

# FOR TECHNICAL ASSESSMENT AND/OR VALUATION OF MINERAL AND PETROLEUM ASSETS AND MINERAL AND PETROLEUM SECURITIES FOR INDEPENDENT EXPERT REPORTS (THE VALMIN CODE)

The Fundamental Principles of this Document are

Transparency - Independence - Competence - Materiality

This Code applies to all relevant reports issued on or after 1 April 1998.

	Code was adopted by The AusIMM on
_	applied to all relevant Reports required under Law from 1 July 1995. It was amended on
	applies to all relevant Reports required under ns Law issued on or after 1 April 1998.
2	The AusIMM VALMIN Code, February 1998

#### COMPLIANCE WITH AND SUPPORT OF VALMIN CODE

#### **Compliance obligatory for AusIMM Members**

"The Code is binding on members of The AusIMM when preparing public independent expert reports required by Corporations Law concerning mineral and petroleum assets and securities."

#### Australian Institute of Geoscientists supports the Code

"The Australian Institute of Geoscientists (AIG) supports the issue of the Code and accepts it as a statement of industry and professional best practice. In accordance with Australian Stock Exchange policy and practice, the AIG expects compliance with the Code by members of AIG."

#### Minerals Council of Australia supports the Code

"The Minerals Council of Australia has endorsed the Code's use by members of The AusIMM when preparing Independent Expert Reports."

#### Australian Stock Exchange supports use of the Code

"Australian Stock Exchange supports the issue of the Code, and brings any serious breaches of it to the attention of The AusIMM."

#### **Australian Securities Commission uses the Code**

"The Australian Securities Commission (ASC) refers to the Valmin Code when reviewing mining and exploration prospectuses and takeover documents. Although the ASC regards the Code as indicative of best practice, this does not relieve issuers and others involved in the preparation of prospectuses and takeover documents from their obligations under the Law. The Code is not a statement by the ASC of what constitutes the Law."

#### The Institute of Chartered Accountants in Australia supports the Code

"The Institute of Chartered Accountants in Australia supports the application of The Australasian Institute of Mining and Metallurgy's VALMIN Code as it applies to the valuation of mineral and petroleum assets and mineral securities."

#### The Australian Society of Certified Practising Accountants supports the Code

"The Australian Society of Certified Practising Accountants supports the Code and believes that such a best practice Code will be of substantial benefit to the users of valuation reports."

#### **Ernst & Young Corporate Finance Pty Limited supports the Code**

"Ernst & Young Corporate Finance Pty Limited supports the application of the VALMIN Code by members of The Australasian Institute of Mining and Metallurgy in the assessment of and valuation of mineral and petroleum assets and mineral and petroleum securities."

#### Coopers & Lybrand endorses the Code

"Coopers & Lybrand regards the VALMIN Code as indicative of best practice for members of The AusIMM and supports its use in all public documents."

## KPMG Corporate Finance Pty Ltd requires use of the Code

"KPMG Corporate Finance requires that any valuation of mineral or petroleum assets be performed by a suitably qualified consultant and that it comply with the terms and guidelines of the VALMIN Code. Whilst industry standards need to be regularly reviewed and updated for changes in circumstances we consider the VALMIN Code to be the current measure of best practice."

#### **Australian Institute of Company Directors supports the Code**

"The Australian Institute of Company Directors supports the implementation of The AusIMM VALMIN Code, in line with the philosophy of encouraging self-regulatory codes of conduct and best practice in industry."

## **Australian Shareholders Association supports the Code**

"The Australian Shareholders Association supports the Code in the preparation of Independent Expert Reports."

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#### **DEFINITION OF TERMS**

The first or a particularly significant mention in the VALMIN Code and Guidelines of a term which is included in the Definition of Terms is indicated by a superscript, ie Valuation, D38 means that this term is defined in Definition Number D38.

#### Definition Number

- D1. 'ACN' means Australian Company Number.'Advanced Exploration Areas' See Definition D14
- D2. **'APPEA'** means the Australian Petroleum Production and Exploration Associated Limited.
- D3. 'ARBN' means Australian Registered Body Number.
- D4. 'ASC' means the Australian Securities Commission.
- D5. **'Associate/Association'** has the meaning given by Division 2 of Part 1.2 of the Corporations Law.

In summary, persons who would be classed as 'Associates' or as acting in 'Association' include those who:

- carry on business together, whether in partnership, as principals, shareholders in a private company or as principal unit holders in a trust;
- have some fiduciary relationship with each other;
- share common directorships; or
- have entered into or propose to enter into an agreement
  - (i) because of which one of the persons has or will have power (even if it is in any way qualified) to exercise control, directly or indirectly on, or to influence substantially the exercise of any voting power attached to shares in the Commissioning Entity or any other corporation with an interest in the Mineral Assets which are the subject of the Valuation; or
  - (ii) for the purposes of controlling or influencing the composition of the board or the conduct of affairs of the Commissioning Entity or any other corporation with an interest in the Mineral Assets which are the subject of the Valuation.
- D6. 'ASX' means Australian Stock Exchange Limited. ASX maintains an 'official list' of companies whose securities may be traded. Admission to the official list is gained by satisfying the 'ASX Listing Rules'. These rules impose strict requirements which must be complied with by entities admitted to the official list of ASX as well as by entities seeking admission to the official list of ASX. ASX Listing Rules which are particularly relevant to Independent Expert Reports are:
  - (a) in respect of entities seeking admission to the official list:
    - Chapter 1 Criteria for admission to the official list.
  - (b) continuing Listing Rules for existing listed companies:

Listing Rules 10.1 and 10.10 - Transactions with persons in a position of influence.

Listing Rule 11.1 - Proposed change to nature or scale of activities.

(These Listing Rules are relevant and in force as at January, 1998).

ASX reserves the right to require listed entities to provide additional information, even where a Report is prepared in compliance with the VALMIN Code.

- D7. 'AusIMM' means The Australasian Institute of Mining and Metallurgy.
- D8. 'Code' and 'VALMIN Code'. See Paragraph C2.
- D9. **'Commissioning Entity**' means the organisation, company or person commissioning a Report.
- D10. **'Competence**' means having relevant qualifications and experience See Definitions D12 and D34, and Paragraphs C15, C16, C18 and C19.
- D11. 'Corporations Law' means the Corporations Law as amended from time to time and has the additional meaning given by Sections 8 and 8A of the Corporations Law. It takes precedence over any other pronouncement, including those of ASC, ASX or this Code. Sections of the Corporations Law which are particularly relevant to the Code are:
  - (a) Sections 704, 705, 995, 996, 1005, 1006 and 1009 which make false and misleading statements or Material omissions subject to civil or criminal penalties and also set out the defences available to an Expert or Specialist; and
  - (b) **Section 765** which requires a person making representation with respect to any future matter to have reasonable grounds for making the representation, otherwise that representation shall be taken to be misleading;
  - (c) **Sections 648 and 703** setting out circumstances under which Reports are required.
  - (d) **Section 1022** which prescribes the contents of prospectuses, without expressly requiring an Independent Expert Report.
  - (e) Sections 647(3) and 1032 which specify the ways in which Part A and Part B Statements and prospectuses may refer to an Independent Expert Report.

Details of related legal and ASC interpretations are set out in the following ASC Practice Notes and Policy Statements which were relevant and in force as at January 1998.

Practice Note 21 - Value of Non-current Assets

Practice Note 29 - Selective Capital Reductions

Practice Note 42 - Independence of Experts Reports.

Practice Note 43 - Valuation Reports and Profit Forecasts

Practice Note 54 - Accounting for the Acquisition of Net Assets in Financial Statements or a Prospectus

Practice Note 55 - Citing Experts and Statement of Interests

Policy Statement 25 - Takeovers - False and Misleading Statements

Policy Statement 56 - Prospectuses

Policy Statement 57 - Takeovers

Policy Statement 60 - Schemes of Arrangement

Policy Statement 74 - Acquisitions Agreed to by Shareholders.

Policy Statement 75 - Independent Expert Reports to Shareholders.

Policy Statement 76 - Related Party Transactions

Policy Statement 79 - Prospectuses - Material Contracts - Confidential Information

D12. An 'Expert' means a natural person who prepares and is responsible for a Report, who is Independent and is a professional having expertise, competence, experience in the Mining or Petroleum Industries D26, qualifications and reputation so as to give authority to a statement made in relation to a particular matter. Where the licensing requirements of the Corporations Law are applicable, an appropriate licence must be held.

