17 August 2011

Executive Officer
Economic Development and Infrastructure Committee
Parliament House, Spring Street
EAST MELBOURNE VIC 3002

Dear Sir/Madam,

Unity Mining Limited – Inquiry into Greenfields Mineral Exploration and Project Development in Victoria

Unity Mining Limited (formerly Bendigo Mining Limited) and its predecessors, have been exploring, developing and mining for gold deposits in Victoria since the Company’s formation in 1985. The Company’s focus of activity has been the historic Bendigo Goldfield in Central Victoria, from which 22 million ounces of gold was produced over 100 years of mining between 1851 and 1954.

The company has carried out exploration both within and surrounding the goldfield in urban, rural and forest settings and has developed an underground mine beneath the city of Bendigo.

The experience of the company is that the regulatory regime in Victoria hampers exploration and mining activity in the State. This manifests itself in delays and costs that are built into the regulatory system. The replication of conditions and the multiple regulatory bodies involved, burdens all projects and act as deterrents to incoming groups.

The Company hopes that this Inquiry will identify measures to simplify and improve regulatory and approvals processes as well as introduce initiatives that will remove the delays that currently plague the approval process for both exploration and mining.

Industry expects that the government will provide a stable, workable and transparent regulatory environment and that it will continue to supply “geological infrastructure” through programs generated within Geoscience Victoria.

Unity Mining Limited supports the recommendations presented in the submission of the MCA to the Inquiry as the peak body of the industry.

Please find attached a submission covering the terms of reference of the Inquiry.

Yours sincerely,

Rod Hanson
Managing Director and CEO
Unity Mining Limited
Unity Mining provides the following comment in accordance with the Inquiry’s Terms of Reference:

a. **Victoria’s Mineral Endowment**

The history of mineral production in Victoria has shown that the state is richly endowed with coal, gold, and mineral sands and also has significant copper, lead and zinc mineralisation. The mineral endowment of the state on an area basis shows it is equivalent to that of the other states.

Victoria has been one of the most prolific gold producing regions in the world as well as having substantial amounts of brown coal. Underexplored areas of the state include the difficult terrain in the east of the state that impeded the early prospectors and still hampers mineral exploration today, the covering of the basement rocks by the Murray Basin sediments in the north-west of the state and the basalt plains which cover areas in the south west of the state.

The potential for further discoveries of gold in the known historic producing goldfields has been shown by gold production over a 30 year period from the Stawell area, over a 20 year time period at Fosterville and over shorter time frames at Heathcote, Costerfield, Tarnagulla, Inglewood, Dunolly, Woods Point, Maldon, Bendigo and the continued success of metal detector operators and fossickers throughout central Victoria.

Geoscience Victoria over the last decade has carried out the Gold Undercover Program, which estimated the amount of gold that potentially may occur in the buried northward continuation of the rocks which host the goldfields further south. The research showed that 30 million ounces of gold may be present. The program has significantly assisted companies currently exploring in the area.

The methods for exploring for mineralisation in this environment have improved over time and will continue to do so as the rate of technological advance and the computing power for data analysis increases. The discovery of the Mineral Sands Province in north-western Victoria is a spectacular example of the success of the application of improved technology.

In contrast, the major projects at Bendigo and Ballarat have encountered a number of set-backs. However these are counterbalanced by success at Stawell and Fosterville, where new geological concepts and the application of new technology have enabled the discovery of significant gold mineralisation and the utilisation of new economic methods for processing ores and the production of gold.

b. **Regulation**

Legislation and regulation for the Victorian mining industry is generally perceived by those operating within the industry, as well as potential explorers, as being complex and onerous. A number of recent changes and proposed changes to the MR(SD) Act through regulations and draft guidelines reinforce these perceptions and continue a highly prescriptive approach. The large number of regulatory agencies (with unique legislation, approval processes and ‘standard conditions’ with which applicants need to comply) makes it difficult for explorers, developers and operators to understand and fulfil their regulatory obligations.

