

International perspective on U.S. minerals appraisal standards development

Introduction

This paper provides a basis for discussion regarding the development of a minerals, and possibly petroleum appraisal standard for the United States. It provides an international and domestic context for the development of such standards. Issues discussed include what body or bodies should undertake the development, how input should be managed and resolved, the structure and content for the standard, the long-term ownership and continued maintenance of the standard, potential enforcement mechanisms, competent person issues and education of professionals pertaining to application of the standard. It presents many questions that need to be resolved.

Background

International. Much has been happening internationally in 2002 pertaining to the development of minerals appraisal standards¹. Activities of recent years leading up to the following have been documented and discussed by the author in previous papers, and are not described in this paper (Ellis, 1999, 2001a, 2002a-c; 2002d; Ellis et al., 1999; Ellis and Abbott, 2000).

The Board of the International Valuation Standards Committee (IVSC), at its Annual Meeting in Brussels in mid-September 2002, approved the proposed approach of its Extractive Industries Task Force regarding the rapid development of an Extractive Industries addition to the International Valuation Standards (IVS) (IVSC, 2001a). The Board has requested that the task force submit the draft addition to the next Board meeting in Cape Town, South Africa, in late March 2003.

The extractive industries addition will be designed to cover all minerals, including oil and gas. It will be designed to address the development of appraisal reports for all uses. The particularly important potential use, which caused its development to be put on a rapid path, is to support *fair value* estimation for assets in the financial reports of public companies. The inclusion of the extractive industries section in the IVS will strongly support the case for allowing fair value (current cost) accounting in the Extractive

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Industries International Financial Reporting Standard (IFRS) of the International Accounting Standards Board (IASB), for which drafting is about to begin. This standard will also support reliance of the Extractive Industries IFRS on the Reserve-Resource reporting standards of member institutes of the Council

of Mining and Metallurgical Institutions (CMMI). The definitions for those standards have been developed by the CMMI Mineral Reserves International Reporting Standards Committee (CRIRSCO) (Miskelly and Rendu, 2002).

The current members of the IVSC's Extractive Industries Task Force are: Trevor Ellis as leader, who is the immediate past-president, American Institute of Minerals Appraisers (AIMA); Michael Lawrence, who was instrumental in the development of the Australian VALMIN Code; William Roscoe, co-chair of the Canadian CIMVal Committee; Alastair Macfarlane, who is leading the drafting of the South African mineral valuation code (SAMVAL Code) for the South African Institute of Mining and Metallurgy (SAIMM); and Donald Warnken, a retired U.S. petroleum valuer. Raymond Westwood, retired Valuer-General, Tasmania, Australia, is continuing as the IVSC Coordinator and Technical Editor for the task force. Additional volunteers are being recruited from lesser-developed countries and from the petroleum industry.

In mid-2002, the IASB after reviewing requested submissions of public comments on the findings of the Extractive Industries *Issues Paper*, suspended its internal project to develop the Extractive Industries financial reporting standard (IASC, 2000). Instead the IASB requested that the national standards setters of some interested countries develop a draft standard for submission to IASB. In August 2002, the

Abstract

Australia's mineral valuation code continues to evolve, while mineral valuation standards are also being written for Canada and Southern Africa. The author is leading a task force for writing the extractive industries addition to the International Valuation Standards. Meanwhile, the International Accounting Standards Board is continuing the development of an extractive industries addition to its International Financial Reporting Standards, with an emphasis on valuation reporting. This paper analyzes the need, content and ownership for a U.S. minerals appraisal standard in the context of both these developing international standards and also existing U.S. regulations and appraisal standards. The author provides many questions for research and debate.

¹In the U.S., the term *appraisal* is used for what internationally is a *valuation* assignment and a formal *valuation* report. A *valuation* under U.S. usage is typically a less stringent undertaking than an *appraisal*, especially when Real Property is involved. Similarly, a professional *valuer* or *valuator* is called an *appraiser* in the U.S. In this paper, *appraisal* and *appraiser* are generally substituted for their international equivalents.

accounting standards boards of Australia, South Africa, Canada and Norway agreed to participate in drafting the standard. This participation bodes well for the development of a standard more in line with what the IVSC and the author have argued is justified (IVSC, 2001b; Ellis, 2001a, 2002a-c). The delay provides the minerals and petroleum industries and IVSC with at least two years of reprieve from the initial schedule for introduction of the standard. This will allow them to better prepare and argue their cases for a favorable outcome. The likely outcome is that IVS-based appraisals will have an important role in determining the value of mineral and petroleum industry assets reported on the balance sheets of public companies.

