

## **RECENT AUSTRALIAN AND CANADIAN DEVELOPMENTS AFFECTING MINERAL VALUATION**

Trevor R. Ellis, Vice President, AIMA

To date, Australia has been the leader in developing standards for mineral property and mineral security valuations. Canada is now challenging Australia, by largely copying what Australia has done and attempting to improve on it for their unique circumstances.

### **International Standards for Reporting Resources and Reserves**

A primary pillar of the valuation standards for both countries is a strong, enforceable set of standards for reporting of mineral resources and reserves. These also originated in Australia and have now evolved into the international standard.

Australasia's Joint Ore Reserves Committee (JORC) made its first recommendations to the Australian Stock Exchange in 1972 on mineral resource and reserve reporting. The committee represents the Australasian Institute of Mining and Metallurgy (AusIMM), the Australian Institute of Geoscientists (AIG), and the Minerals Council of Australia. *The Australasian Code for Reporting of Mineral Resources and Ore Reserves*, officially known as *The JORC Code*, grew out of that initial effort (JORC, 1999).

Since 1994, the major mining institutes of the world have been working together to develop a uniform international standard for definitions for reporting resources and reserves. The Australasian definitions were the primary basis for the provisional agreement reached in 1997 by the Council of Mining and Metallurgical Institutions (CMMI). The United Nations Economic Commission for Europe then agreed to incorporate the CMMI standard into a UN classification. Nearly 40 countries have now indicated that they are moving towards adopting the UN classification (AusIMM, 1999).

The major mining institutes of the world are now producing almost uniform reporting standards for resources and reserves. This uniformity shows in the 16 page 1999 edition of the JORC Code and the US based Society of Mining, Metallurgy and Exploration's 17 page, *A Guide for Reporting Exploration Information, Mineral Resources, and Mineral Reserves* (SME, 1999). The Canadian Institute of Mining, Metallurgy and Petroleum (CIM) has also adopted the CMMI standards. This probably means that the CIM will drop its controversial third reserve category, "possible reserves." The finalization of the CIM standards has been delayed due to arguing this issue, and formalizing their position in the soon to be released Canadian minerals industry regulations.

The end result is standardization on definitions for the three resource categories, Inferred, Indicated and Measured, and the two reserve categories, Probable and Proved. The "modifying factors" which determine the classification of a block of mineralization as being an Indicated Resource versus a Probable Reserve, or a Measured Resource versus a Proved Reserve, are "consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors." For mineralization to be classified as a resource, it must have "reasonable prospects for eventual economic extraction," with the term eventual being defined to restrict it to prudent use. This is very

close to what general practice used to be for defining a reserve. Reserves should be reported as “mineable production estimates” taking into account diluting materials and allowances for losses.

Australasia has a strong history of enforcement of its JORC Code. The Code is incorporated into the listing rules of the Australian and New Zealand Stock Exchanges. Violations are reported to the Institutes (primarily AusIMM), which have a proven history of effective discipline.

The Canadians are modeling their enforcement procedures on the Australasian system. The new reporting regulations, National Instrument 43-101, presently in a second drafting, will automatically incorporate the CIM standards and any updates (CPSA, 1998). NI 43-101, *Standards of Disclosure for Exploration, Development and Mining Properties*, will replace NP 2-A that many of us have worked under. Enforcement will be through the disciplinary procedures of “Self-Regulatory Organizations (SROs),” the professional bodies which qualify the responsible professionals, such as provincial engineering societies.

The US SEC shows no inclination to accept the CMMI standards to replace its antiquated Industry Guide 7, the text of which was originally developed in 1981. Therefore, we will still be handicapped by US listed companies not being allowed to report quantity estimates for resources. The SEC views the term “resource” as being a poor choice by industry, being essentially synonymous with the meaning of “reserve” in common language, and therefore too easily confused by the public. Even apart from that, SME has no discipline mechanism for its members, never having adopted a Code of Ethics, and therefore could not self-enforce its standard.

### **Australasia’s VALMIN Code**

The 1998 edition of the AusIMM’s VALMIN Code is the second edition. It is titled, *Code and Guidelines for Technical Assessment and/or Valuation of Mineral and Petroleum Assets and Mineral and Petroleum Securities for Independent Expert Reports*. I reviewed the 1995 edition in some detail in our October 1995 Newsletter. The 1998 edition is 23 pages long, containing 18 pages of double columned fine print, which I find to be remarkably clear reading.

The philosophy of the new edition is very much the same as previously. It is still obviously designed for valuation reports required under Corporations Law, for which it is mandatory. It would seem to be very unwieldy to apply to more modest appraisals, such as private interests in mineral prospects. It continues to place considerable obligations for disclosure on the commissioning entity, on the apparent assumption that it holds the mineral asset or security being appraised.

The new edition expands coverage to petroleum. It also includes “Technical Assessments” which determine the investment value of a property, as compared to market value which is the focus of “Valuation.”

The primary goals of VALMIN are to assure full disclosure and clear presentation of all relevant items (“Transparency” and “Materiality”) and to assure the competence and independence of those doing the appraisal. The Code provides considerable instructions on all aspects of what must be considered in the appraisal and included in the report, from property access to competence of

management and labor issues. It describes the types of maps which must be included and their labeling. However, it leaves the selection of the valuation methodology up to the independent expert.

The VALMIN Code has such wide acceptance by the Australian financial community that its use is essentially obligatory for many reports which do not fall under Corporations Law. Enforcement is by the AusIMM's disciplinary mechanism.