In the case of the Technical Assessment of and Reports on Mineral or Petroleum Assets, in order to ensure that the Report is authoritative, the Expert, must have had at least ten years of relevant General, Mining or Petroleum Industry Experience<sup>D16</sup> or use a Specialist<sup>D34</sup> who must be an appropriately qualified and experienced geologist, mining or petroleum engineer, metallurgist, or other appropriate experienced technical professional and be a corporate member of an appropriate, recognised professional association having an enforeable code of ethics. See Definition D34 and Paragraphs C15 to C20

- D13. 'Exploration Areas' means properties where mineralisation may or may not have been identified, but where a Mineral or Petroleum Resource has not been identified
- D14. 'Advanced Exploration Areas and Pre-development Projects' means properties where Mineral or Petroleum Resources have been identified and their extent estimated (possibly incompletely) but where a positive development decision has not been made. Properties at the early assessment stage, properties for which a development decision has been negative, properties on care and maintenance and properties held on retention titles are included in this category if Mineral or Petroleum Resources are identified, even if no further Valuation, Technical Assessment, delineation or advanced exploration is being undertaken.
- D15. **'Development Projects'** means properties which have been committed to production, but which are not yet commissioned or not operating at design levels.

'Fair Market Value'. See Definition D41.

- D16. 'Fairness or Fairness and Reasonableness Report' means a report as described in Paragraph C12 which involves a Valuation and expresses an opinion on the fairness, or fairness and/or reasonableness of the transaction that is the subject of the Report.
- D17. 'General Mining or Petroleum Industry Experience' means:
  - (a) in relation to an Exploration Area, (See Definitions D13 and D14) applied experience and competence in geology;

(b) in relation to other Mineral or Petroleum Assets, (See Definitions D24 and D30) applied experience and competence in the technical discipline for which the Expert or Specialist is academically qualified, together with sufficient knowledge of other relevant technical disciplines to allow the Expert or Specialist to supervise the work of professionals in those disciplines;

with such experience having been gained in the Mining or Petroleum Industries as in Definition D26.

- D18. 'Guidelines'. See Paragraph G100.
- D19. **'Independent'** and **'Independence'** means, with respect to the relationship between an Expert or Specialist (as the case requires) and a Commissioning Entity, that:
  - a) the Expert or Specialist has no relevant pecuniary or beneficial interest in the Commissioning Entity (if a body corporate);
  - (b) the Commissioning Entity has no relevant pecuniary or beneficial interest in the Expert or Specialist (if a body corporate); and
  - (c) neither the Expert nor Specialist nor the Commissioning Entity is employed by (or, in the case of bodies corporate, is an officer of) any one of the others, and that the principles enunciated in Paragraph C22 are adhered to.

In this definition, all references to Experts, Specialists and Commissioning Entities includes their respective

(ASC Practice Note 42 which deals with the Independence of Expert Reports, provides more detail on the concept of Independence.)

- D20. 'Independent Expert Report' ('Report') is a Report as required by Corporations Law concerning the Technical Assessment and/or Valuation of Mineral or Petroleum Assets or the Valuation of Mineral or Petroleum Securities prepared by an Expert who is Independent, usually with the assistance of a Specialist or Specialists, who are also Independent, depending on whether or not the Expert has expertise in all aspects of the Valuation, and on the magnitude of the task. (The purposes for which such reports may be required are set out in Paragraph C11 and the types of reports in Paragraph C12).
- D21. 'JORC Code' means The Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, and the accompanying Guidelines as set out in Appendix 5A of the ASX Listing Rules, as amended from time to time. (This Code incorporates the Australian Code for Reporting Identified Coal Resources and Reserves (February 1986) and the Australasian Reporting of Diamond Exploration Results, Identified Mineral Resources and Ore Reserves (October 1993)). See also Definition D25.
- D22. 'Material/Materiality' means, with respect to the contents and conclusions of a Report, and to any assessment, technical or otherwise, calculation or the like which contribute to these contents and conclusions and to data and information of such importance that the inclusion or omission of the data or information concerned might result in a reader of the Report reaching a different conclusion than might otherwise be the case.

In particular, Material data and information is that which would reasonably be required in order to make an informed assessment of the subject of the Report.

(In order to provide some guidance in assessing Materiality, it may be noted that

 the Australian Society of Accountants' Standard AAS5 proposes that, as 'useful benchmarks', the Materiality of information or data can be assessed in terms of the extent to which its omission or inclusion could lead to changes in total value of

Less than five per cent - immaterial

Between five per cent and ten per cent - discretionary

More than ten per cent - material

and

- the Supreme Court of New South Wales has stated that something is Material if it is significant in formulating a decision about whether or not to make an investment or accept an offer.)
- D23. A 'Mineral' is any naturally occurring material useful to and/or having a value placed on it by mankind which is found in or on the Earth's crust. For the purpose of this Code, the term specifically includes coal, shale and materials used in building and construction, but excludes crude oil and natural gas. See also Definition D29
- D24. 'Mineral Assets' means all property including but not limited to real property, intellectual property, mining and exploration tenements held or acquired in connection with the exploration, the development of and the production from those tenements together with all plant, equipment and infrastructure owned or acquired for the development, extraction and processing of minerals in connection with those tenements. Most Mineral Assets can be classified as either Exploration Areas<sup>D13</sup>, Advanced Exploration Areas<sup>D14</sup>, Pre-Development Projects<sup>D15</sup> or Operating Mines<sup>D28</sup>.
- D25. The 'Mineral Resources and Ore Reserves' terms referred to in the VALMIN Code are defined as in the latest update of the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC Code) and the accompanying Guidelines. These terms must not be interpreted in any Material way without reference to the JORC Code (as may be amended from time to time) in its entirety. The terms in use as at 1 July 1996 are:

**Exploration Results** 

Mineral Resources

Inferred Mineral Resources

Indicated Mineral Resources

Measured Mineral Resources

Ore Reserves (Minerals other than coal)

Probable Ore Reserves

Proved Ore Reserves

Coal Reserves

Mineable In Situ Reserves

Recoverable Reserves

Marketable Reserves

- D26. 'Mining or Petroleum Industry' means the business of exploring for, extracting, processing and marketing Minerals or Petroleum.
- D27. 'Mineral or Petroleum Securities' means those Securities issued by a body corporate or an unincorporated body whose business includes exploration for, development of, or extraction and processing of Minerals or Petroleum. (See also Definition D33)
- D28. 'Operating Mines' means mineral properties, particularly mines and processing plants, which have been fully commissioned and are in production.
- D29. **'Petroleum'** means any naturally occurring hydrocarbon, whether in a gaseous or liquid state.
- D30. **'Petroleum Assets'** means all property including but not limited to real property, intellectual property, production and exploration tenements held or acquired in connection with the exploration, development of and production from those tenements together with all plant, equipment and infrastructure owned or acquired for the development, extraction and processing of petroleum in connection with those tenements. Most Petroleum Assets can be classified as either Exploration Areas<sup>D13</sup>, Advanced Exploration Areas<sup>D14</sup>, Pre-Development Projects<sup>D14</sup>, Producing Fields<sup>D31</sup> or Production Facilities<sup>D32</sup>.
  - 'Pre-Development Projects' See Definition D14.
- D31. **'Producing Fields'** means oil or gas fields which have been developed and are in production.
- D32. **'Production Facilities'** means all plant and equipment required for the production of oil or gas from a field.
  - 'Report' See Definition D20.
- D33. **'Securities'** means documents which are evidence of a loan or ownership, including:
  - (a) debentures, stocks or bonds;
  - (b) shares;
  - (c) units in a trust;
  - (d) loan securities, such as mortgages; and
  - (e) any right to participate, or any interest in;

the profits, assets or realisation of any financial or business undertaking or scheme;

a common enterprise in relation to which the holder of the right or interest is lead to expect profits;

a contract, scheme or arrangement that, in substance and irrespective of its form, involves investment of money in or under such circumstances that the investor acquires or may acquire an interest in, or right in respect of, property that, under, or in accordance with, the terms of investment will, or may at the option of the investor, be used or employed in common with any interest in, or right in respect of, property; eg a joint venture.

O34. 'Specialists' means natural persons who may be retained by the Expert to provide subsidiary reports or sections of Reports on matters on which the Expert is not personally expert. A Specialist must be Independent and be a professional having expertise, competence, experience in the Mining or Petroleum Industry, qualifications and reputation so as to give authority to a statement made in

relation to a particular matter and thus be relevant to the subject matter of the section(s) of the Report to which he or she contributes. A Specialist must have had at least five years of suitable and preferably recent experience in the particular technical or commercial field on which he or she is to report.

In the case of the Technical Assessment of and Reports on Mineral or Petroleum Assets, a Specialist must be an appropriately qualified and experienced mining or petroleum engineer, geologist, geophysicist, metallurgist, or other appropriate experienced technical professional and be a corporate member of a relevant, recognised professional association having an enforceable code of ethics.