In Australia, the VALMIN Code, first introduced by the Australasian Institute of Mining and Metallurgy (AusIMM) in 1995, is undergoing review to improve on the current, internationally respected, 1998 edition (AusIMM, 1998). The Code covers technical assessment and appraisal reports for mineral and petroleum assets and securities. Application of the VALMIN Code is required for independent expert reports submitted to the Australian stock exchanges. The enforcement mechanism for the Code is through sanctions by the AusIMM and Australian Institute of Geoscientists. The VALMIN Code is presently the only comprehensive minerals valuation standard in place in the world². It is designed to work independently of a national or international, overarching appraisal standard, such as IVS. Therefore, it was not structured to abide by the Generally Accepted Valuation Principles (GAVP) of the international community of valuation professionals as embodied in IVS. This means that the current edition contains instructions that conflict with IVS and other standards based on GAVP (Ellis, 2001c, 2000a). The Code introduced principles of minerals appraisal that are now considered fundamental principles in the minerals appraisal standards being developed in other countries.

In Canada, the CIMVal Committee of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) is making final revisions to the draft CIMVal Standard (CIMVal, 2002). The committee hopes to release the finalized standard before the end of 2002. The CIMVal Standard is designed to address appraisals of mineral properties as real property interests. It will not address appraisals of personal property such as mobile equipment, intangible property such as financial interests nor the appraisal of mineral businesses. The CIMVal standard is structured to abide by most of the GAVP and to operate in harmony with the IVS if or when that standard is introduced into Canada. As with the VALMIN Code, the CIMVal Standard is primarily designed as a standard for reports by independent experts to the stock exchanges. Enforcement will be through the sanctioning ability of provincial professional licensing bodies and professional societies that have an enforceable code of ethics.

In August 2002, SAIMM provided limited circulation for a second draft discussion document that pro-

vides a tentative structure for the SAMVAL Code (SAIMM, 2002). SAIMM expresses support for the development of the IVS, particularly the extractive industries addition. However, the fast-track development of the SAMVAL Code is in response to substantial immediate needs within South Africa due to recently enacted law. SAIMM's goals are to:

- rapidly develop a set of minerals appraisal standards and guidelines;
- integrate these standards with the IVS and draw upon the IVS as the primary standards;
- provide such comprehensive standards that they can be utilized for all purposes for which minerals appraisals are conducted, and for appraisal of all types of mineral property (assets), being real property, personal property, financial interests and businesses; and
- provide standards and guidelines appropriate for developing appraised value reports that meet the requirements for *fair value* inputs to asset ledgers for reporting under the IASB's developing IFRSs.

The second draft incorporates the GAVP within its structure; fully integrates IVS by references, descriptions, explanations and reliance; and provides a number of other important advances over CIMVal.

United States of America. The national U.S. appraisal standards are the Uniform Standards of Professional Appraisal Practice (USPAP). USPAP does not include specific instructions for the appraisal of mineral and petroleum property (assets), but they are inherently covered since USPAP provides general instructions for all property types for all appraisal purposes (USPAP, 2002). USPAP is updated and published annually by the Appraisal Standards Board. The Appraisal Standards Board is part of the Appraisal Foundation, which is authorized by the U.S. Congress "as the source of appraisal standards and appraiser qualifications." Enforcement is through the sanctioning ability of state appraiser licensing boards and appraisal societies that have an enforceable code of ethics.

The U.S. Generally Accepted Accounting Principles (GAAP) accounting standards for financial reporting by companies to the U.S. securities exchanges are based on historic cost accounting. Estimates of market value or fair value by appraisers are rarely used in this historic cost system of financial reporting. In contrast, application of the IASB's IFRSs is gradually moving financial reporting internationally to current cost accounting based on disclosure of fair value of assets and liabilities (Ellis, 2001a). The author strongly believes that the United States will adopt the IASB's IFRSs when their development has reached a satisfactory point (Ellis, 2002a, 2002b). At that time, the Extractive Industries IFRS will likely terminate the Security and Exchange Commission's very restrictive minerals industry reporting standard, *Industry Guide 7* (SEC, 1992; Ellis, 2002a). Additional support for this contention was provided on 29 October 2002, when the U.S. Financial Accounting Standards Board (FASB) and IASB issued a joint press release in which FASB formally committed to the *convergence* of US GAAP with the IFRSs. This release also defined many short-term goals for the convergence project (FASB, 2002). The end result is likely to be a sub-

²The Royal Institution of Chartered Surveyors (RICS), based in London, provides minerals valuation guidance to its members in a section of its Red Book appraisal and valuation manual. However, this guidance cannot be considered as providing a comprehensive minerals appraisal standard.

stantial increase in demand for fair value appraisals by minerals and petroleum appraisers for use in financial reporting in the United States.

