



MINERALS COUNCIL OF AUSTRALIA

SUBMISSION ON THE EXPOSURE DRAFT OF THE TAX LAWS AMENDMENT (RESEARCH AND DEVELOPMENT) BILL 2010

FEBRUARY 2010

The Minerals Council of Australia is the peak industry organisation representing Australia's exploration, mining and minerals processing industry, nationally and internationally, in its contribution to sustainable development and society. The MCA's strategic objective is to advocate public policy and operational practice for a world-class industry that is safe, profitable, innovative, and environmentally and socially responsible attuned to its communities' needs and expectations.

MCA member companies produce more than 85 per cent of Australia's annual minerals output, and will account for about 60 per cent of Australia's merchandise exports in the year to June 2009.

The minerals industry recognises that its past success and future prosperity is dependent on a sound and expanding national economy, an educated and cohesive society and a sustainable natural environment.

For this reason, the minerals sector supports public policy settings aimed at the following objectives:

- sustainable economic growth characterised by low inflation, low interest rates, fiscal prudence, and a skilled and productive workforce;
- a sound, fair and stable society, where effort is encouraged and rewarded and a helping hand extended to those in need; and
- a sustainable natural environment, reflecting national consistency and balance in policy settings.

The MCA recognises that the future of the Australian minerals industry is inseparable from the global pursuit of sustainable development. Through the integration of economic progress, responsible social development and effective environmental management, the industry is committed to contributing to the sustained growth and prosperity of current and future generations.

The Australian minerals industry is an industry of considerable size and economic and social significance, benefiting all Australians both directly and indirectly.

The mining and minerals processing sector:

- underpins vitally important supply and demand relationships with the Australian manufacturing, construction, banking and financial, process engineering, property and transport sectors;
- has contributed over \$600 billion directly to Australia's wealth over the past 20 years;
- is in the top five producers of most of the world's key minerals commodities, including
 - the world's leading producer of bauxite, alumina, rutile, ilmenite, zircon and tantalum;
 - the second largest producer of, uranium, lead, zinc and lithium;
 - the third largest producer of gold, diamonds, iron ore, manganese, nickel and niobium;
 - the fourth largest producer of black coal and silver; and
 - the fifth largest producer of aluminium, brown coal and copper.
- directly and indirectly employs some 320,000 Australians, many of whom are in sparsely populated, remote and regional Australia; and
- is responsible for significant infrastructure development – since 1967, the industry has built 26 towns, 12 ports and additional port bulk handling infrastructure at many existing ports, 25 airfields and over 2,000 kilometres of railway line.

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EXECUTIVE SUMMARY

The proposed reforms to Federal Government's research and development support run the risk of damaging Australia's reputation as a world leader in mining innovation.

In the process of revamping the present tax arrangements, and despite assurances that the mining industry was not being targeted through the changes, the exposure draft legislation released last December narrows definitions and introduces complex and prescriptive rules that will significantly limit eligible claims for the tax credit in large R&D projects typical for the mining sector.

The proposed draft has serious policy and structural flaws. Measures being introduced increase complexity and uncertainty. As such they are likely to be counterproductive and lead to a significant reduction in business expenditure in research and development.

The Minerals Council of Australia (MCA) regards innovation as crucial to the success of the industry in an increasingly competitive world, where capital is increasingly globally mobile and new mineral deposits typically involve lower grade deposits in less accessible areas. It is essential that mining companies be innovative, nurture a culture of innovation and take the necessary risks that innovation entails. No company can escape that requirement.

The critical issue here is whether policy assists or hinders the investment at the point of making a decision to invest. A policy that offers no certainty at the point a reasonable investment decision is made makes no contribution to the expansion of R&D.

This critical issue forms part of a more general consideration: the extent to which policy support for R&D in general improves the breadth and scope of innovation overall, not just for the marginal investment decision.

