International Trends in Valuation of Mineral Projects – Standards and Regulations

Trevor R. Ellis, MSc, CPG, CMA, FAusIMM
Chairman, Extractive Industries Task Force
International Valuation Standards Committee
www.ivsc.org

Mineral Property Valuer
Ellis International Services, Inc.
Denver, Colorado, USA
www.minevaluation.com

China Mining, Beijing, 13-15 Nov. 2007
Main Developments of Mineral Valuation Standards — VALMIN Code, Australia

- 1995 first published, by The Australasian Institute of Mining and Metallurgy (AusIMM)
- Introduced important ethical principles: transparency, materiality, competence, and independence
- Major focus on technical assessment of mineral properties
- Enforceable on AusIMM members for financial reporting
- 2005 edition, 23 pages
Main Developments of Mineral Valuation Standards — CIMVal Standards, Canada

• 2003, published by The Canadian Institute of Mining, Metallurgy and Petroleum (CIM)
• the first set of mineral valuation standards to incorporate the three valuation Approaches
  – Cost Approach
  – Market (Sales Comparison) Approach
  – Income (Capitalisation) Approach
• Instructions only for Market Valuation of the Real Property portion of mineral holdings
• 33 pages
Main Developments of Mineral Valuation Standards
— International Valuation Standards (IVSs)

• 2005, the Seventh Edition of the IVSs contains mineral and petroleum valuation standards
  – Published by the International Valuation Standards Committee (IVSC)
• Designed for worldwide use
• Based on comprehensive Generally Accepted Valuation Principles (GAVP)
• 2007, the Eight Edition, 462 pages
International Valuation Standards (IVSs)

• Valuation of all asset types:
  – Real Property
    • Includes mineral rights, mineral deposits, land, buildings
  – Personal Property
    • Includes machinery and equipment, working capital and securities
  – Businesses
    • Includes mine and quarry operating entities
  – Financial Interests
    • Intangible assets, including options to buy or sell real property and personal property
International Valuation Standards (IVSs)

- Market-based and Non-Market valuations
- Valuations for most purposes
  - Including private sector (non-government) financial reporting (corporate accounting), particularly with the International Financial Reporting Standards (IFRSs)
  - and public sector (government) accounting, particularly with the International Public Sector Accounting Standards (IPSAS)
International Valuation Standards (IVSs)

• Principles-based standards, not rules-based
  – Minimizes loopholes for abuse of standards
  – Minimizes obsolescence with changing legislation, economy, and professional practice
  – The basic principles are common across all professional sectors of valuation
  – Minimizes conflicts of theory, principles, and modes of application between valuation sectors
International Valuation Standards Committee (IVSC)

• Published the first set of IVSs in 1985
  – Mainly for valuation of land and buildings
• United Nations NGO, working closely with World Bank, EU, BIS, OECD, IMF, WTO, Basel Banking Committee
• 50 nations participate in developing and maintaining its standards
  – The IVSs are translated into a number of languages
• China Appraisal Society is a Full Board Member and a significant sponsor
Participation Globally in Minerals Valuation Conferences

Canada 2000    Australia 2001    South Africa 2002
Participation, United Nations, Geneva
Need for a Global Extractive Industries Valuation Standard

- Minerals and petroleum companies work internationally
- Minerals and petroleum valuers (appraisers) work internationally
- Companies report internationally to:
  - Securities markets
  - Investors
  - Lenders
- Investors and lenders compare projects internationally
- Governments compete when leasing out or privatizing mineral properties
- Over 150 countries need standards
- Required to support *current value* accounting for the extractive industries adopting the IFRSs
Structure of the IVSs

- **Fundamentals**: Introduction, the IVS, Objectives and Organization of the IVSs, Concepts Fundamental to Generally Accepted Valuation Principles
- **Code of Conduct**
- **Property Types**: Real Property, Personal Property, Businesses, Financial Interests
- **Introduction to IVSs 1, 2, and 3**
- **Standards**
  - Standard 1: Market Value Basis of Valuation
  - Standard 2: Bases Other Than Market Value
  - Standard 3: Valuation Reporting
- **Applications**
  - Application 1: Valuation for Financial Reporting
  - Application 2: Valuation for Secured Lending Purposes
  - Application 3: Valuation of Public Sector Assets for Financial Reporting
- **Guidance Notes**
  - Valuation of Real Property
  - Valuation of Lease Interests
  - Valuation of Plant and Equipment
  - Valuation of Intangible Assets
  - Valuation of Personal Property
- **Business Valuation**
  - Consideration of Hazardous and Toxic Substances in Valuation
  - Cost Approach for Financial Filings (DCF)
  - DCF Analysis for Market Valuations and Investment Analyses
  - Valuation of Agricultural Properties
- **Reviewing Valuations**
  - Valuation of Trade Related Property
  - Mass Appraisal for Property Taxation
  - Valuation of Properties in the Extractive Industries
  - Valuation of Historic Property
- **Agenda**
  - Glossary of Terms
IVSC Undergoing Change