Should a Specialist prepare a section of a Report for which he or she is personally responsible, as evidenced by his or her signing it off, he or she must be a corporate member of a relevant, recognised professional organisation having an enforceable code of ethics. (See Paragraphs C15 to C20)

Where the licencing requirements of the Corporations Law are applicable, an appropriate licence must be held.

- D35. 'Technical Report' means a report as described in Paragraph C12 which deals with the Technical Assessment of Mineral or Petroleum Assets and does not address matters such as a Valuation Report, a Vendor Consideration Opinion on Securities or the fairness and reasonableness of a transaction relating to Mineral or Petroleum Assets.
- D36. 'Tenement' means any form of title or right such as a licence, permit or lease granted by the relevant Government in accordance with its mining or petroleum legislation that confers on the holder certain rights to explore for and/or extract minerals that might be contained in the land. 'Tenure' and 'Title' have the same connotation as 'Tenement'.
- D37. 'Transparent' as applied to a Valuation means, as in the Concise Oxford Dictionary, 'easily seen through, of motive, quality, etc'. For the purposes of the VALMIN Code, this applies to the factual information used, the assumptions made and the methodologies applied, all of which must be made plain in the Report.
- D38. 'Valuation' is the process of determining the Value of a Mineral or Petroleum Asset or Mineral or Petroleum Security.

- D39. **'Valuation Date'** means the reference date to which a Valuation applies which, depending on the circumstances, could be different to the date of completion or signing of the Report or the cut-off date of the available data.
- D40. 'Valuation Report' means a report, as described in Paragraph 12, which values Mineral or Petroleum Assets or Mineral or Petroleum Securities but is not a Vendor Consideration Opinion, or a Fairness, or a Fairness and Reasonableness Report in a Technical Assessment Report.
- D41. 'Value' is the 'Fair Market Value' of a Mineral Asset or Mineral Security and is the estimated amount of money or the cash equivalent of some other consideration for which, in the opinion of the Expert reached in accordance with the provisions of the VALMIN Code, the Mineral or Petroleum Asset or Mineral or Petroleum Security should change hands on the Valuation Date between a willing buyer and a willing seller in an 'arm's length' transaction, wherein each party had acted knowledgeably, prudently and without compulsion.

**Value** is usually comprised of two components, the underlying or 'Technical Value' of the Mineral or Petroleum Asset or Mineral Petroleum Security, as defined in Definition D42 and a premium or discount relating to market, strategic or other considerations.

- D42. 'Technical Value' is an assessment of a Mineral or Petroleum Asset's future net economic benefit at the Valuation Date under a set of assumptions deemed most appropriate by an Expert or Specialist, excluding any premium or discount to account for market, strategic or other considerations.
- D43. 'Technical Assessment' means an appraisal, prepared by an Expert or Specialist, of the technical aspects of a Mineral or Petroleum Asset and may involve a review of such matters as resource, metallurgical process or mining method and include the estimating of capital and operating costs. Technical Assessments will usually provide the basis of a Valuation and be the subjects of Technical Reports.
- D44. **'Vendor Consideration Opinion'** means a report which involves a Valuation and expresses an opinion on the fairness of the consideration paid or benefit given to a vendor, promoter or provider of seed capital.

#### CODE

#### **ENABLING PROVISIONS**

C1. Effective as from 1 July 1995, the VALMIN Code is binding upon members of AusIMM<sup>D7</sup> when preparing public Independent Expert Reports<sup>D20</sup> as required by Corporations Law<sup>D11</sup> concerning Mineral or Petroleum Assets<sup>D24, D30</sup> and Mineral or Petroleum Securities.<sup>D27, D33</sup>

# APPLICATION, GENERAL PRINCIPLES AND TERMINOLOGY

- C2. The VALMIN Code and Guidelines sets standards for those preparing and those commissioning Independent Expert Reports such as are referred to in Paragraphs C11 and C12 for public documents as required by Corporations Law concerning the assessment and/or Valuation D38 of Mineral or Petroleum Assets or the Valuation of Mineral or Petroleum Securities. The VALMIN Code applies to Mineral or Petroleum Securities, to the extent that their Valuation requires the Valuation of the underlying Mineral or Petroleum Assets. The VALMIN Code does not address other issues related to the Valuation of Mineral or Petroleum Securities. The application of the VALMIN Code is mandatory for Independent Expert Reports, as indicated by the use of `must' in most Paragraphs.
- C3. The aim of a Report is to gather, interpret and summarise the Material D22 information related to the Mineral or Petroleum Assets or Mineral or Petroleum Securities under consideration and to present clearly and accurately that information and the opinions of the Expert Who prepares and is responsible for the Report and the Specialists Who are retained by the Expert to contribute to it.
- C4. The VALMIN Code must be adhered to by those commissioning and those preparing Reports subject to the jurisdiction of the ASC and Corporations Law, regardless of the jurisdiction applicable to the Mineral or Petroleum Asset or Mineral or Petroleum Security and regardless of where or for whom the Reports are prepared, except where a relevant regulatory authority such as the ASC grants relief.

It represents a recommended but not mandatory code for all other assessments and Valuations of Mineral or Petroleum Assets and for Mineral or Petroleum Securities regardless of where or for whom they are prepared, or of the location of the Mineral or Petroleum Assets under consideration.

- C5. The Valuation of Mineral or Petroleum Assets and Mineral or Petroleum Securities requires a high level of expertise in relevant technical and commercial disciplines. For example, geoscientific, engineering, environmental, financial, legal and commercial expertise may all be required, depending on the nature of the Valuation. Therefore, an Expert and any Specialists required, all suitably qualified and experienced, must be involved in the preparation of Valuations.
- C6. The Commissioning Entities<sup>D9</sup> and the Expert and Specialists who prepare and contribute to a Report must aim for maximum rather than minimum disclosure, and for substantive rather than mere technical compliance with the VALMIN Code. They must ensure the Report is not Materially false or misleading, and does not omit Material matters.

- C7. Materiality<sup>D22</sup> is an overriding consideration in the application of the VALMIN Code.
- C8. Objectives of the VALMIN Code are that the Valuation process must be Transparent<sup>D37</sup>, Independent, be prepared by a competent person and address only material matters. Where there are prior and different Valuations of the same asset, the Valuation should set out the reasons why a different conclusion has been reached.

The valuation process must be as objective and rigorous as the data and other Material information available to the Expert and Specialists allow. The outcome of any Valuation will depend on the interaction of a number of assumptions which the Expert and Specialists must make, all of which must be reasonable and disclosed.

These assumptions may involve such matters as the effects of the geological, metallurgical or processing characteristics of the deposit, environmental and land access issues, trends in technologies, commodity prices, exchange rates, taxation and depreciation regimes, government policy, sovereign risk, competitor behaviour, inflation, cost structure, interest rates and behaviour of the sharemarket. Furthermore, there are a number of valuation methods available from which the Expert must make a selection. This selection may also affect the outcome of the Valuation.

Even though Experts and Specialists have been professionally objective and diligent in valuing a Mineral or Petroleum Asset, it is acknowledged that the Commissioning Entity may have a different view as to the Mineral or Petroleum Asset's Value<sup>D41</sup>.

C9. In accordance with Corporations Law and other applicable legislation such as the Trades Practices Act, Experts and Specialists may be subject to civil and criminal liability for including misleading statements in a Report and for omitting Material information from it, as well as for conduct in relation to a Report which is misleading or deceptive.

In the event that legal action is taken against an Expert or Specialist in respect of a statement in a Report, he or she may have grounds for defence if he or she is competent to make the statement concerned, has made reasonable enquiries and has reasonable grounds to believe that the statement was true and not misleading and that there were no Material omissions from the statement.

- C10. Definitions of key terms used in the Code are listed in the 'Definition of Terms' which is the first section of the Code. In addition,
  - (a) the word 'must' denotes a mandatory requirement;
  - (b) the word 'should' denotes that an element of discretion may be employed by Experts and Specialists, given the particular circumstances;
  - (c) the singular includes the plural and vice versa.

#### PURPOSE AND TYPES OF REPORTS

C11. A Report may be prepared for any one of a variety of purposes pursuant to various provisions of the Corporations Law, ASX Listing Rules<sup>D7</sup> and for other purposes which directly or indirectly require Mineral or Petroleum Assets or Mineral or Petroleum Securities to be valued.