In 1999, the AIMA set aside an initiative to edit the 1998 edition of the Australian VALMIN Code to meet a perceived need for a U.S. minerals appraisal standard. The initiative was set aside to allow the author to research the content, application and interface of the VALMIN Code with U.S. and international appraisal standards. He also proceeded to research issues of minerals appraiser qualifications, licensing and competency. This research stimulated the author to write many papers to document his findings and appraisal philosophy (Ellis, 2000a-f, 2001b, 2002d; Ellis and Abbott, 2000). The AIMA is now in the process of re-establishing its standards development initiative.

In March 2002, the Mining and Metallurgical Society of America (MMSA) circulated a draft for a U.S. minerals valuation standard, again based on direct modification of the VALMIN Code. The International Mining Professionals Society (IMPS) has since joined MMSA in this initiative. However, the resultant fourth draft of *The USMinval Code and Guidelines* remains a direct modification of the VALMIN Code. Essentially all of the findings of the author's research have been ignored. Few of the advances incorporated in the structure of the draft CIMVal Standard and SAMVAL Code have been included. The GAVP of the international community of appraisers have not been included. No structure is in place for interfacing with USPAP and the Uniform Appraisal Standards for Federal Land Acquisitions (UAS), which would often take a superior role over such a minerals valuation standard (UAS, 2000). The author believes that a major restructuring of the MMSA-IMPS initiative would be necessary for it to be successful in creating workable standards.

Considerations for development of a U.S. minerals appraisal standard

In view of the current international and U.S. status discussed above, the following are considerations for the development of a U.S. minerals appraisal standard. Most of the considerations are provided as unanswered questions for further discussion by potential participants. The author often provides opinions or suggestions as material for debate.

Is there adequate need? Is a U.S. minerals appraisal standard really needed? Some minerals appraisers find that USPAP alone, or when supplemented by the SME guidelines for reporting Mineral Resources and Reserve, provides an excellent framework for minerals appraisals when carefully followed (SME, 1999).

If it is needed for the minerals industry, should it also encompass appraisals for the oil and gas industry? The extractive industries addition to the IVS will encompass both minerals and petroleum appraisals. A unified front of the minerals industry and its big brother, the petroleum industry, would likely make the standard easier to sell to the nation.

What is lacking in the present U.S. standards structure that the proposed standard should provide? What are the primary goals that the proposed standard should attempt to accomplish? Possible primary items that it could address include:

- minerals appraiser qualifications and competency;

- enforcement and sanction mechanisms;
- the relationship of a minerals appraisal to estimates of Mineral Reserves and Resources, a technical assessment report, or a feasibility study;
- items of detail such as maps, photographs and geological sections that perhaps should be included in a minerals appraisal report; and
- technical items and valuation methods that should be considered in developing a minerals appraisal.

Would it be possible to adopt the extractive industries section of the IVS?

The Appraisal Institute recently wrote to the Appraisal Standards Board encouraging it to convert USPAP to look much the same as the IVS. Assuming the U.S. adopts the IFRSs, the IVS will also likely be brought into the United States, because the two have been designed to work together. That means the extractive industries section of the IVS would supersede any minerals valuation standard not designed to supplement it. Would it be best to wait patiently for a few years and see how events unfold from convergence of US GAAP and the IFRSs? Would it be reasonable to design a standard to interface with the IVS and IFRS's in addition to USPAP in preparation for probable adoption of those by the United States?

What body should develop the standard? Are the present bodies that are attempting to develop a U.S. minerals appraisal standard, the appropriate bodies for carrying out this undertaking? The bodies are those involved in efforts discussed above, namely MMSA-IMPS and AIMA.

Although it is a small institute, AIMA has the advantage of being exclusively devoted to minerals appraisal, including petroleum. In 1999 when AIMA, at the author's recommendation, set aside its standards development effort based on modifying the VALMIN Code, it had already worked through essentially the same mistakes that are currently apparent in the MMSA-IMPS initiative. There has been considerable opportunity for learning from research and relationships with international standards developers since then.