- Demand for the IVSs and IVSC interpretation support is rapidly increasing
- Increasing needs to support the rapid global adoption of the IFRSs (such as in China)
- In November 2007, changing name to International Valuation Standards Council
- Paid staff replacing volunteer professionals
- A new International Valuation Standards Board within IVSC.
IVSC Best Practice Technical Paper

• IVSC Extractive Industries Technical Paper is scheduled for publication in 2008
  – After three years of development by IVSC’s Extractive Industries Task Force
• Provides comprehensive, best practice guidelines for valuations in the extractive industries (minerals and petroleum)
• Explains the application and implications of many of the IVS standards to minerals valuations
Standards Trends Internationally

• Globalisation is driving global uniformity of standards
  – Global uniformity is necessary in measurement and classification systems for all industry sectors for efficient, competitive international markets

• Global convergence of private sector accounting standards on the IFRSs, supplemented by local guidance.
  – Globalised stockmarkets and banking demand uniform financial reports.
  – Globalisation demands uniform valuations of assets and liabilities for those reports
Standards Trends Internationally

- Reduction from approximately 200 minerals and petroleum reserve-resource classification systems worldwide, towards harmonised SPE-UNFC-CRIRSCO combined classification
- Merging of valuer certification bodies nationally and internationally, with need for uniform valuer education and certification
Minerals Valuation Trends Internationally

• Globalisation by mining and petroleum companies, commodities markets, stockmarkets, financiers, and professionals working within those, is causing trends towards:
  – uniform minerals and petroleum valuation standards worldwide
    • Supplemented to meet national needs
  – uniform qualifications and competency requirements for minerals and petroleum valuers worldwide
  – Certification or licensing of those valuers by self-regulating organisations with demonstrated enforcement of a strong Code of Ethics.
Minerals Valuation Trends Internationally

- Increasing demand for extractive industries valuers to work across borders
- Growing shortage of competent extractive industries valuers
- Continued proliferation of national/state/provincial certification/license requirements for engineers, geologists, and land valuers
- Inconsistencies in these requirements, lack of reciprocity, and varying land and mineral laws, continue to increase the difficulty for extractive industries valuers to work legally across borders.
  - For example, within the USA, Canada, and Australia
- Barriers to trade in professional services need to be minimized
  - A system of international reciprocity for certification and licensing of qualified persons should be developed
Extractive Industries Valuer Education

- Minerals and petroleum valuation short courses teaching market valuation principles based on the GAVP are rare worldwide
  - No university programs
- No comprehensive textbook is available for teaching such
Extractive Industries Valuer Education

• Comprehensive minerals/petroleum valuer education must be made available
• Instructional materials based on IVSs must be written
• Appropriately qualified instructors must be groomed to teach them
• Continuing education courses are needed
Extractive Industries Valuer Education — Alternatives

• Students and interested professionals can learn much from published professional papers on extractive industries valuation.

• Minerals industry professionals seeking education in market valuation commonly take short courses in real property or business valuation, offered by professional societies and educational institutions.
Recommendations

• Nations and institutes should not develop their own valuation standards
• Valuation standards setters should adopt the complete set of IVSs by reference (allowing automatic updating), to avoid valuation sector and international conflicts of standards and inappropriate rules
• Supplement the IVSs as needed for local conditions and to provide enforcement of a Code of Ethics
• Support the development of educational materials and courses for student extractive industries valuers
• Remove or lower certification/licensing and other barriers, that prevent or impair entry by qualified and competent extractive industries valuers, to work in their specialization across state and national borders
International Trends in Valuation of Mineral Projects – Standards and Regulations

Trevor R. Ellis, MSc, CPG, CMA, FAusIMM
Chairman, Extractive Industries Task Force
International Valuation Standards Committee
www.ivsc.org
Mineral Property Valuer
Ellis International Services, Inc.
Denver, Colorado, USA
www.minevaluation.com

China Mining, Beijing, 13-15 Nov. 2007