Purposes for which the application of the VALMIN Code is mandatory include:

- (a) any prospectus, information memorandum or similar document. (Corporations Law Section 1022);
- (b) compensation for compulsory acquisitions. (Corporations Law Section 703(5));
- (d) protection of the rights of certain classes of shareholders in transactions between associated companies. (Corporations Law Sections 648(1), 411(13) and 412);
- (e) assistance to receivers or managers in the disposal of assets (Corporations Law Section 411(13);
- (f) valuations involving acquisitions agreed to by shareholders under Corporations Law Section 623.
   (ASC Policy Statement 74);
- (g) capital reductions or selective capital reductions, if a Report is provided. (A report is not mandatory under Corporations Law but, if one is prepared, Section 195 applies);
- (h) the valuation of a vendor's consideration in a public float. (Corporations Law Section 1022);

Other purposes for which the VALMIN Code, in whole or in part, may be used are set out in Paragraph G101.

- C12. Reports may be classified as follows:
  - Technical Reports D35, which are directed to some aspects of a Technical Assessment of the actual or potential economic production from a Mineral or Petroleum Asset. Technical Reports include geological, mining or petroleum engineering and metallurgical reports;
  - Valuation Reports D40 which express an opinion as to the Value of a Mineral or Petroleum Security or its underlying Mineral or Petroleum Assets. These reports may take into account factors such as product prices, socio-political issues, environmental considerations and general economic conditions which may impact upon the Valuation of a Mineral or Petroleum Asset or Mineral or Petroleum Security; and,
  - Fairness or Fairness and Reasonableness Reports<sup>D16</sup>, which are directed to an evaluation of the fairness and reasonableness of the transaction examined in the report. These include Vendor Consideration Opinions D44.
- C13. Fairness must be assessed by undertaking a comparison of the amount of the offer price or the cash equivalent of the consideration (as the case requires) with the Value of the Mineral or Petroleum Assets or Mineral or Petroleum Securities subject to the transaction without regard to the factors referred to in Paragraph C14.
- C14. Reasonableness must be determined against the background of all other Material factors shareholders might consider prior to accepting a takeover offer (or making such other decision as may be required), after referring to the range of Values determined in the Expert's assessment of the fairness of the offer (or other transaction), such as:
  - (a) the offeror's pre-existing holding or entitlement to shares in the target company;

- (b) advantages that might accrue to the offeror, due to access to the target company's cash flow, taxation losses and other relevant matters;
- (c) other significant blocks of shareholdings in the company;
- (d) the liquidity of the market in the target company's shares, and the probability that an alternative offer might be made;
- (e) any disadvantage the offeree might face if the offer is not accepted.

#### EXPERT AND SPECIALISTS

(See also Guidelines Paragraph G102)

- A natural person (as opposed to a 'legal person' which is a legally constituted body) must take overall professional responsibility for the physical preparation and contents of a Report. In the VALMIN Code, such a person is termed an 'Expert', In many circumstances, it is improbable that an Expert will be personally authoritative in all areas required by the Report. In such cases, and depending upon Materiality, it is the Expert's responsibility to ensure that persons with appropriate qualifications and technical or commercial Competence<sup>D10</sup>, expertise and experience who, in the VALMIN Code, are termed 'Specialists', are commissioned to provide and be responsible for specialist input to the Report. If a Specialist prepares a subsidiary report for inclusion, either in whole or in part, in a Report, that Report must comply with the VALMIN Code.
- C16. Experts and Specialists must be able to satisfy the Commissioning Entity and those entitled to receive a Report that they, by virtue of their appropriate relevant qualifications, expertise, experience, Competence and professional reputation are able to prepare and/or contribute to the Report as may be required.

An Expert must declare to the Commissioning Entity whether he or she is a member of an appropriate, recognised professional body. If so, he or she must state its name and provide to the Commissioning Entity a signed declaration that he or she is subject to its code of ethics.

Specialists must declare to the Expert if they are members of an appropriate, recognised professional body. If so, they must state its name and provide to the Expert a signed declaration that they are subject to its code of ethics. These declarations must be retained by the Expert in his or her files for inspection if required.

Should an Expert or Specialist not belong to an appropriate recognised professional body having an enforceable code of ethics, this must be clearly indicated in the Report, together with the reason for his or her selection.

- C17. In the case of a Report having sections which deal with Mineral or Petroleum Assets, either the Expert or a Specialist must have had at least ten years of relevant General Mining or Petroleum Industry Experience<sup>D17, D26</sup> and that person must co-ordinate, supervise and take overall responsibility for such sections of the Report. See Definitions D12 and D34.
- C18. Only in exceptional circumstances may an Expert or Specialist, who is not a geologist carry out a Technical Assessment of Material Exploration Areas. The Valuation of such areas must not be undertaken without the

- involvement of a geologist who must give written consent to the form and context in which the Technical Assessment is used in deriving the Valuation, which consent must be included in the Report.
- C19. Experts and Specialists should be familiar with so much of the VALMIN Code, the JORC Code, D21 requirements or statements of ASC and ASX, the Corporations Law and court decisions concerning Independent Expert Reports as is relevant to their work.
- C20. Either the Expert or Specialists who participate in the valuation of Mineral or Petroleum Securities or provide a Vendor Consideration Opinion must hold an investment adviser's licence or a security dealer's licence, where required under the Corporations Law.

#### **INDEPENDENCE**

(See also Guidelines Paragraphs G103 to G107)

- C21. A Report will be an Independent Expert Report<sup>D20</sup> only when the reporting Expert and, if applicable, any Specialist is Independent and perceived to be Independent and is acknowledged to be so by the Commissioning Entity.
- C22. The overriding principle of Independence<sup>D19</sup> is that the Expert and Specialists must have no Material present or contingent interest in or Association with the Commissioning Entity or with the owners or promoters (or parties associated with them) of any of the Mineral or Petroleum Assets or Mineral or Petroleum Securities being assessed or valued, other than professional fees and reimbursement of disbursements paid in connection with the assessment or Valuation concerned, and must have no beneficial interest in the outcome of the Technical Assessment or Valuation.
- C23. In order for the Commissioning Entity, or other interested parties such as the professional bodies of which the Expert or Specialists may be members, to assess whether or not they may be deemed to be Independent:
  - (a) Experts and Specialists must disclose any previous material association during the previous two years with
    - the owner's or promoter's (or any party associated with them) of, any of the Mineral or Petroleum Assets or Mineral or Petroleum Securities being assessed or Valued; or
    - the Commissioning Entity, or any party associated with it; or
    - any of the Mineral or Petroleum Assets or Mineral or Petroleum Securities to be assessed or valued.
  - (b) Experts and Specialists must disclose, after making reasonable enquiries, whether or not they, the members of their immediate families, or their employer(s) or any Associate of their employer(s) hold or have an interest in the acquisition or disposal of part or all of the Mineral or Petroleum Assets or Mineral or Petroleum Securities which are the subject of the Report.
  - (c) Experts and Specialists must disclose particulars of any pecuniary or other interest that could reasonably be regarded as being capable of affecting their Independence.

Such disclosures must be made as early as possible to the Commissioning Entity, must be included in the Report and do not absolve an Expert or Specialist from the requirement to be Independent.

#### VALUATION METHODOLOGY

(See also Guidelines Paragraphs G150, G151)

C24. The decision as to the valuation methodology or methodologies to be used and the content of the Report are solely the responsibility of the Expert or Specialist whose decisions must not be influenced by the Commissioning Entity. The Expert or Specialist must state the reasons for selecting each methodology used in the Report.

#### **COMMISSIONING A REPORT**

(See also Guidelines Paragraphs G108, G109)

C25. The Commissioning Entity and the Expert or Specialist must enter into a written agreement (which may be by way of an exchange of letters) which specifies the terms governing the preparation of the Report.

#### OBLIGATIONS OF THE COMMISSIONING ENTITY

- C26. A Commissioning Entity must make reasonable enquiries to establish that the Expert is sufficiently competent in the fields in which he or she is to work and/or is sufficiently experienced in the type of Mineral or Petroleum Assets or Mineral or Petroleum Securities to be assessed or Valued to satisfy the purposes of the Report.
- C27. An Expert must not undertake the preparation of a Report unless the Commissioning Entity ensures and represents in writing to the Expert:
  - (a) that, to the best of its knowledge and understanding, complete, accurate and true disclosure is made to the Expert and Specialist(s) of all Material information relevant to the Report;
  - (b) that the Expert and/or Specialist(s) have such access to the Commissioning Entity's personnel and records as, in the reasonable opinion of the Expert and/or Specialist(s), is necessary to enable a proper assessment or Valuation of the Mineral or Petroleum Assets or Mineral or Petroleum Securities which are the subject of the Report; and
  - (c) that the Independence of the Expert and Specialist(s) is respected at all times.
- C28. To the extent that it is based on information provided by the Commissioning Entity, the Report must state that the Commissioning Entity has represented in writing to the Expert and Specialist(s) that full disclosure has been made of all Material information and that, to the best of its knowledge and understanding, such information is complete, accurate and true.
- C29. In that all information which a Commissioning Entity holds in respect of the subject matter of a Report falls into the categories of:
  - (a) information which may be divulged to the Expert or Specialist and which may be presented in a public version of the Report, all of which may be taken into account in a Technical Assessment or Valuation and
  - (b) information which may be divulged to the Expert or Specialist and is determined by the Commissioning Entity to be confidential which may not appear in a

public version of a Report but which may be taken into account in a Technical Assessment or Valuation,

the Commissioning Entity must inform the Expert and Specialist(s) of which information falls into either category (a) or (b) above and the extent to which the Expert and/or Specialist(s) may disclose that information.

