Need for Improved Guidance on Community and Environmental Factors considered in JORC and VALMIN Reporting

Context

Mining projects are often inaccurately represented by insufficient consideration of Community and Environment factors by Competent Persons (CPs), when reporting. Damage can arise from this which can include financial losses to the project and reputational damage to the mining industry. The JORC and VALMIN Codes include requirements for modifying factors, including Community and Environmental, to be reported by the CP.

Typically CPs are either geology or mining engineering professionals. A knowledge gap exists were Community and Environmental (C&E) aspects are expected to be considered by the competent person, but they may not have the necessary experience and knowledge in those factors. Concomitantly, on occasions where Community and Environment personnel are engaged by the CPs the C&E professionals may not be aware of the JORC and VALMIN process and the importance of, and legal requirements associated with, CP reporting.

These gaps have recently been confirmed via a survey initiated by the AusIMM C&E Society to understand the level of awareness and competency in assessing C&E issues reported in JORC and VALMIN reports.

Detailed results of this survey can be found in Appendix 1.

As a result of the survey, the AusIMM C&E Society has formed a working group drawn from volunteers across the AusIMM membership to improve the awareness of C&E issues across disciplines in the context of JORC / VALMIN reporting.

FAQs

Why do C&E aspects need to be considered?

There are potentially significant costs associated with not considering Community and Environmental aspects in mining projects. These costs can include unbudgeted environmental mitigation through to delays in development and ultimately mine closure costs. The cost burden impacts all stakeholders, investors and the host communities alike. Although the community and environment are the biggest casualties of such oversight, the economic viability and long term sustainability of the project are also adversely impacted.

How does this fit overall context of the business case of the JORC/VALMIN Reporting?

The purpose for addressing C&E aspects in the JORC and VALMIN Codes is to provide information to investors so they are able to make informed business decisions while holding to account the project owner with regards to due diligence of the project.

In both the JORC and VALMIN Codes, Community and Environment (C&E) are significant modifying factors when it comes to reserve evaluation and should be given appropriate consideration. JORC / VALMIN reports for advanced mining projects mostly focus on the quantification of OPEX and CAPEX, however the non-quantitative factors are often likely to impact new mine development. For example, absence of community support will stop a project altogether. Where investors are not informed of such risks, the losses can be considerable.
Apart from ensuring the economic viability of the project, it is important that the community which will be impacted is consulted sufficiently, and the environmental risks understood and mitigated where possible.

**What is the AusIMM context for improved C&E reporting?**

At a global level there is an increasing awareness of the impact of the Triple Bottom Line on business project viability and C&E aspects are central to this trend. The mining industry operates with the implicit or explicit approval of society, and to maintain that approval the AusIMM has an obligation to assist its members to protect communities and the environment wherever possible and prevent reputational damage.

**How can C&E aspects be quantitatively and qualitatively assessed?**

There is no set framework within the JORC and VALMIN Codes for addressing C&E aspects - it is dependent on the requirements for each project. However it is important on a project by project basis that owners/sponsors evaluate with serious consideration the breadth and significance of C&E aspects that need to be addressed.

If C&E aspects for a project are not adequately understood, the project may face unforeseen issues across the study, operations and closure timeframes and ultimately may not be sustainable. An understanding of issues upfront can result in preventative and mitigating actions being incorporated into mine plans and hence reduce the financial and reputational impacts (e.g. problematic mineral waste characterisation and management).

**Resources**

Relevant expert knowledge is the most effective and important resource that can be utilised in addressing C&E aspects in the JORC and VALMIN Codes. To support this the working group contains members with experience in feasibility studies, resource geology, mine planning, hydrogeology, closure planning, geochemistry, community and environmental issues. The working group possess over 350 years of combined experience.

The Working Group members are:

**Glen Corder** – Principal Research Fellow, Sustainable Minerals Institute, University of Queensland  
**Joanne Heyes** – Manager Mining Engineering (Closure), BHP Billiton  
**Brian Baumhammer** – President Director, PT. Runge Pincock Minarco  
**Libby Ferrari** – Team Leader Indigenous Social Investment, BHP Billiton Corporate Affairs  
**Matt Jackson** – Director Exploration and Mining, Bluestone Geophysical Services Ltd  
**Colin McVie** – Manager Project Development, Mining Plus Pty Ltd  
**John Kelly** – Director, Kelly Mining and Consulting  
**Greg Maddocks** – Principal Hydrogeochemist, RGS Environmental  
**Bruce McCarthy** – Principal, Mattiscombe Resources  
**Mohamed Ali Mohamed** – Mining Planning Engineer  
**Mark Noppe** – Corporate Consultant, Geoscientist, SRK Consulting  
**Laurie Reemeyer** – Principal Consultant, Resourceful Paths  
**Tony Kalma** – Community Relations, Regional Lead, Teck Australia Pty Ltd  
**Hans Andersen** – Senior Resource Geologist, Evolution Mining Ltd  
**Tania Kennedy** – Director, SeeBuiltEarth  
**Michael Leggo** – Madron Resources  
**Ivy Chen** – Principal Consultant, CSA Global

**Deliverables**

The working group is aiming to produce a set of FAQ’s and case study examples by June 2017. The ultimate intent is that both JORC and VALMIN adopt the FAQ’s as referenced guidance material and that these are considered for future updates of the JORC and VALMIN Codes.