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House of Representatives
Standing Committee on Industry and Resources
Parliament House
Canberra ACT 2600

Dear Secretary

**Draft Submission – House of Representatives Inquiry into Resources
Exploration Impediments**

The Australasian Institute of Mining and Metallurgy welcomes the opportunity to make representations to the Inquiry into Resource Exploration Impediments and to appear, if required, at a subsequent date before the Committee.

1. The Australasian Institute of Mining and Metallurgy (The AusIMM)

The Australasian Institute of Mining and Metallurgy (The AusIMM) has been in existence for 109 years and throughout that time has been the pre-eminent body representing the professionals in the Australasian minerals and supportive industries. Mining Engineers, Geologists and Metallurgists make up the majority of the 7,500 members although there is a growing number of Environmental Scientists and other tertiary qualified professionals. They are employed by mining companies, government, research institutes and universities with an ever increasing number of contractors and consultants based throughout Australia, New Zealand and other overseas countries.

Under The AusIMM Code of Ethics members are committed to take responsibility for the welfare, health and safety of the community at all times before their responsibility to the profession, sectional and private interests or to other members. As a consequence, the members are committed to sustainability of our minerals sector and to enhancing their professional excellence and their industry.

As stated above our membership includes approximately 2,100 Geoscience graduates (28% of Membership) employed predominately in Exploration. Many of these professionals are now only partly employed in their chosen profession or have been forced to choose other occupations due to the cyclical nature of the Industry or to practice overseas. Although there has been some small resurgence in exploration expenditure, much of this has been largely on or adjacent to existing leases (ie Brownfields) and through existing information acquisition and not Greenfields exploration.

2. Australia is a minerals dependant economy, now and into the foreseeable future

“Mineral and energy exports have contributed more than \$500 billion to Australia’s wealth over the past 20 years. In 2000–01 these exports

were worth \$55.6 billion (up 27% over the previous years). They currently constitute 47 percent of Australia’s merchandise exports and 37 percent of total exports including services. They comprise eight of Australia’s “top 10” commodity exports.

As well, roughly \$2 billion is earned from the export of high technology mining products and services, and the mineral industry pays around \$5 billion in taxes, royalties and transport levies annually to government”.¹

The Federal Government acknowledged in 1999, “that the resources industries are the backbone of the Australian economy. Without their contribution of \$40 billion to exports, we would be a different country.”² Yet the sustainability of this contribution is under threat in the absence of Greenfields exploration.

In 2000, Australia was among the top three producers for 10 of the world’s most important minerals. Exports have grown from \$7 billion AUD in 1980-81 to \$55.6 billion in 2000-01. Minerals direct contribution to GDP has been around 9% for the past decade and the sector accounts for just under half of all merchandise exports, which is of enormous significance for an economy often running an international current account deficit. Additionally, we export our professionals’ intellectual property. For example, we lead the world in the development of mine planning software now used by at least 70% of all large mines in the world. Minerals and petroleum provide jobs for 83,000 people and generate a further 327,000 manufacturing jobs downstream. Regional Australia, in particular continues to benefit from the resources industry. Mining companies have built 25 towns, 12 ports and 20 airfields since the 1960’s.

3. Employment Trends in the Industry!

Despite the mining sector experiencing growth in outputs and exports, the labour force is declining. Although, mineral industry real growth in output is increasing at 4.2% per annum, employment in the mining sector has continued to decrease at a rate of 1.9% per annum since 1994/95 (DISR, 2001). This is due in part to the introduction of new technologies and rationalization and consolidation of companies, to improve their international competitiveness. Mergers and takeovers result in relocations and redundancies, contributing to a declining employment market. In addition, many corporate activities are now being outsourced to consultants and contractors.