The Commissioning Entity must obtain all necessary approvals and exemptions from its Associates and joint venture participants to permit confidential information to be released to the Expert or Specialist and to be either included in or excluded from the Report.

The Expert or Specialist must indicate in the Report (Paragraph G115 to G117) the extent to which the Technical Assessment or Valuation is attributable to information which the Commissioning Entity regards as confidential and which has been used by the Expert or Specialist, but is not disclosed in the Report.

Where the Commissioning Entity is a listed entity, information may only be kept confidential where disclosure of the information would not be required under the ASX Listing Rules or the continuous disclosure provisions of Part 1.2A of the Corporations Law.

#### **MATERIALITY**

(See also Definition D22)

- C30. Materiality is the overriding principle in determining whether or not information is used in a Valuation and/or is included in a Technical Assessment Report.
- C31. The requirements of the VALMIN Code can only be departed from wherever the departures would not Materially impact on the Expert's or Specialist's Technical Assessment or Valuation. Any such Material departure must be disclosed in the Report.

#### THE REPORT

(See also Guidelines Paragraphs G108 to G153 and Definitions D20, D35 and, D 40).

C32. The Expert or Specialist must state in the Report its purpose, and that of any subsidiary report, its terms of reference and any limitation on its use for other purposes.

When the purpose of a Report is to assess technically and/or determine the Value<sup>D41</sup> of a Mineral or Petroleum Asset or Mineral or Petroleum Security, it may be different to the Technical Value<sup>D42</sup> of the Mineral or Petroleum Asset or Mineral or Petroleum Security and be subject to change with time. In most circumstances, it will be necessary to illustrate the effect of variation in basic assumptions by determining a range of such Values.

A Valuation Report must state clearly the nature of the Value determined and its Valuation Date<sup>D39</sup>.

- C33. A Report is likely to be of interest to readers having differing interests and depths of technical knowledge. For the sake of clarity, but recognising that the use of technical language is sometimes essential, in which case a glossary of terms would be helpful, the Report must be written in plain English and must contain:
  - (a) all information which investors and their professional advisers would reasonably require, and reasonably expect to find in the Report, for the purpose of making an informed decision in respect of the subject of the Report;

- (b) a balanced, objective and concise statement of the Expert's review and conclusions so that an informed layman can have a clear understanding of the Mineral or Petroleum Assets or Mineral or Petroleum Securities concerned, their Value and the attendant risks;
- (c) sufficient information to allow experienced investment analysts to understand how the Technical Assessment and/or Valuation was arrived at, including details, summarised if appropriate, of the relevant financial model as well as sensitivities to variation in the most important assumptions, and;
- (d) sufficient information on the valuation method(s) used so that another Expert can understand the procedures used and assess the Valuation.
- C34. The cost of a Report will normally reflect the complexity of the Technical Assessment or Valuation, the amount of data available for investigation and any specific assessment or valuation difficulties encountered. (Paragraphs G115 to G117)

Time and cost constraints must not be permitted to compromise fundamental compliance with the requirements of the Code. Any restrictions so caused to the depth of analysis or extent of detail in the Report must be recorded in the Report.

- C35. The Expert or Specialist must ensure that the assumptions with respect to Material technical and commercial parameters, the significant risks arising from those assumptions and the valuation methods used are clearly set out in the Report.
- C36. The Expert or Specialist must state the source of all Material information and data used in preparing the Report and, subject to any confidentiality or regulatory requirements, give adequate reference to relevant published and unpublished reports and records used. All such sources and references must be listed in the Report.

It may also be necessary to make mention of reports and records which were either available or known but which were not used, and the reasons for so doing.

The Expert or Specialist must not consent to reference being made in any document required under Corporations Law to a Report which has been prepared in accordance with the VALMIN Code, unless the Report is included in full as part of this document.

Consents may be required to the quoting of information prepared by others, except as may be otherwise required by law, but no such consents are needed for published papers or documents in the public domain.(See ASC Practice Note 55)

C37. The Commissioning Entity must be given a draft copy of a Report to determine and advise the Expert or Specialist as to any information not taken into account, the accuracy of the facts stated and the non-objection or otherwise to the assumptions made and to inform the Expert or Specialist of those parts of the Report which the Commissioning Entity regards as confidential.

#### SITE INSPECTIONS

C38. Where inspection of a Material Mineral or Petroleum Asset or Tenement D36 is likely to reveal information or data which is Material to a Report, the Expert, or, where relevant, the Specialist(s), should inspect it. A decision whether or not to conduct such an inspection must be

made by the Expert or Specialist and not by the Commissioning Entity. In making this decision, the Expert or Specialist should have regard to the nature and purpose of the Report and the nature of the Mineral or Petroleum Asset or Tenement.

The inspection should be made after the occurrence of the latest significant activity in respect of the subject matter of the Report. Any workings or treatment facilities (mine, mill, etc) should also be inspected.

Where a Material Mineral Asset or Tenement has not been so inspected, the Expert or Specialist must state in the Report the reason for non-inspection and must be satisfied, and state why he or she is satisfied, that there is sufficient current information available to allow an informed appraisal to be made without inspection.

Inspection of Petroleum Exploration Areas<sup>D13</sup> would not normally be required except where the Expert considers Material elements of the database to be incomplete, or to require verification, or where facilities are planned

Inspection of Petroleum Production Facilities<sup>D32</sup> may be required where their design or physical condition is considered Material to the Valuation.

#### **TENEMENTS**

(See also Guidelines Paragraphs G118 to G120)

- C39. The status of Tenements is Material and requires disclosure. Determination of their status is necessary and must be based on recent independent inquiry, either by the Expert or Specialist or on a recent report by a solicitor or tenement specialist who could qualify as a 'Specialist' as set out in Definition D34.
- C40. The attribution of Value to Tenements, especially those under application, must be justified in detail.

# MINERALISATION, MINERAL RESOURCES AND ORE RESERVES

(See also Guidelines Paragraphs G121 to G126)

C41. All Material mineralisation, Mineral Resources and Ore Reserves within the boundaries of the Tenements under consideration and any likely extensions thereto which are considered by the Expert or Specialist to be Material must be reviewed and reported on, together with their attendant Material risks, in accordance with the JORC Code. If it is impractical to report in this way, the reasons for so doing must be indicated in the Report.

# PETROLEUM OCCURRENCES, RESOURCES AND RESERVES

C42. All petroleum occurrences, resources and reserves within the boundaries of the tenements under consideration (which are considered by the Expert to be Material) must be reviewed and reported on in the Report in accordance with accepted industry standards and guidelines (eg APPEA Guidelines for Reporting Oil and Gas Reserves).

#### **ILLUSTRATIONS**

(See also Guidelines Paragraphs G127 to G134)

C43. Maps, plans or other graphic information must be provided which are sufficient, in the opinion of the Expert or Specialist, to illustrate the geology and other pertinent features, including the location of the Tenements under consideration.

#### SERVICES AND INFRASTRUCTURE

The Expert or Specialist must review and report upon the availability of and obstacles to obtaining appropriate services and infrastructure in order to establish whether, and at what likely cost, services and infrastructure at the likely or necessary scale are or can be made available. Services and infrastructure include power, water, transport, housing and waste and tailings disposal facilities

In the case of Petroleum Assets, an Expert must also review and report upon access and terrain aspects which may affect the logistics of exploration and development. Proximity to pipelines or road haulage routes must also be reported upon.

#### ENVIRONMENTAL AND LAND ACCESS MATTERS

(See also Guidelines Paragraph G143)

C45. The Expert or Specialist must review and report upon environmental, land access, Native Title or rehabilitation matters which may impact on a Technical Assessment or Valuation Report. The identification of those factors which could lead to delays in project development, curtailment of operations, and any resulting higher cost of debt or equity or compensation payments or which may otherwise have a significant cost are particularly important.

#### EMPLOYEE RELATIONS

C46. The Expert or Specialist must review and report upon any special factors relating to employee relations and/or work practices which may impact on a Technical Assessment or Valuation of the Mineral or Petroleum Assets or Mineral or Petroleum Securities under consideration.