The objectives of the draft legislation, as identified by the Treasurer, the Hon. Wayne Swan MP and the Minister for Innovation, Industry, Science and Research, Senator Kim Carr in the accompanying media release on the Exposure Draft and Explanatory Memorandum released in December 2009, are that the new R&D Tax Credit:

1. Is more generous with better incentives;
2. Is more predictable with more certainty for businesses;
3. Is less complex with reduced Government red tape;
4. Implements part of the broader Government agendas on productivity and innovation;
5. Will provide beneficial outcomes to Australian businesses, workers and investment in R&D; and
6. Has been prepared in a way that takes on board the views of stakeholders.

In the MCA's view, the measures fall well short of achieving any of the six objectives - they will discourage rather than encourage Australian business expenditure on research and development and will do little to assist both small and large businesses to be more competitive or to meet the challenges of climate change and globalisation.

The draft legislation significantly restricts what constitutes eligible R&D, alters the nature of the R&D tax benefit available by the introduction of the 'augmented feedstock rule' and related expenditure provisions (including 'expenditure not at risk' and the 'on own behalf' rules) and increases compliance time and costs. The calculation of the expenditure adjustments is complicated and open-ended and the available benefits can only be determined after the market value of the R&D can be assessed. It is an approach that ultimately rewards failure and renders the benefit irrelevant for larger-scale R&D. The intent of the draft law is contrary to Australian R&D spend across all industries, which ABS data indicates only 6 per cent of such spend is on basic research, with 94 per cent spent on applied research.

We note with concern that the draft exposure bill has ignored virtually all publicly available submissions in the consultation phase to date.

The exposure draft proposes a definition of 'core activities' requiring both innovation *and* high levels of technical risk to be regarded as eligible. At present the definition requires that activities be innovative *or* risky. Such a definitional change has already been rejected by the Parliament in 2001 because of its potential adverse impact

on support for genuine R&D. As Labor Senators noted at the time in a report on a proposed similar change, it was of concern that a project that was genuinely innovative might not be eligible because it was not technically risky. Similarly, the Labor Senators noted that it would be anomalous for a project which is an advancement of a mining process, using a known concept or an accepted methodology, but where the outcome is highly risky, to be ineligible. It would have a high level of technical risk, but it would not be innovative in terms of that activity.

The MCA's view is that the proposed measures will significantly reduce support for business expenditure on research and development (BERD) and will lead directly to a fall in BERD levels. Such falls have a long term effect on innovation spending. Following 1996 when funding was cut to the program as then constituted, total BERD took over five years to recover, and then only with additional measures. The net effect of the proposed R&D Tax Credit is to provide compensation after-the-fact for narrowly-defined R&D that fails to generate a sufficient market value. The planning value of such a Credit is negligible.

Australian mining is a world leader in innovation. It provides substantial investment into research and development, far in excess of its share of the economy. Australian Bureau of Statistics figures for 2007/8 showed mining (which accounts for 8 per cent of the economy) made up 22.8 per cent of total research and development spending. The mining industry's share of tax concessions in 2007/8 was reported by the Productivity Commission as \$154 million out of a total spend recorded by the ABS of \$3.28 billion – or 4 per cent of the total sector's total spending on R&D.

While the size of the scheme has grown, the minerals sector's *proportion* of taxpayer support under the scheme, as measured by the Productivity Commission's annual trade and assistance review, has declined over the past three years.

The MCA, in its submissions to Government before the release of the Bill, noted that Treasury had provided no material to suggest that mining industry claims were not genuine R&D. This remains the case with the release of the draft legislation.

Mining R&D claims often do appear large because of the scale of the operations and the fact that pre-production or trial runs are not always possible to separate from the mine. However the claim generally represents only a fraction of the total cost of operations over the mine life, and before considering the economic add on benefits flowing from the mine. In some situations, solutions cannot be developed in a test laboratory, due the scale and size of the test matter or work environment. This is a fundamental point in understanding the effect of the proposed changes on the mining sector.

Many of the changes are geared to limit large-scale R&D, which is unavoidably undertaken in the production environment, and reward companies that conduct R&D outside their normal operating environments, or where there is no immediate market value created by the R&D. Companies do not have "spare disused or trial mines" to conduct laboratory type research.

The proposed changes run counter to the Government's stated intention of boosting innovation in Australia. The result will be a much more complicated program with a higher compliance burden and a reduced incentive generated at a critical juncture - the planning stage of R&D projects. The resulting harm on Australia's business expenditure on R&D and international competitiveness will be significant.