The mining sector in 1999 relied on a higher proportion of highly skilled workers, than low skilled workers, and to a lesser amount on middle skill level workers, whilst experiencing an overall declining workforce (DISR, 2001). Whilst the mining sector still relies on highly skilled workers, there are changes occurring within the

¹ Jacques, L and Huleatt, M – 2002
AusGeo News 64: 3-7

² Senator Minchin 1999

employment structure. For example, many companies are relying on more technically qualified people with TAFE certificates in practical computer training to operate their systems rather than degree qualified professionals. In addition, land access issues and a bottom-line driven industry, are decreasing the number of geoscientists employed in exploration in favour of increasing shareholder return. If there is no substantial exploration there will be no substantial minerals sector, with severe implications for future sustainability of the industry.

A surplus of degree qualified professionals, means more competition for the reducing number of jobs in the industry, forcing qualified minerals industry professionals to retrain and enter other industries. This loss of qualified people is further exacerbated by other industries such as the IT industry poaching top students with incentives such as on-the-job retraining, guaranteed employment, high salaried, and a perceived more attractive lifestyle. For example, many qualified minerals industry professionals such as mining engineers are attracted to other subsidiary careers such as finance/banking rather than on site positions. This is attributable to the many factors reducing the overall attractiveness of the industry to qualified graduates such as an increase in long distance operations. This has severe implications for the future sustainability of the industry and therefore the Australian economy.

Another trend is the increasing number of Environmental, Social or Community Affairs, Public Relations professionals employed by the minerals industry. This is related to the increasing pressure from the community for social and environmental responsibility of mining companies and hence maintain a “licence to operate.” This negative public image constrains its capacity to influence government, community and attract high caliber graduates (Dept of Education, Training and Youth Affairs, 2001).

4. Globalisation, Centralisation and Sustainability

The two big and fundamental changes now impacting on our industry and its professionals (our members) are the drive for sustainability and the move to consolidation and Globalisation. The AusIMM has constructively addressed the former, by redefining its basic ethical responsibilities and called for an action agenda for exploration to address sustainability. We must now work to reposition and empower these wealth-generating professionals in a globalising industry. The differentiating characteristic of the Institute in the minerals sector is that it is about people and expertise ---intellectual capital--- at a time when this is especially valued by government and community but is not necessarily valued by shareholders. For example, exports of Australian mining related intellectual property totaled over \$1 billion in 1999-2000. Other world-class processes include advance electronic blasting, Atomic Absorption Spectrometry, aluminum smelter innovations, Becher process, bioheap bacterial leaching, HISmelt, SIROMELT, Jameson Flotation Cell, P9 Project, robotics processes etc. etc. etc.

However, the human capital in the industry is faced with uncertainty as to the place that the Mineral industry will hold in the future economic development of Australia and whether their experience, skills and talents will be a sought after commodity either locally or internationally.

The rate of consolidations, mergers and acquisitions will not slow down; neither will the calls for sustainability of every part of the Industry in order to get and continue to have a license to operate.

5. Skill Needs to address a changing landscape

In the last half of the year 2000, the AusIMM took the lead in a study funded by DETYA and several major mining corporations to address the question – Are we confident that the minerals industry has the professional staff capability to appropriately position it to meet the demands of tomorrow?³

Over 150 professionals were interviewed by the consultants, World Competitive Practices, as to the current challenges facing the industry. In summary, the outcomes were:

- an increasing trend towards globalisation
- an increasing use of new technologies to reduce costs and increase outputs
- commodity prices continuing to fall
- the attractiveness of the industry was decreasing
- there was a lack of shared vision within the industry
- the prevailing culture was not conducive to responding effectively to the challenges
- investors with an increasing focus on short term returns
- an ever increasing squeeze in the capital markets
- restricted and reduced access to land
- an inability to attract and retain the required talent to grow the industry.

Unfortunately, these outcomes did not pick up the many good things, which are occurring in the industry, such as technological developments, environmental performance and emphasis on sustainability and a desired engagement with external stakeholders.

