

³² See section 769C of the Corporations Act 2001 (Cth) and section 12BB(1) of the Australian Securities and Investments Commission Act 2001 (Cth). Note that under the latter Act, a person making a representation as to the future is taken not to have had reasonable grounds for making the representation unless they adduce evidence to the contrary (section 12BB(2)).

³³ Listing Rule 5.33.3.

³⁴ Listing Rule 5.35.2.

7.4 Qualified petroleum reserves and resources evaluator requirements

An entity publicly reporting estimates of petroleum reserves, contingent resources or prospective resources for the first time must ensure that the estimates are prepared by a qualified petroleum reserves and resources evaluator.³⁵ The report must state:

- that it is based on, and fairly represents, information and supporting documentation prepared by a named qualified petroleum reserves and resources evaluator or evaluators;
- whether the qualified petroleum reserves and resources evaluator is an employee of the entity or a related entity and, if not, the name of the qualified petroleum reserves and resources evaluator's employer; and
- the name of the professional organisation of which the qualified petroleum reserves and resources evaluator is a member,

and it must only be issued with the prior written consent of the qualified petroleum reserves and resources evaluator or evaluators as to the form and context in which the estimated petroleum reserves, contingent resources and prospective resources and supporting information are presented in the report.³⁶

Subsequent public reports of the same petroleum reserves, contingent resources and prospective resources are not be required to include the above statements or consent provided the following conditions are met:³⁷

- the subsequent report cross-references the relevant market announcement given to ASX for release to the market containing the estimates and the required statements and consent referred to above; and
- the entity confirms in the subsequent report that it is not aware of any new information or data that materially affects the information included in the relevant market announcement and that all the material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

If an entity is not able to meet these conditions then the subsequent report must include the statements and consent referred to above.³⁸

8 The interaction between Chapter 5 and other reporting obligations

The reporting requirements for oil and gas activities in Chapter 5 are an adjunct to, and operate in tandem with, the reporting and disclosure requirements in Chapter 3 (continuous disclosure) and Chapter 4 (periodic disclosure) of the Listing Rules.

For example, where an entity is required to disclose market sensitive information³⁹ involving oil and gas activities to ASX under Listing Rule 3.1, the information disclosed must comply not only with that rule but also with any applicable requirements in Chapter 5.

It should be noted that information required to be disclosed under Listing Rule 3.1 must be disclosed immediately. ASX has given guidance in Guidance Note 8: *Continuous Disclosure: Listing Rules 3.1 – 3.1B* that:

- “Immediately” does not mean “instantaneously”, but rather “promptly and without delay”.
- ASX recognises that the speed with which an entity can disclose information under Listing Rule 3.1 will vary, depending on factors such as where and when the information originated, the forewarning (if any) the entity had

³⁵ Listing Rule 5.41. The term “qualified petroleum reserves and resources evaluator” is defined in Listing Rule 19.12.

³⁶ Listing Rule 5.42.

³⁷ Listing Rule 5.43.

³⁸ Listing Rule 5.42.

³⁹ ‘Market sensitive information’ is a short-hand expression referring to information of the type required to be disclosed under Listing Rule 3.1 (namely, information that a reasonable person would expect it to have a material effect on the price or value of an entity’s securities). For further guidance on the meaning of the term, see Guidance Note 8 *Continuous Disclosure: Listing Rules 3.1 – 3.1B*.

of the information, the amount and complexity of the information concerned, the need in some cases to verify the accuracy or bona fides of the information, and (importantly in this context):

“the need in some cases to comply with specific legal and Listing Rule requirements, such as the requirement for an announcement that relates to mining or oil and gas activities to comply with Chapter 5 of the Listing Rules.”

- ASX will take these factors into account, as well as whether or not the entity has promptly requested a trading halt to minimise the period that the market is trading on an uninformed basis, in assessing whether an entity has complied with its obligation to disclose information in a timely manner under Listing Rule 3.1.

All other things being equal, ASX considers that the requirement for an entity to disclose market sensitive information about an oil and gas activity under Listing Rule 3.1, which is also subject to the reporting requirements in Chapter 5, will generally only be triggered when the entity is in possession of all of the information that it is required to include in a market announcement about that activity under Chapter 5. Prior to it having all of that information, ASX considers that whatever market sensitive information it may have about the activity will generally be insufficiently definite to warrant disclosure. Therefore, provided the market sensitive information is and remains confidential, ASX has not formed the view that it has ceased to be confidential, and a reasonable person would not otherwise expect it to be disclosed, it will generally fall within the carve-out to immediate disclosure in Listing Rule 3.1A.

Guidance Note 8 *Continuous Disclosure: Listing Rules 3.1 – 3.1B* has more detailed guidance on when information is confidential, when ASX may form the view that information has ceased to be confidential, and when a reasonable person would expect information to be disclosed for purposes Listing Rule 3.1A.