#### CAPITAL AND OPERATING COSTS

(See also Guidelines Paragraphs G138 to G141)

- C47. To the extent that it may affect a Technical Assessment or Valuation, the Expert or Specialist must review and report upon actual and forecast capital and operating costs for the effective estimated productive life of the Mineral or Petroleum Assets being valued.
- C48. The basis for any cost escalation and exchange rates used must be stated in the Report.

#### RESIDUAL VALUE

C49. The Expert or Specialist must state if an estimate of the residual value of the Mineral or Petroleum Assets is included and, if so, how that value was determined.

#### TIMING OF COMPLETION AND COMMISSIONING

C50. The Expert or Specialist must review and report upon the likelihood and possible impact on a Technical Assessment and Valuation of delays in timing for completion or commissioning of major capital projects or major changes in operating practices and upon any other risks which may have a significant effect on the future technical or financial viability of the Mineral or Petroleum Assets under consideration.

#### MINERAL MARKETS

C51. A Report must include a reconciliation of proposed production volume and product quality with likely market

opportunities and available resources and/or reserves. The Report must state product quality, forecast sales volumes and prices and the escalation and exchange rates used.

## MATERIAL AGREEMENTS AND STATUTORY/LEGAL REQUIREMENTS

(See also Guidelines Paragraph G142)

C52. The Expert must ensure that any Material agreements and contracts, including development plans, sales contracts, joint venture agreements, project permits, environmental, access and other legal or statutory requirements are thoroughly reviewed, preferably by an appropriate Specialist, and reported upon.

#### TAXATION AND ROYALTIES

C53. The amount and timing of any taxes and royalties (both government and private) must be properly taken into account, together with the results of enquiries concerning past audits and announced government policies.

# LIABILITIES, COMMITMENTS AND FINANCIAL EXPOSURES

(See also Guidelines Paragraphs G144 to G149)

C54. Depending upon the scope of the Report, the Expert or Specialist must review and report upon liabilities, actual and contingent commitments and financial exposures.

#### **VENDOR CONSIDERATION**

C55. The basis for and nature of any consideration or benefit payable to any vendor, promoter or provider of seed capital, and of any conditions attaching thereto, must be assessed and quantified in a Valuation.

#### SHAREMARKET AND ECONOMIC CONDITIONS

(See also Guidelines Paragraph G149)

C56. When determining any premium to be applied to a Technical Value, the Expert or Specialist must state whether and how sharemarket and economic conditions have been taken into account.

## OTHER MATTERS

C57. The Expert or Specialist must review and report upon all other matters which are Material to the Report in order to enable the reader to make an informed assessment of the Mineral or Petroleum Assets which are the subject of the Report.

#### CONCLUSIONS OF THE EXPERT

(See also Guidelines Paragraphs G152 and G153)

C58. To the extent that it may affect the Valuation and data available permits,

- (a) a range (high/low) of values must be determined and stated, reflecting uncertainties in the data and the interaction of the various assumptions which have been applied. In all cases, the preferred Value must be identified, unless there are cogent reasons stated in the Report for not doing so; and
- (b) the Report must include a sensitivity analysis showing the effects of changing the most significant assumptions.

The data used must not be invalid due to the passage of time and its cut-off date, which must be disclosed in the Report, must be as close as practicable to the date of the Report or the Valuation Date, as may be appropriate.

- C59. Where it is impossible or impracticable to obtain sufficient accurate or reliable data or information as the basis for a Technical Assessment or a Valuation, this must be stated by the Expert or Specialist. In this case, the Expert or Specialist is under no obligation to express an opinion.
- C60. Where the Expert or Specialist considers that a Mineral or Petroleum Asset has no Value or a negative Value, (ie it is a liability) this must be stated.

# DECLARATIONS AND MISCELLANEOUS REPORTING REQUIREMENTS

(See also Guidelines Paragraph G154)

- C61. The Expert or Specialists must declare in the Report that it has been prepared independently and in accordance with the VALMIN Code. Where the Commissioning Entity has been granted relief from the requirements of the VALMIN Code by any regulatory authority, such as ASC, that fact and the extent of any such relief must be stated.
- C62. The Expert or Specialists must take care in summarising or quoting from other reports to ensure that the summary is accurate and that the quotation is in the form and context that the original author intended. (See Paragraphs C35, G115 and ASC Practice Note 55).
- G63. Where a Report is prepared within a corporation or firm, the name, registered address and ACN<sup>D2</sup> or ARBN<sup>D4</sup> (if a corporation) of the corporation or firm must be stated or included in the letterhead. In addition, the name of the Expert responsible for the Report must be included and that Expert must personally sign the Report.

#### **GUIDELINES**

#### APPLICATION OF THE GUIDELINES

- G100. These Guidelines should be read in conjunction with the Definition and Code sections of the VALMIN Code. The Guidelines are intended to support the Code and assist in its application by providing additional detail on matters with which Reports are likely to deal. The application of the Guidelines is recommended but not mandatory, as indicated by the use of 'should' in most paragraphs.
- G101. In addition to those purposes listed in Paragraph C11, the Guidelines may be used for reports concerning:
  - (a) justification for raising debt or equity finance from an outside party.
  - (b) facilitating negotiations between partners.
  - (c) valuations relating to the assessment of Government charges and taxes.
  - (d) estate settlements.
  - (e) internal corporate and asset valuations for directors.
  - (f) reports and expert witness statements provided for the purposes of litigation.

## COMPLAINTS AGAINST AN EXPERT, SPECIALIST OR COMMISSIONING ENTITY

G102. Experts, Specialists and Commissioning Entities (where applicable) should understand that a complaint against them in respect of a violation of the VALMIN Code may be investigated by their professional body's ethics committee and that, if substantiated, the results of that investigation may be published in the appropriate journal.

#### **INDEPENDENCE**

- G103. An Expert or Specialist will be considered as having a contingent interest in the outcome of an assessment or Valuation if any written or oral agreement has been made and not withdrawn in respect of the Mineral or Petroleum Assets under assessment or Valuation or in respect of any other Mineral or Petroleum Asset in which the owners or promoters or their Associates are interested, directly or indirectly, to the effect that the consideration, including fees, payable to the Expert or Specialist for undertaking the assessment or Valuation; or the provision of further work to the Expert or Specialist is in any way dependent or contingent upon:
  - the outcome of the Technical Assessment or Valuation; or
  - the success or failure of the transaction or proposal in connection with the Technical Assessment or Valuation being undertaken.
- G104 Experts and Specialists should not assess or value any of their own Technical Assessment (as opposed to Valuation) work which has been undertaken previously and which relates to the Mineral or Petroleum Assets being assessed or valued, unless that work was prepared independently for a Report.
- G105. The basis of the consideration (including fees) payable by the Commissioning Entity to an Expert or Specialist in connection with the preparation of a Report should be disclosed in the Report. It must not be such as to compromise the Independence of the Expert or Specialists.

- G106. The Expert and Specialists should avoid any communication with the Commissioning Entity which may compromise their Independence.
- G107. A prior association through an Expert or Specialist having been previously engaged by the Commissioning Entity or a party associated with it to undertake a consulting or Valuation assignment will not necessarily be considered to impair their Independence, but be judged on the facts of the matter.

#### COMMISSIONING A REPORT

- G108. The written agreement between the Commissioning Entity and the Expert should refer to such matters as
  - (a) the scope and purpose of the Report;
  - (b) an acknowledgement of the Independence and Competence of the Expert and Specialists;
  - (c) the Valuation Date;
  - (d) the proposal and/or Mineral or Petroleum Assets or Mineral or Petroleum Securities to be assessed or Valued:
  - (e) the basis for the consideration to be provided to the Expert, which should relate to the nature and complexity of the Valuation and must not be contingent upon the success or failure of any proposal or transaction assessed in the Report or on the nature or size of the Mineral or Petroleum Assets which are the subject of the Report;
  - (f) the right of the Expert to refuse to provide an opinion or report where it is impossible or impractical to obtain sufficient accurate or reliable data or information;
  - (g) the Specialists to be engaged, the areas in which they are to contribute to the Report and their terms of engagement;
  - (h) the right and obligation of the Expert and Specialists to base findings on information within their own knowledge or acquired as a result of their own investigations, as well as on the information supplied by the Commissioning Entity; and
  - (i) a programme for the completion of the Report, including the dates for completion of such intermediate activities as:
    - provision to and review by, the Expert and Specialist(s) of data and information;
    - issue to the Commissioning Entity of a draft report for the purposes set out in Paragraph C37;
    - Commissioning Entity's review of the draft.
  - (i) the matters referred to in Paragraph C27.
- G109. Prior to the preparation of this agreement, the Commissioning Entity should be advised of the qualifications and relevant experience of the Expert and the names, qualifications, relevant experience and proposed specialities of the Specialists and be provided with the undertakings set out in Paragraph C16.