A consensus of observations, however, was distilled into 8 principal findings:

- (i) The negative image of the industry constrains its capacity to effectively influence community and government.
- (ii) A major repositioning of professional staff competencies is required.
- (iii) Existing organizational arrangements and capabilities are under pressure to change.
- (iv) It will be difficult to access professional staff of the required capability.
- (v) The industry is facing significant external challenges with a real concern about capacity to address them.
- (vi) The prevailing culture is not suited to the needs of the future.

³ Rising to the Challenge – Building professional staff capability in the Australian Minerals industry for the new century. Report prepared by World Competitive Practices Pty Ltd for DETYA and The AusIMM

(vii) The fragmentation of the industry leads to a lack of shared vision/voice, and

(viii) There is a need for change.

6. What the AusIMM is doing

How does a “traditionally learned” Institute react to the challenges and opportunities created by:

- Globalisation and concentration of the Industry
- The ever increasing calls for sustainable development
- The ever increasing calls for self regulation and ethical behavior on a world wide scale
- The challenges of greater technical innovation and change
- Changing employment practices by international corporations (use of consultants, contractors, level of commitment to employees CPD, International flexibility and recognition of qualifications, FIFO, duty of care, etc)
- The need for more appropriate and effective risk, environment and OH&S management
- Other cost and regulatory pressures.
- Declining commodity prices.

The Institute can react, by supporting and assisting the professionals in the Minerals and related industries, to:

- keep abreast of the latest technological developments and opportunities
- manage and develop their careers whilst successfully managing all compartments of their lives (social, religious, family, health, etc)
- be flexible, transferable and accountable whilst their qualifications, competencies and experiences are recognized world wide
- acquire the broader range of skills to cope with and be successful in the ever-changing environment, particularly to address their emotional intelligence
- accept opportunities to network with fellow professionals in the minerals industry to their mutual advantage
- understand and accept the advantages of embracing diversity
- be aware of issues which may impact on their current and future employment and careers
- take pride in themselves, their profession, their industry, and their employer, to be informed and to speak out in support of all of these
- adhere to codes of conduct supported by ethical processes wherever they practice in the world
- lead passionate and fulfilling lives
- work with other mineral sector stakeholders for an increasingly sustainable minerals sector for Australia.

The Institute is addressing these challenges so that we can provide career support for professionals in the Minerals Industry who are committed to continuing professional development of both themselves and in the broader community in which they work and play. For example, provision of International Conferences, Proceedings and

Transactions and International reciprocal recognition of qualifications and competencies.

These opportunities must also be addressed by the Tertiary Education sector as they endeavour to provide graduates which will meet the needs of the Global Corporations wherever they practice. Australia has the opportunity to continue to be the source of professionals for the worldwide Minerals Industry. The AusIMM will play its part to ensure its members are equipped to fill the expectations of those who seek fully qualified Professionals.

7. The Challenge

The challenge is for Industry and Government to position the Australian Minerals Industry as a comparatively attractive investment opportunity for the Global miners whilst encouraging through a climate of consistency and stability the growth of juniors. The successful juniors may then grow to be the Australian global companies of the future.

How can this be achieved?

- (i) At a macro level, the Federal Government has to recognize the significance of the Minerals Industry to the Australian economy and the lifestyles we all enjoy. Also to state that Australia will be a minerals dependant economy for the foreseeable future. Therefore, research priorities will assist to ensure an effective and efficient minerals industry and the commitment to a knowledge economy will ensure a greater commitment to higher education and a competitive Minerals Industry, which is in turn dependent on the higher education sector for the maintenance of existing technology and for technological breakthroughs.
- (ii) Continue to assist with Access to Information through geoscientific data sets through Geoscience Australia and the equivalent bodies at State level. Industry has identified the following aspects of this issue to be addressed: the level and nature of precompetitive data and regional synthesis needed to attract mineral exploration companies to Australia; the roles and responsibilities of the Commonwealth and the States in the provision of precompetitive data and information and the scope for tailoring of new generation geophysical surveys to satisfy the needs of both exploration and land management; and the need for this data to be publicly available.