Should the developing body be the same body that will publish and maintain the standard? For example, AIMA could possibly develop a combined standard for the minerals and petroleum industries, the Appraisal Standards Board publish it, and the Centre for Advanced Property Economics take responsibility for coordinating its long-term maintenance.

Does it need to be a society or institute that develops the standard? For example, given the diverse interests involved, The American Institute of Mining, Metallurgical and Petroleum Engineers (AIME), could establish an independent development committee. Such a committee could draw from AIME's member mining and petroleum bodies (SME and the Society of Petroleum Engineers), the AIMA, and interested parties outside of the extractive industries, such as the Appraisal Foundation, IVSC and FASB.

Who is qualified to develop the standard? What should be the qualifications and experience of the lead persons drafting the standard? Should they have minerals appraisal qualifications (e.g., certified minerals appraiser); real property appraiser qualifications (e.g., certified general appraiser); and/or qualifications in min-

ing engineering, petroleum engineering, reserve estimation, geology, mineral economics, accounting or minerals law? Should they be experienced in working with the national appraisal standards, USPAP and UAS? The author recommends that one of the lead drafters of the standard must have an in-depth education in market value real property appraisal, gained outside of the minerals and petroleum industries, and have taken USPAP and UAS courses.

How should input be managed? How should the input for the goals of the standard development project and the potential content of the standard be gathered and managed? Should a conference be called, as was done for the development of the VALMIN and SAMVAL Codes? Alternately, should an extended session be held at an existing minerals industry conference as was done for the CIMVal Standard. Perhaps a questionnaire could be sent to interested parties? Who should be responsible for determining how to obtain the input and evaluating the input data obtained?

How and where should drafts of the standard be circulated for review? How should resulting feedback be collated, analyzed and managed?

Is field-testing of drafts of the standard necessary? If so, how should such testing be conducted? The author recommends that based on his experience with developing the AIMA's draft standard, field-testing is critically important (Ellis, 2000a).

What should be the structural philosophy of the standard? Should the standard be able to function independent of the overarching national standard, USPAP, or international standard, IVS? The CIMVal Standard and the VALMIN Code are designed to function as independent minerals valuation standards. Does the standard need to interface seamlessly with the overarching standard when both are being applied to the one property or asset?

Should the standard rely on USPAP, and alternatively IVS, for its fundamental structure and definitions, through reference? This is the philosophy followed in the draft SAMVAL Code in relying on IVS largely through reference. The author recommends this philosophy.

Should the standard be written in a goals oriented manner, such as in IVS and the IFRSs? Or, should it be written more as a set of strict rules, as in USPAP and US GAAP?

Should the standard document only contain text that specifically composes the standard? Or, should it also contain comprehensive guidelines? Perhaps it should also have a section of an educational nature, discussing minerals appraisal methods and philosophies.

Who will be competent to apply the standard? What should be the goal of the competency and/or qualifications requirement within the standard? Who should determine what qualifications and level of experience is necessary to define a competent minerals appraiser? Should the determination be done through written examination, written application, submission of examples of work product, or a combination of these?

Should the definition and requirements for a competent and/or qualified minerals appraiser be maintained outside the standard and incorporated by reference?

What institutes, government agencies or licensing boards, or other type of body, should provide the credentials for the competent or qualified minerals appraiser?

Who should be allowed to grandfather into such credentials? Should the U.S. government or state governments ultimately be responsible for certification or licensing, as is generally the case for real property appraisers?

How should certification, or reciprocity of certification, be provided to individuals working across international borders, or maybe even state borders as is done for real estate appraisers?

How will minerals appraiser education be provided?

To the author's knowledge, nowhere in the world are there comprehensive educational resources available for the teaching of market value appraisal of mineral and petroleum properties through application of GAVP-based standards. Such resources are readily available for teaching market value appraisal of real estate.

What societies or other bodies should take on the obligations of training minerals appraisers so that they understand how to apply the minerals appraisal standard develop? How will the necessary educational materials be developed? How will instructors themselves be taught the necessary teaching skills for training candidate minerals appraisers? How will the quality of education programs be monitored and assessed?

Should there be continuing education requirements for maintaining certification as a minerals appraiser? The author recommends that continuing education should be required for minerals appraisers and anyone who teaches minerals appraisal courses. If it is required, what types of programs will qualify as continuing education?

How will a standard be enforced? Should the same bodies that license or certify minerals appraisers be responsible for conducting disciplinary hearings against standards violation defendants and enforcing resultant sanctions? How should such bodies be monitored to assure that appropriate enforcement is taking place? How should sanctions be applied against violators who are not licensed or certified?