#### RECORD KEEPING

G110. The Expert and Specialists should keep contemporaneous records of discussions with the Commissioning Entity. The Expert and Specialists should keep a list of all documents referred to in the Report and copies of all Material source documents.

#### TECHNICAL INFORMATION

G111. Detailed technical information should be included in the Report, particularly if its understanding is important to the Technical Assessment or Valuation.

The use is encouraged of tables, maps, graphical presentations, a glossary of terms and explanations of unusual or new technical processes and activities which may be Material to the understanding of the Technical Assessment or Valuation.

#### SUMMARY AND CONCLUSIONS

G112. A Report should include a concise summary setting out the key data and important assumptions made, and the conclusions drawn by the Expert and/or Specialists which, if necessary, should be qualified according to the 'insufficient or inadequate information' provisions of Paragraph C59.

The summary should be structured to be easily comprehended by readers. No information should be included in the summary that is not also in the body of the Report.

#### **BACKGROUND INFORMATION**

G113. A Report should include a description of the Mineral or Petroleum Assets, including their location, plant, equipment and infrastructure or Mineral or Petroleum Securities, including their ownership. The Material history of the Mineral or Petroleum Assets should be discussed.

## STATEMENT OF QUALIFICATIONS, LICENCES AND EXPERIENCE

G114. A Report should contain the names, qualifications, memberships of appropriate professional bodies, relevant experience and, where applicable, investment adviser's licence (or security dealer's licence) number, for the Expert and each Specialist, and must identify the nature and contribution of each of them to the Report.

#### SOURCES OF INFORMATION

- G115. The Expert or Specialist should make written enquiries of the directors and/or management of the Commissioning Entity, and other reasonable enquiries as to the existence of prior relevant technical, valuation or similar assessment reports, particularly if the Expert or Specialist considers that such material has not been sufficiently provided by the Commissioning Entity (see Paragraph C27). Depending upon Materiality, the Expert and/or Specialist(s) should interview relevant personnel and review such reports, the Commissioning Entity's database, responses to enquiries and all other Material information and data relevant to the Report.
- G116. The Expert or Specialist should state in his or her Report the extent of enquiries made, particularly of the Commissioning Entity or its Associates, and comment on the adequacy and reliability of information or data

provided by the Commissioning Entity and the extent to which the Expert or Specialist has relied upon it.

The Expert or Specialist should give details in the Report of sources of key information, including specific references to, and the conclusions of any relevant, prior, Material, Independent and other reports.

G117. The Expert or Specialist should not rely uncritically on the information provided either by the Commissioning Entity or obtained otherwise. He or she should undertake whatever checks, enquiries, analyses and verification procedures are necessary to afford reasonable grounds for the contents of the Report and comment accordingly.

#### **TENEMENTS**

G118. A Report should contain a schedule of all Tenements Material to the Report, prepared by or on behalf of the Expert or Specialist, unless that information is provided in an accompanying report.

The Tenement schedule should list:

- (a) Tenement type, reference name and/or number and area:
- (b) whether the title has been formally granted or not. If it has any impediments such as post granting approvals and permission attached, they should be described and, if not, whether an application or approval is pending and whether the application is subject to challenges should be noted;
- (c) whether the Tenement document has been issued and if it is in the possession of the holder;
- (d) expiry and renewal dates;
- (e) past Tenement expenditure, future expenditure commitments, rents and rates;
- (f) all other Material obligations to the government(s) or to any other person/entity;
- (g) ownership, including details of co-venturers and their interests;
- (h) details of any indirect interests such as overriding royalties;
- details of liabilities, liens and encumbrances, including those relating to reclamation and rehabilitation;
- (j) if a mining lease, whether or not the Tenement has been subject to a cadastral survey;
- (k) any other Material information.
- G119. A Report should also list by title and location related properties or Tenements not considered Material, stating why they are not considered Material.
- G120. The overall Value of a group of Tenements may be different from the sum of the Values of the individual tenements. Where the Value of the aggregate is claimed to be higher or lower than the sum of the individual Values, the Expert or Specialist should state the Values, explain the difference and set out the supporting reasoning.

# REVIEW OF DATA BASE, ASSESSMENT, VALUATION AND RISK FACTORS

G121. Depending upon the nature and status of the Mineral or Petroleum Assets under consideration and the adequacy of the information and data, the matters set out in

- Paragraphs G122 to G126 should be reviewed and included in the Report if Material to the Technical Assessment or Valuation. This list of matters is intended to be illustrative and should not be regarded as being exhaustive.
- G122. Assessment criteria that may need to be reported on include geophysical and geochemical data, drillhole location, spacing, diameter, assay intervals, collar location and elevation, downhole survey method and data, sample numbers used to define assay intervals, drilling and sampling methods used, accuracy of sampling points, drill-sample recoveries, tonnage factors, quality of geological sampling and assay data, the assay laboratories and the analytical techniques used, geotechnical and hydro-geological factors which may affect mining practices or the safety of tailings dams and structures, minor constituents of the ore likely to influence viable exploitation of the deposit because of metallurgical or environmental concerns and assumptions regarding cut-off grades, dilution, recovery and tonnage/grade estimation methods and parameters and process plant recovery.
- G123. The Expert or Specialist should ensure that the review conducted pursuant to Paragraph C41 identifies the principal estimation risks to be taken into account in assessing or valuing the Mineral Assets, ie resource and/or reserve grade, tonnage and metallurgical/mineralogical characteristics. In the case of Petroleum Assets, the principal estimation risks will relate to oil-in-place estimates and recovery factors. These matters should be discussed in the Report.
- G124. Where comparisons are made with geological situations at known mineral or petroleum occurrences, all relevant factors should be presented. Where a causal relationship (eg continuity of geological structures) is claimed, the Expert or Specialist should clearly show how this is considered relevant to the assessment or Valuation of the Mineral or Petroleum Asset or Tenement under consideration. Where a comparison is made and no causal relationship is claimed, the Expert or Specialist should clearly state there is no known causal relationship.
- G125. The absence of known mineralisation on adjoining or nearby Tenements may be as important as its presence. Therefore, to the extent made possible by the information available to the Expert or Specialist, either from the Commissioning Entity or that which is in the public domain, the Expert or Specialist should disclose and explain, as well as is reasonably possible, the presence or absence of known mineralisation or exploration results, where such disclosure is Material to an objective Valuation of the Mineral Assets which are the subject of the Report.
- G126. Wherever considered by the Expert or Specialist to be appropriate and Material to the Report and the mineralisation being investigated:
  - (a) inadequacies in the quality of sampling and assaying should be discussed;
  - (b) assay results included in a Report, should be set out in one of the following forms considered most suitable by the Expert or Specialist:
    - all assay results, with sample widths or size in the case of bulk samples;

- the weighted average assay of the mineralised zone, indicating clearly the way the average was calculated; or,
- when high values are recorded, they should be given in context, with relevant supporting data;
- (c) samples used for assaying should be reliably identified as having been taken from specific locations and as having not been contaminated. If an Expert or Specialist has not personally taken the samples, the Report should state the efforts made to confirm the authenticity and representivity of the samples, procedures and reports.

Assessment criteria that should be reported on with respect to Petroleum Assets where specifically relevant include well spacing, seismic control, well test results, analyses, drilling and sampling methods, reserve estimation methods and assumptions.

#### **ILLUSTRATIONS**

- G127. A general location map or an inset map should indicate the geographical location of the map area in relation to a capital city or major town and, if possible, the map should include a grid in Australian Mapping Grid (AMG) co-ordinates or latitudes and longitudes.
- G128. A Tenement map should show local landmarks and the Tenement's boundaries, its size and position relative to those nearby properties which have a significant bearing on the potential of the Tenement.
- G129. Where mineralisation or indications of petroleum on a nearby property is noted in the Report, maps and/or sections should indicate the relationship of its geology to that within any Tenement which is the subject of the Report.
  - When showing the location of petroleum wells on maps, standard industry well symbols should be used which denote the well status and the nature of any hydrocarbon indications encountered in such wells.
- G130. Each map should have a bar scale and a direction arrow pointing north, designated as either magnetic, true or grid north. The map should be based on a standard series map of a suitable scale, if such a map is published. Where exploration results are presented in graphical form, the scale should be such as to allow satisfactory assessment of sampling and other exploration procedures.
- G131. Any map, plan or diagram should be dated, carry the name of the persons or companies originating or taking responsibility for its content and indicate the report to which it pertains. The source of data used should be disclosed.
- G132. Maps should be readable and prepared so that no data is lost or obscured if the document is reproduced in black and white or reduced in size for printing.
- G133. Graphs should have a graticule which is sufficiently detailed for readings to be taken with adequate accuracy.
- G134. Where the potential of a Tenement is predicated on the basis of geophysical or geochemical surveys, some form of graphical interpretation, maps or tables showing results of the surveys and the interpretations should be included.