Recent experience in carrying out exploration drilling programs in Central Victoria highlights the time consuming process of gaining multi-layered approvals and consents to commence work.
In order to carry out a simple drilling program, individual approvals and consents have typically been required from:

- DPI
- Local Council
- Registered Aboriginal Party
- Heritage Victoria
- Parks Victoria/DSE

The process will also invariably require community consultation, and depending on the setting, may also require consent from private landholders, other agencies such as DSE, AAV, the rural water authority, VicRoads, VicTrack, EPA and the Catchment Management Authority.

The above stakeholders all require separate applications, consultation and follow-up in order to authorise the commencement of work and each authority typically issues applicants with a unique set of conditions under which consent/approval is provided.

**These processes could be substantially streamlined through a “whole of government” approach, and through the facilitation and genuine empowerment of the DPI to ensure that all of the regulators’ needs are addressed through a single stage, ‘one-stop-shop’ approach. This would deliver a far more efficient approval process and ensure that there is clarity in compliance obligations, and reduce regulatory overlap and duplication.**

Experience indicates timeframes to authorise exploration and development work often fall outside statutory timeframes prescribed within the legislation, and if approved within the prescribed timeframes, nearly always requires the maximum timeframe prescribed rather than an ‘as-soon-as-possible’ approach. Statutory timeframes for approval should be:

- strictly observed;
- subject to transparent public reporting requirements; and
- reduced to provide more timely response to proposed exploration and development programs.

The MRSD Act provides a streamlined approval process for ‘Low Impact Exploration’ activities, the definition of which has been under review for many years. It is understood that the DPI is currently in the process of finalising a review of the definition for ‘Low Impact Exploration’, at the request of industry, which should enable a broader range of low impact exploration activities to take place without the need for a Work Plan, and thereby reduce unnecessary regulatory assessment and approval. Whilst it has been a long time coming, six years from recommendation to implementation, putting this definition into effect will provide the industry with some significant benefits, and should be pursued as quickly as possible.

Exploration programs often progress in a given location over many years from initial discovery to quantification of a reserve and feasibility assessment. In order for an organisation to commit to the development of a resource, security of tenure is important. The industry is very concerned about sovereign risk associated with changing land tenure, in particular the ongoing creation of parks and reserves in the state which can prohibit or hinder future exploration and mining activities. Whilst current legislation includes some recognition of rights for pre-existing licence holders, in practice the legislation makes it very difficult to pursue mineral exploration and
development in newly declared National Parks. Therefore, explorers are continually at risk of losing access to ground in which they have already have a substantial investment. Stronger laws are required to protect the rights of exploration tenement holders which may be subject to changing land tenure and the creation of National Parks and reserves.

Once a substantial mineral resource is identified, an EES is typically required to authorise mining and project development. Whilst this process plays an important role in identifying environmental aspects and impacts, detailed specialist assessment and review can reach a point of diminishing return, whereby highly detailed analysis is undertaken which delivers minimal additional benefit for the project.

The Bendigo Mining Supplementary EES process in 2004 took 2 years to complete and cost the company approximately $2 million. It was thought at the time that the outcomes from the process could and should have been delivered in a much shorter timeframe, and did not require the level of detailed analysis, modelling and review which appeared to have been pursued to satisfy the curiosity of specialists and consultants, rather than to identify sensible operating criteria for the proposed operation. The inefficiencies and cost of such a process is undoubtedly a deterrent to starting-up a mining operation in Victoria, and presents a real barrier in growing the Victorian mining industry.

The DPI has a role in promoting the development of the mining industry in the state and establishing criteria under which the industry shall operate. Whilst the DPI recognises the important role the local community plays as stakeholders in mining projects, the Department does not generally provide communities with information about the public’s role and their rights as landholders on an exploration or mining licence. There is scope for the DPI to play a more proactive role and develop guidance material to assist industry to explain the difference between mining and exploration and how this relates to individual landholders.

c. Fees, Charges and Royalties

Whilst Victoria’s remains competitive with respect to government charges, it is important to recognise the cyclical nature of the commodities market. Hefty government charges remove the incentive for investment in boom times and become a burden in times of down-turn, to the point where they may make an operation unprofitable.