Conclusions

This paper has demonstrated that an in-depth understanding of the current and developing national and international standards environment is essential for determining the need and goals for the development of a U.S. minerals appraisal standard. The two U.S. mineral appraisal standards development initiatives that have taken place to date have taken a wrong path. This has resulted in insurmountable conflicts with overarching national and international standards with which a smoothly functioning interface will often be required.

The author has put forth a substantial number of questions regarding the need and goals for a proposed U.S. minerals appraisal standard; what societies, bodies and persons should be responsible for undertaking its development; how the development of the standard should be undertaken; what body should publish and maintain the standard once it has been developed; the potential structure and philosophy of the standard; how qualifications and competency for minerals appraisers applying the standard should be determined; and how education of candidate minerals appraisers and continuing education for minerals appraisers and instructors of minerals appraisers, will be provided. The author was only able to provide recommended answers for a few of these questions. The substantial quantity of questions,

and particularly unanswered questions, demonstrates the need for extensive research and debate before undertaking development of a U.S. minerals appraisal standard. ■

References

- Australasian Institute of Mining & Metallurgy (AusIMM), 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" (and "Aide Mémoire to assist its interpretation") 1998 Ed., Melbourne, Australia, 23 pp.; available at www.mica.org.au.
- CIMVal, 2002, "Revised Draft Standards and Guidelines for Valuation of Mineral Properties," CIM Special Committee on Valuation of Mineral Properties, Canadian Institute of Mining, Metallurgy and Petroleum, Montreal, Quebec, Canada, September, 34 pp.; available at www.cim.org.
- Ellis, T.R., 1999, "Recent Australian and Canadian developments affecting mineral valuation," *American Institute of Minerals Appraisers Newsletter*, Vol. 4, No. 3, November 1999, pp. 1, 6-7.
- Ellis, T.R., 2000a, "Lessons Learned about Standards from Applying both VALMIN and USPAP on a Complex Appraisal Project," 2000 SME Annual Meeting, Salt Lake City, Feb 28-Mar 1, Preprint 00-129, 9 pp. Revised and updated in *SME Transactions 2000*, Vol. 308, pp. 116-122.
- Ellis, T.R., 2000b, "International challenges will confront state licensure," *The Professional Geologist*, AIPG, Vol. 37, No. 11, December 2000, pp. 10-13; available at www.mineralsappraisers.org.
- Ellis, T.R., 2000c, "Appraisals of a gold property: A case study of reserve additions," *2000 Journal of the ASFMRA*, American Society of Farm Managers and Rural Appraisers, Denver, CO, pp. 44-53; available at www.mineralsappraisers.org.
- Ellis, T.R., 2000d, "The U.S. Mineral Property Valuation Patchwork of Regulations and Standards," *Mineral Property Valuation Proceedings – Papers presented at Mining Millennium 2000*, Canadian Institute of Mining Metallurgy and Petroleum, Montreal, Canada, pp. 25-40; available at www.cim.org/mes/pdf/VALDAYTrevorEllis.pdf. Revised and updated in *CIM Bulletin*, Vol. 95, No. 1059, March 2002, pp. 110-118.
- Ellis, T.R., 2000e, "The difference between a value estimate and an appraisal," 2000 SME Annual Meeting, Salt Lake City, Utah, Feb 28-Mar 1, Preprint 00-119, 15 pp. Revised in *SME Transactions 2001*, Vol. 310, pp. 25-35.
- Ellis, T.R., 2000f, "Ethical dilemmas posed during a mineral project appraisal," *The Professional Geologist*, AIPG, Vol. 37, No. 2, Feb 2000, pp. 7-11.
- Ellis, T.R., 2001a, "Funding Dangers Posed by Extractive Industries International Accounting Standard," www.minevaluation.com, March 2001, 8 pp.
- Ellis, T.R., 2001b, "US Views on Valuation Methodology," presented at VALMIN 2001, Sydney, Australia, Oct 25-26, 2001; in *VALMIN '01 – Mineral Asset Valuation Issues 2001*, Australasian Institute of Mining & Metallurgy, Melbourne, Australia, PS No 5/2001, pp. 1-23. Also in *The Professional Geologist*, AIPG, Vol. 39, No. 6-8, June-Aug 2002, as a three-part series.