#### PRIOR PRODUCTION PERFORMANCE

G135. Prior production performance in terms of cost, tonnes or volumes and mineral grade or coal and petroleum quality, should be reconciled with proposed performance estimates. The results of the reconciliation should be stated in the Report.

#### MINING AND ORE TREATMENT

G136. Actual or proposed mining and process plant practices should be reviewed to establish the technical and economic feasibility of the operation at the existing or proposed scale.

Specific matters to be reviewed, as may be relevant, include grade control, mining loss and dilution, ground conditions, mineralogical and metallurgical factors likely to affect process recovery, flowsheet design, variability of the ore body's physical and chemical properties, metallurgical recoveries, labour sources, requirements and productivity, operating practices, equipment availability, utilisation and performance, the likely effects of hydrological and climatic factors on construction and operating costs and the technologies employed or to be employed.

For proposed operations, recent mining and ore treatment trial data and the anticipated time taken to achieve design capacity should be reviewed.

- G137. A Report which deals with mining and ore treatment should include:
  - (a) tonnage and grade of ore or other material mined or treated in appropriate time increments, both achieved and forecast, over the anticipated life of the operation;
  - (b) tonnage and grade of ore or other material mined and contained metal, both achieved and forecast, reconciled with each category of Mineral Resources and Ore Reserves, as defined in the JORC Code;
  - (c) mining and ore treatment methods, including a description of plant, technology and operating practice, together with actual or forecast process plant recoveries from mill feed to marketable products; and
  - (d) comprehensive reasons to support any recommendation to reopen any facilities which are either on care and maintenance or have been abandoned.

#### CAPITAL AND OPERATING COSTS

- G138. The review of capital costs, (including acquisition costs, working capital, sustaining capital, residual value, feasibility study costs and all contingencies) and operating costs, (including off-site administration, environmental, transportation, marketing and all charges by governments and contingencies) should be sufficiently detailed to allow an assessment as to whether they are realistic and achievable.
- G139. Forecast capital and operating costs adopted for use in the Report should take into account changing physical parameters, such as increased haulage distances or changes in work practices and productivity.

G140. A Report should state the forecast capital and operating cost estimates adopted, with supporting data, including date references for all cost estimates. Capital and operating cost estimates should be compared with those of similar operations elsewhere, where available and relevant. Both capital and operating costs should be set out under broad functional headings, and in terms of some suitable unit such as per ounce of gold produced or per tonne of annual plant throughput, not just in total.

A Report should also give an estimate of the costs of removal of any mining or petroleum plant or facility and of any site restoration which may be required.

# PRODUCT PRICES, TREATMENT CHARGES AND EXCHANGE RATES

- G141. A Report should set out the basis for the Expert's and/or Specialist's price-related assumptions including those concerning:
  - (a) forecast product prices, smelter treatment and refinery charges, having regard to long term historical experience, current and forecast market conditions and the likely quantity and quality of product;
  - (b) penalty components in the product;
  - (c) variation in product price;
  - (d) size, nature and location of markets;
  - (e) exchange rates;
  - (f) hedging or forward sales contracts; and
  - (g) relative rates of revenue and cost escalation.

# MATERIAL AGREEMENTS AND STATUTORY/LEGAL REQUIREMENTS

- G142. A Report should disclose any Material obstacle (eg statutory, legal, technical, environmental, commercial or socio-political) to future exploration, development or production. General security and sovereign risk issues should also be addressed.
- G143. A Report should consider and comment on the likely impact of planning controls, restrictive zoning, Native Title or other land rights, and other administrative matters.

#### TAXATION AND ROYALTIES

- G144. Depending upon the Expert's or Specialist's terms of reference, other matters relating to income tax and capital gains tax may need to be reviewed.
- G145. The Expert or Specialist should state the nature and source of assumptions made in respect of taxation and royalties.

## LIABILITIES, COMMITMENTS AND FINANCIAL EXPOSURES

G146. Liabilities to be reported upon include creditors and provisions for superannuation and annual and long service leave entitlements. Commitments include expenditure commitments on exploration Tenements which, in some cases, could result in the overall value of an Exploration Area being negative.

Financial exposures include under-insurance or the cost of environmental rehabilitation if a property is to be abandoned and any requirements for the lodging of security deposits.

#### **FINANCING**

- G147. The Expert and Specialist's Valuation may be affected by the likelihood of obtaining financing for a project. The Expert or Specialist should therefore review commitments made and the form of financing (for example, gold loans and commodity price hedging).
- G148 Depending upon the terms of reference of the Report, for some Mineral or Petroleum Assets, the Expert or Specialist may need to assume an appropriate financing structure. For Development Projects and Operating Mines or Producing Fields, care should be exercised to ensure that debt which has been drawn down is taken into account in the Valuation.

#### SHAREMARKET AND ECONOMIC CONDITIONS

G149. General sharemarket and economic conditions may influence the value of Mineral or Petroleum Assets and Mineral or Petroleum Securities and, in particular, the assessment of premiums or discounts. Specific sharemarket data may provide evidence of the Value of Mineral or Petroleum Assets and Mineral or Petroleum Securities, although caution needs to be exercised because of the significant problem of possible lack of comparability between Mineral or Petroleum Assets and between Mineral or Petroleum Securities.

#### VALUATION METHODOLOGY

- G150. The Expert or Specialist should make use of valuation methods suitable to the Mineral or Petroleum Assets or Mineral or Petroleum Securities under consideration. Selection of the appropriate valuation method will depend on, inter alia:
  - (a) the purpose of the Valuation;
  - (b) the development status of the Mineral or Petroleum Assets:
  - (c) the amount and reliability of relevant information;
  - (d) the risks involved in the venture; and
  - (e) the relevant market conditions for commodities and/or shares.
- G151. The Expert or Specialist should choose, discuss and disclose the selected valuation method(s) appropriate to the Mineral or Petroleum Assets or Mineral or Petroleum Securities under consideration, stating the reasons why the particular method(s) of valuation have been selected in relation to those factors set out in Paragraph G150 and to the adequacy of available data. It may also be desirable to discuss why a particular valuation method has not been used. The disclosure should give a sufficient account of the valuation method(s) used so that another Expert could understand the procedure used and assess the Valuation.
  - Should more than one valuation method be used, and different Valuations result, the Expert or Specialist should comment on the reason(s) for selecting the Value adopted.
- G152. In addition to the Technical Value determined, in all cases an assessment should be shown of what the Technical Value of the assets would be on a 100 per cent pre-tax equity basis, in order to provide a common reference point.

#### CONCLUSIONS OF THE EXPERT

G153. In times of high commodity prices and/or buoyant sharemarket conditions, the Expert may conclude that the Values (Fair Market Values<sup>D41</sup>) ascribed to Mineral or Petroleum Assets or Mineral or Petroleum Securities may be higher than their Technical Values. The reverse may occur in times of low commodity prices or depressed sharemarket conditions. A Report should take such factors into account, state the results of the principal valuation method(s) used and disclose the amount of and reasoning behind any difference between the Fair Market Values and the Technical Values.

Since the Values of Mineral or Petroleum Assets or Mineral Petroleum Securities are subject to marked fluctuations over time, the Expert or Specialist should ensure that the opinion expressed or Valuation provided is consistent with the circumstances at the Valuation Date.

G154. Relevant legislation or ASX Listing Rules may require the Expert or Specialist to express other specific conclusions or opinions. The Expert or Specialist should comply with any such requirements.

#### **DECLARATIONS**

G155. A Report should not include a report or quotation which is the work of another person without the written (and not subsequently withdrawn) consent of that person, but, except as may otherwise be required by law, no such consents are required where the report or quotation is within the public domain. Published papers are excluded from this requirement.

A Report should include a statement that such a report or quotation is an accurate reflection of that person's view and that that person has consented in writing to the inclusion of that report or quotation in the form and context in which it is included in the Report and, at the date of the Report, has not withdrawn that consent.

## **INDEMNITIES**

- G156. Experts and Specialists should obtain an indemnity from the Commissioning Entity under which they are to be compensated for any liability
  - (a) which results from their reliance on information provided by the Commissioning Entity or to the Commissioning Entity not providing Material Information. (Such an indemnity does not absolve Experts and Specialists from critically examining the information provided); or
  - (b) which relates to any consequential extension of work load through queries, questions or public hearings arising from the Report.
- G157. A Report should disclose the nature and Material details of any indemnity provided by the Commissioning Entity or other person for the benefit of the Expert or Specialists.