The perceptions of prospectivity and regulatory environment are often mixed and confused with each other, with one believed to be the cause of the other. Mineral prospectivity and the extent to which regulation impedes exploration for minerals and their extraction need to be considered as two separate issues.

The mineral prospectivity of the state, as shown by work undertaken by Geoscience Victoria and its predecessor the Geological Survey of Victoria, matches that of other states given its relative size. The geology of the state determines the type of mineral deposits that may occur, however changing economic conditions and technology can change mineral occurrences once regarded as geological curiosities into economically viable deposits. The extensive covering of the basement terrain in the north and west of the state has long hidden the prospectivity of these areas. Advances in technology over past decades have now enabled assessment of the potential of these areas, but actual exploration for individual deposits has only just commenced due to the cost and difficulty of the techniques required.
The presence or absence of the major international mining companies is commonly used as an indicator of the prospectively of a region. These companies constantly review the potential future use of minerals and therefore tend to have a presence where significant sized deposits occur. For example haematitic iron–ore is currently sought by these companies, but given Victoria’s geology it is extremely unlikely for any to be discovered in this state. These companies specialise in bulk commodities over long project lives. The style of deposits in Victoria may not provide the volume of the commodity these companies require. This doesn’t mean that profitable mining of these minerals cannot take place.

The regulatory environment in Victoria is perceived to be difficult by people and companies from outside the state and also by those within it. Other factors that impact on perceived prospectivity include the density of population, the extent of agricultural industries, the size of the landholdings, the amount of park land, both national and state, and restrictions on exploration activity on every other piece of public land. Compounding these problems is the time taken to get approval to carry out any work. This all contributes to the perception that the state does not want any new mining activity.

There has been no overt support of the mineral industry by the State Government for several decades. In contrast, the South Australian Premier has in recent years publicly stated that the state wants mineral exploration and mining.

If a government minister in Victoria makes a public statement in support of the mineral industry, it is so heavily qualified by reference to the environment and social outcomes that it is normally perceived as being anti-mineral development.

The Fraser Institute based in Canada conducts annual surveys of companies operating throughout the world on the operating environments in the region they are active and publishes rankings for individual countries from the results. Victoria is well regarded on the quality of geological information available from government authorities but usually is ranked the lowest of all Australian states and generally in the lower half of all regions on regulatory matters.

This survey is a keen indicator of the views of companies working in the state and is a means through which the rest of the world develops its perceptions about the attractiveness of Victoria as a place to carry out exploration and mining.

**It is recommended that the committee review the recent surveys to understand the extent and nature of negative perceptions in relation to Victoria.**

e. **Success and failure of projects in Victoria’s mining pipeline.**

Success of any mining project is due to the resource base, the size, the grade, the ability to access the resource at the correct time throughout the project, the accurate estimation of the resource and the costs associated with accessing the resource. The technical challenges of discovery, development and extraction are common across many deposit types, but each deposit has unique characteristics.

The central Victorian goldfields, with some exceptions, are characterised by “nuggety gold”. This creates a problem in trying to estimate the amount of gold present by taking samples. One sample may contain a large piece of gold. An adjacent sample may have none at all. The way to address this problem is to collect more samples. As an optimal sample volume is obtained, the average grade of the samples will approach the true grade of the deposit. This reduces the overall project risk. The onerous regulatory processes experienced in Victoria inhibit drilling and soil and rock sampling and therefore the collection of an optimal number of samples.
f. Different approaches and programs in Australia and elsewhere to foster investment in Greenfields exploration.

There are 3 ingredients to fostering investment in Greenfields exploration. These are outlined below.

Acquire large, good quality datasets such as gravity, magnetics, geological maps and geological reports and making them readily accessible on-line. This enables ground selection according to an explorer’s own criteria.

Provide a transparent, uncomplicated tenement regime that is consistently enforced. This gives explorers a stable framework in which to plan their programs of work.