- Ellis, T.R., 2002a, "Reporting Standards — The USA Experience: Achieving True Globalisation – Problems and Solutions," presented at the Council of Mining and Metallurgical Institutions' Congress 2002, Cairns, Australia, May 27-28, 2002, and the International Mining Professionals Society's Annual Meeting, Denver, Colorado, May 21, 2002. In *CMMI Congress 2002 – International Codes, Technology and Sustainability for the Minerals Industry*, Australasian Institute of Mining & Metallurgy, Melbourne, Australia, PS No 3/2002, pp. 67-77. Updated versions in *Minerals & Energy - Raw Material Report*, Vol. 17, No. 3, December 2002, pp. 15-31, and *CIM Bulletin*, vol. 96, No. 1067, January 2003, pp. 37-48.
- Ellis, T.R., 2002b, "Mineral Property Valuation Standards — A US Perspective: Marching with the International Valuation and International Financial Reporting Standards," presented at the South African Institute of Mining and Metallurgy's Valuation Code Colloquium, Johannesburg, South Africa, 19-20 March 2002. In *Valuation of Mineral Projects and Properties: an African Perspective*, SAIMM, Johannesburg, 2002, 17 pp. Also in *The Professional Geologist*, AIPG, Vol. 39, No. 5, May 2002, pp. 5-13. Available at www.minerals-appraisers.org.
- Ellis, T.R., 2002c, "Recent developments in International Valuation Standards," in *SME Transactions 2002*, Vol. 312, pp. 148-152.
- Ellis, T.R., 2002d, "United States and international valuation standards — The future," in *SME Transactions 2002*, Vol. 312, pp. 141-147.
- Ellis, T.R., Abbott, D.M., and Sandri, H.J., 1999, "Trends in the regulation of mineral deposit valuation" 1999 SME Annual Meeting, Denver, March 1-3, 1999, SME Preprint 99-29, 8 pp.; available at www.mineralsappraisers.org.
- Ellis, T.R., and Abbott, D.M., Jr., 2000, "Regulatory Trends in Mineral Property Valuation — An International Perspective" *Valuation 2000: Papers and Proceedings*, sponsored by ASA, AI, and ASFMRA, July 2000, pp. 27-41, available from Appraisal Institute, Chicago.
- International Accounting Standards Committee (IASB), 2000, "Extractive Industries," *Issues Paper*, London, November 2000, 412 pp.; available at www.iasb.org.uk.
- International Valuation Standards Committee (IVSC), 2001a, *International Valuation Standards 2001*, London, 458 pp.
- International Valuation Standards Committee (IVSC), 2001b, "A submission to the International Accounting Standards Board in respect of: an Issues Paper issued for comment by the IASB steering committee on extractive industries," London, June 2001, 35 pp.; available at www.ivsc.org/pubs/submission0106-A4.pdf.
- Miskelly, N., and Rendu, J.-M., 2002, "Mineral Resources and Mineral Reserves — Progress on International Definitions and Reporting Standards," presented at Council of Mining and Metallurgical Institutions' Congress 2002, Cairns, Australia, May 27-28, 2002. In *CMMI Congress 2002 – International Codes, Technology and Sustainability for the Minerals Industry*, Australasian Institute of Mining & Metallurgy, Melbourne, Australia, PS No 3/2002, pp. 47- 52.
- Securities & Exchange Commission (SEC), 1992, *Industry Guide 7*, first published in *Federal Register*, Vol. 57, p. 36442, July 30, 1992; available at: www.sec.gov/divisions/corpfin/forms/industry.htm#-secguide7.
- Society for Mining, Metallurgy and Exploration (SME), 1999, "A Guide for Reporting Exploration Information, Mineral Resources and Mineral Reserves," 17 pp.; available at: www.smenet.org.
- South African Institute of Mining and Metallurgy (SAIMM), 2002, "Draft Standards and Guidelines for Valuation of Mineral Projects, Properties and Assets in the Mining Industry of South Africa – Discussion Document," Johannesburg, South Africa, revised August 2002, 39 pp.
- U.S. Financial Accounting Standards Board, 2002, "FASB and IASB Agree to Work Together toward Convergence of Global Accounting Standards," Press release, 29 October 2002, 4 pp.; available on www.iasb.org.uk.
- UAS, 2000, *Uniform Appraisal Standards for Federal Land Acquisitions*, Interagency Land Acquisition Conference, 129 pp., published by Appraisal Institute, Chicago; also available at www.usdoj.gov.
- USPAP, 2002, *Uniform Standards of Professional Appraisal Practice (USPAP)*, Appraisal Standards Board of the Appraisal Foundation, Washington, DC, 249 pp.; available at: www.appraisalfoundation.org (revised annually).