In the Institute's presentation to the Federal Minister for Industry, Tourism and Resources earlier this year, the following recommendation was stated.

“Systematic acquisition of high quality, regional geoscientific datasets is being seen increasingly as a key part of identifying the next generation of exploration targets in frontier regions and at depth in established mining districts. Governments need to take a leading role in providing appropriate regional geoscientific datasets because of the costs and large scales of such surveys, harmonisation of the data, equality of access to the data, and the efficiency of data distribution. The coverage has to be broad enough to satisfy the needs of the whole minerals sector, and the purposes of a range of other

users. On-line delivery of data also needs to be accelerated, and regional scale mineral predictive models need to be improved”.

- (iii) Access to investment capital to facilitate exploration – the small companies historically responsible for mineral discoveries are experiencing increasing difficulties in gaining access to capital.

There is an apparent distortion in the current taxation treatment of these junior companies whereby they do not benefit from deductibility of exploration expenses against other income as they most often do not have “other income”. There is also a need to reduce statutory charges such as rentals on exploration tenements and stamp duties on certain transactions.

One large company quoted that “31% of its \$9.5 million WA exploration budget for 2002 will go to pay statutory charges (rents and rates)”.⁴ It is recommended that the Bureau of Statistics collect data for each State to verify these cost impositions.

- (iv) Finally, at a macro level, the maintenance of an internationally competitive economy will help to reduce the level of uncertainty and provide an attractive investment location for the global corporations and the government’s commitment to the sector would greatly enhance market sentiment towards the sector.

With regard to exploration impediments, beyond the macro policy settings and support for the Industry, the following are suggested:

- (a) The New Action Agenda – Mineral Exploration be supported, as a “whole of government” approach could result in the resolution of major issues and would address impediments
- (b) Issues surrounding relations with indigenous communities and the difficulties facing the industry created by the Native Title requirements, particularly with respect to facilitating access by junior companies who are so important to the discovery of our new resources be addressed. Initiatives could include:
 - i. support for the continuation of the dialogue and relationships built up by the recent MMSD process through the MCA, State Chambers and other representative bodies.
 - ii. ensure the consistent maintenance of heritage surveys across all States
 - iii. review the South Australian system’s appropriateness across other states whereby exploration tenements are granted regardless of Native Title claims and the explorer has then to negotiate a compensation agreement prior to conducting “ground disturbing work” This starts the clock rolling and forces the explorer to negotiate in good faith
 - iv. increase funding from the Federal and State Governments of Native Title Representative bodies, eg land councils who depend on Commonwealth funding to facilitate the negotiation process.
- (c) The advantages and costs of the introduction of flow-through shares needs to be evaluated based on overseas (Canadian) experience.

⁴ Submission to Ministerial Inquiry to identify Strategies to increase Resource Exploration in Western Australia by Perth Branch of The AusIMM – June 2002

- (d) The lack of progress in negotiation of bilateral Commonwealth/State agreements under the Commonwealth's Environment Protection and Biodiversity Conservation Act 1999 has been identified as an impediment to increased mineral exploration, as it has lead to delays in processing applications.
- (e) Continuing Federal Government support for initiatives such as the Minerals Tertiary Education Council should ensure the maintenance of high standards in the Tertiary Education Sector. Whilst support for initiatives which endeavour to attract students to minerals related careers should be encouraged (ie The National Education Program and ASMV).

8. Conclusions

The Federal Government can assist by getting the macro economic settings right and by encouraging the international corporations to invest in Australia so that Australia provides the research and skills for their companies world wide. This can be done through higher education and National research priorities targeted at the Minerals Industry. Then, specific impediments to exploration through access to land, access to risk capital, access to information and access to expertise can be addressed by supporting the proposed action agenda and through some of the suggestions outlined in this submission.

Regards,

A handwritten signature in black ink, appearing to read 'Don Larkin', written in a cursive style.

Don Larkin
CEO – The AusIMM