### **Valuation Standards Development in Canada**

The Mining Standards Task Force of the Toronto Stock Exchange and Ontario Securities Commission (MSTF), in its Final Report of January 1999, recommended that CIM "form an ad hoc committee of valuation practitioners to review approaches to valuation of mineral properties." Our Canadian member, Ross Lawrence, has advised that the committee is now active and that he is on it. The objective is to submit a final report to CIM by December 2000. The outcome as Ross indicates, will likely look somewhat similar to VALMIN, but reflect Canadian realities.

### **Qualified Person, Competent Person, and Enforcement**

The definition of a Qualified or Competent Person is an important part of the Australasian and Canadian standards. The standards rely on membership of recognized SROs, the institutes which qualify or certify the individuals, as the first cut in determining who is qualified to sign as taking individual responsibility for a report. The standards also require at least five years of relevant experience to assure competency. The Australasian standards emphasize the competency aspect by using the term, Competent Person (Abbott, 1999). Under the VALMIN Code, ten years of relevant experience is specified for the responsible Expert.

To be a Competent Person under the JORC Code, one must be a Member or Fellow of the AusIMM or AIG. Enforcement is through their demonstrated disciplinary procedures. The VALMIN Code is a little more generous in allowing full membership "of an appropriate, recognised professional association having an enforceable code of ethics." To be a recognized professional organization, enforcement of its code of ethics would probably need to have been demonstrated.

The Canadian standards will be based on enforcement provisions similar to that under the VALMIN Code, relying on enforcement through the threat of discipline by the SRO which provided the qualifying membership. Public disclosure of disciplinary actions is also being emphasized. CIM, which is issuing the relevant standards, is similar to the SME in not having a binding code of ethics. Therefore, enforcement will be relied upon by provincial SROs such as engineering and geoscience bodies, and recognized international institutes.

Our belief is that the Canadians intend to develop a list of relevant provincial SROs and recognized international institutes. It appears highly likely that the American Institute of Professional Geologists (AIPG) will get listed. However, although AIMA has a similar code of ethics and high standards for member qualifications, it has not yet developed a history of demonstrated enforcement of its code of ethics. Therefore, it presently appears that it would be difficult to obtain listing of AIMA.

The authorities in Australia and Canada emphasize that along with the increased reliance that they are placing on the qualified person that signs disclosure and valuation reports, comes increased liability. Therefore, they recommend that those responsible individuals take out appropriate liability insurance and also get indemnification from the commissioning party (Ellis, 1999).

## References Cited

Abbott, David M. Jr., 1999, "Who is a Competent or Qualified Person and Who Cares?," *The Professional Geologist*, v. 36, no. 1, January 1999, p. 6-7.

Australasian Institute of Mining & Metallurgy, 1999, "Australia Leads Way in Establishment of Global Mineral Reporting Standards - Launch of the 1999 JORC Code," *The AusIMM Bulletin*, No. 6, Sept-Oct 1999, p. 74-75.

Australasian Institute of Mining & Metallurgy, 1998, (VALMIN Code), "Code and Guidelines for Technical Assessment and/or Valuation of Mineral and Petroleum Assets and Mineral and Petroleum Securities for Independent Expert Reports," 1997 edition, Carlton, Vic., Australia, 23 pages; see also the AusIMM website: [www.ausimm.com.au/codes/valmin](http://www.ausimm.com.au/codes/valmin).

Canadian Provincial Securities Administrators: "National Policy No. 2-A, Guide for Engineers, Geologists and Prospectors Submitting Reports on Mining Properties to Canadian Provincial Securities Administrators," 4 p.

Canadian Provincial Securities Administrators, 1998, "Notice of Proposed National Instrument 43-101 and Companion Policy 43-101CP 'Standards of Disclosure for Mineral Exploration and Development and Mining Properties' and Rescission of National Policy Statement No. 2-A," [www.osc.gov.on.ca/en/Regulation/Rulemaking/Rules/43-101.html](http://www.osc.gov.on.ca/en/Regulation/Rulemaking/Rules/43-101.html).

Ellis, T.R. 1995a, "The Australian Valmin Code for Mineral Appraisals," *American Institute of Mineral Appraisers Newsletter*, Vol. 1, No. 4, October 1995, p. 1-2.

Ellis, T.R., 1999, "Signing the Report—Recognition, Responsibility, and Liability for the Qualified Person," *The Professional Geologist*, v. 36, no. 8, July 1999, p. 16-18.

Joint Ore Reserve Committee, 1999, (The JORC Code), "Australasian Code for Reporting of Mineral Resources and Ore Reserves," 1999 edition, The AusIMM, Carlton, Vic., Australia, 16 pages; latest edition available at AusIMM website: [www.ausimm.com.au/codes/jorc/](http://www.ausimm.com.au/codes/jorc/).

Society of Mining, Metallurgy and Exploration (SME), 1999, *A Guide for Reporting Exploration Information, Mineral Resources and Mineral Reserves*, March 1999, 17 pages, [www.smenet.org/pdfs/SMEGdRep.pdf](http://www.smenet.org/pdfs/SMEGdRep.pdf).

Toronto Stock Exchange and Ontario Securities Commission Mining Standards Task Force, *Setting New Standards: Recommendations for Public Mineral Exploration and Mining Companies—Final Report*, TSE Publications, Toronto, Jan. 1999, 141 pages.

US Securities & Exchange Commission, 1992, *Industry Guide 7*, first published 57 Federal Register 36442, July 30, 1992, but available from various sources.