As mentioned in that Guidance Note, ASX may form the view that information about an oil and gas activity has lost confidentiality if there is:

- a media or analyst report about the matter;
- a rumour known to be circulating the market about the matter; or
- a sudden and significant movement in the market price or traded volumes of the entity's securities that cannot be explained by other events or circumstances.

Each of these is evidence that the matter is no longer confidential and therefore Listing Rule 3.1A no longer applies.

An entity which has potentially market sensitive information about an oil and gas activity and which is in the process of compiling the information that it is required to include in a market announcement about that activity under Chapter 5 should therefore as a matter of course be monitoring:

- the market price of its securities;
- major national and local newspapers;
- news wire services; and
- enquiries from analysts or journalists.

If the entity detects signs that the information may no longer be confidential, it may need to request a trading halt to stop trading in its securities while it completes an announcement about the matter that meets the requirements of both Listing Rule 3.1 and Chapter 5.

9 Requirements applicable to the annual reports of oil and gas entities

9.1 List of tenements

An oil and gas exploration entity is required to include in its annual report:

- the petroleum tenements held by it and its child entities and their location; and
- the percentage interest it or they hold in each petroleum tenement.⁴⁰

9.2 Annual reserves statement

An oil and gas entity that has any petroleum reserves and that does not file US SEC compliant Forms 10-K and 20-F with the SEC annually⁴¹ is required to include an annual reserves statement in its annual report.⁴²

The information required in the annual reserves statement includes:

- the entity level total 1P petroleum reserves and 2P petroleum reserves (split between developed and undeveloped petroleum reserves and by product); and
- the total aggregated 1P petroleum reserves and 2P petroleum reserves by product and by geographical area (split between developed and undeveloped petroleum reserves by geographical area).⁴³

The geographical areas by which an oil and gas entity chooses to report its aggregated petroleum reserves is a matter for it to determine, having regard to its individual circumstances and the materiality of the petroleum reserves in question. For example, some entities may choose to report by continent, by country, by state/territory or by other regions. Others may choose to report petroleum reserve estimates for a particular basin, if that is material, with a mix of other geographical areas.

The annual petroleum reserves statement must include a reconciliation of the entity's reported petroleum reserves holdings for the current year against the corresponding petroleum reserves holdings for the previous year, along with an explanation of any material changes between the two.⁴⁴ The reconciliation against the previous year's petroleum reserves holdings, at a minimum, should identify changes that have resulted from revisions to previous estimates, extensions and discoveries, acquisitions and divestments, and production. Whether any further explanation is required will depend on the materiality of the information in question. For example, if there has been a significant reduction in the total portfolio of petroleum reserves from one year to the next because net acquisitions and divestments are materially negative, the entity should generally explain the reason for this (for example, this was the result of the sale of a particular asset or assets or the sell down of a significant interest in a particular oil and gas project or projects).⁴⁵

If an oil and gas entity includes contingent resources in its annual reserves statement, it must include the group level total 2C contingent resources by product and aggregated 2C contingent resources by product and geographical area⁴⁶ and a reconciliation of its reported contingent resources holdings for the current year against the corresponding contingent resources holdings for the previous year, along with an explanation of any material changes between the two.⁴⁷ The reconciliation against the previous year's contingent resources holdings, at a minimum, should identify changes that resulted from conversion of contingent resources to petroleum reserves, revisions to previous estimates, extensions and discoveries, and acquisitions and divestments. Whether any further explanation is required will again depend on the materiality of the information in question.

⁴⁰ Listing Rule 5.38.

⁴¹ Listing Rule 5.39.

⁴² Listing Rule 5.40.

⁴³ Listing Rule 5.39.1. If the oil and gas entity has material unconventional petroleum resources, it must separately identify the portion of the total 1P petroleum reserves and 2P petroleum reserves reported at the group level that are based on unconventional petroleum resources (Listing Rule 5.39.2).

⁴⁴ Listing Rule 5.39.3.

⁴⁵ This could be done as a note to a table showing the comparison of the two years.

⁴⁶ Listing Rule 5.40.1.

⁴⁷ Listing Rule 5.40.2.

The reserves statement in an oil and gas entity's annual report must include:

- a statement that it is based on, and fairly represents, information and supporting documentation prepared by a qualified petroleum reserves and resources evaluator or evaluators; and
- a statement that the reserves statement as a whole has been approved by a named qualified petroleum reserves and resources evaluator or evaluators (who may be different qualified petroleum reserves and resources evaluators to the ones referred to in the previous bullet point), as well as information about their employer and the professional organisation of which they are a member.⁴⁸

The reserves statement must only be issued with the prior written consent of the named qualified reserves and resources evaluator or evaluators who have approved the reserves statement as a whole as to the form and context in which it appears in the annual report.

⁴⁸ Being the information referred to in Listing Rule 5.42(b) and (c).