Make available an approval process that is fair, transparent and allows for rapid assessment of work proposals. This should be a “one stop shop”, which prevents unnecessary delays, and gives confidence to both the community and explorers.

g. Different roles of Government (including engagement, facilitation and Geological data)

Geological data generated by the Victorian Geological Survey, latterly Geoscience Victoria, is the backbone of the resource industry as it provides the information by which the assessment of prospectivity for minerals is made. The utilisation of the whole geological make up of the state is important and contributes to the overall understanding of mineral occurrence.

The work carried out by GSV under the VIMP program allowed Victorian geology to be put into a context which enabled modern geological theory to be applied. This has had a number of benefits as it has:

- revealed the considerable mineral potential in Victoria to explorers all over the world;
- created a geological framework that serves as a starting point for delineation of exploration targets and prospects; and
- improved the perception of Victoria as a place to explore.

Continuing programs of this nature are recommended.

The DPI hosts the GeoVic on-line mapping service which is available to the public via the world wide web. This can be a very useful tool to identify planning, tenement and environmental information in relation to exploration activities. Whilst the software program works reasonably well in its current form, it is now somewhat dated, and would benefit from a more modern redesign to improve user-friendliness and more importantly provide links to other mapping services such as DSE’s biodiversity mapping software.

The expectation of government is that it will provide a stable, workable and transparent regulatory environment and that it will supply “geological infrastructure” through programs generated within Geoscience Victoria.

Attempts by government to prescribe the commodities sought or the methods, by which mining and exploration take place, inhibit mining development within the state.
h. Opportunities to increase net benefits from Victoria’s minerals and energy earth resources and provide for self-sufficiency in low cost energy and extractive materials, consistent with economic efficiency

There are significant benefits for the State associated with a successful minerals and energy earth resources sector which includes an increase in employment and economic activity in rural areas. This can be of particular benefit in times of drought or agricultural hardship. This will also stimulate flow-on benefits to the metropolitan area as the distribution and administrative hub and through a diversified taxation base.

Providing an environment where mining is an accepted land use and embracing the fact that mining activities enable multiple and sequential land use in a given area, rather than being seen as exclusive and permanent development of the land, has the potential to deliver significant benefits to regional economies.

The ability to develop a sustainable mining industry in the state is rooted in the active encouragement of exploration and mining on all scales from prospecting up to operations with multi-million dollar production and revenue.

The government has a role to play in promoting the benefits of a successful mining sector and in educating the general public in the value of the industry to the state.

In a state which already has a significant education industry, and good regional transport, there is scope to locate mining-related university and training facilities within some of Victoria’s mining centres. The facility at Ballarat could be enhanced, and centres could also be established in the Latrobe Valley and Bendigo. There is potential for the latter to develop a world-class GIS and mapping facility.

i. Consideration of the costs and benefits of Greenfields mineral exploration (economic, social and environmental) and opportunities to improve the management of potential conflicts between exploration and other land uses.

Greenfields mineral exploration offers regions a broad range of benefits including employment of local people and the establishment of local or regional businesses to service the programs. Examples include drilling companies, assay laboratories and specialised equipment suppliers. Such activities invariably broaden the range of employment in these areas using the existing skill base and assists in balancing local economic cycles.

The potential for conflict between exploration and other land uses is largely based on a misunderstanding of landowners’ rights, perceptions about the impact of exploration activities and fears about the establishment of socially intrusive mining activities.

The vast majority of exploration activity carried out in Victoria leaves no footprint and is subject to stringent rehabilitation requirements. Therefore, environmental impacts associated with exploration activities are generally negligible or at least temporary. Experience indicates that stakeholder concerns are usually in relation to the potential for a mine to be developed at an exploration site, which may be in conflict with other land uses such as agriculture, residential or environmental values.

The State Government has an important role to play in promoting the benefits of a responsible exploration and mining industry and in providing the public with education in relation to landowner rights as well as dispelling myths and perceptions about the industry. In some cases, certain information provided by ‘the government’ can be far more effective than information provided from exploration companies or from within the industry.