The MCA understands the Federal Government's desire to ensure the scheme is effective and efficient and welcomes the stated policy objective to maintain the significant, \$1.4 billion of support. Noting that approximately \$500m of this \$1.4bn program, in the form of the premium 175 per cent incentive, is to be removed, the MCA contends that less drastic changes can be adopted to meet the Government's 2009 Budget objectives for innovation.

Therefore the MCA contends that the Federal Government needs to take more time to get the policy and detail right. The MCA stands ready to engage with government and develop proposals that meet the goal of boosting innovation within an affordable scheme.

1. THE MINING SECTOR AND RESEARCH AND DEVELOPMENT

The minerals industry is a major force in innovation in Australia. Today's modern minerals industry considers its future inseparable from the global pursuit of sustainable development. This approach is founded on five key platforms:

1. that the safety and health of its workforce and the surrounding community is its number one value and priority commitment; not subordinate to productivity, and not a factor of competitive differentiation;
2. that corporate social responsibility is not an adjunct to the business – it is the business. The core function of the minerals industry is to convert natural endowment to societal capital, and that can only be achieved sustainably when there are real mutually beneficial considerations of the environment, host communities, the rights and interests of Indigenous peoples and shareholders;
3. that the intergenerational benefits to communities and the nation as a whole of natural resource development should endure across generations and extend beyond the life of mine;
4. that the industry should aspire to continuous improvement and not merely regulatory compliance; and
5. that comparative advantage does not automatically equate to competitive strength – there is no guarantee that Australia's natural endowment of resources is alone sufficient to attract the necessary investment of global companies supplying converging global markets.

This commitment in practice places the industry at the vanguard of industry application of sustainable development.

Australia has long enjoyed a “comparative advantage” in the development of its endowment of geological wealth. Our ability to undertake mining and minerals processing activities and sell product to overseas markets is reflected in the large trade surplus (value of exports minus value of imports) we run in mineral commodities. However, we cannot take that for granted.

To fully realise its growth prospects, the minerals industry needs to be safe, globally competitive, socially responsible and trusted, innovative in technology, processes and systems, and environmentally responsible.

As in other economic activities, the outcomes of R&D are vital to maintaining the international competitiveness of mining and minerals processing activities in this country. Minerals companies must therefore continually find ways of doing things better and more cheaply and develop means to process lower grade ores, often in less accessible / deeper underground areas where cost structures and risk factors are both higher. This requires continual advancement in exploration, mining and processing technologies.

Australia's minerals sector is acknowledged as being at the forefront of harnessing new technology (including biotechnology, information and communications technologies, e-commerce, “high tech” equipment, remote sensing, satellite imagery, airborne magnetic surveying, open pit and underground mining methods etc). In addition, Australia's annual exports of high technology mining goods and services already exceed \$2.5 billion. More than 60 per cent of the world's mines use software developed in Australia.

Furthermore, to retain its competitiveness, the minerals sector also relies on the economic efficiency of the sectors providing it with key inputs to production.

Australian mining is a world leader in innovation. It provides substantial investment into research and development, far in excess of its share of the economy. Australian Bureau of Statistics figures for 2007/8 showed mining (which accounts for 8 per cent of the economy) made up 22.8 per cent of research and development spending. The mining industry's share of the R&D concessions in 2007/8 was measured by the Productivity Commission as \$154 million out of a total spend recorded by the ABS of \$3.28 billion – or 4 per cent of the mining sector's total spending on R&D.

The industry also makes a sizeable contribution to pure research and basic strategic research, with \$172 million in spending in 2007/8. Pure and basic research makes up about 6 per cent of the sector's BERD, with the rest going to applied and experimental R&D. This is in line with the national average.

While the size of the scheme has grown the minerals *proportion* of the concession (125 per cent and the premium 175 per cent) has declined over the past three years and is lower than the proportion five years ago, based on the Productivity Commission's annual trade and assistance review. The mining sector is not over represented in the scheme.

In addition, the minerals industry has long argued that ABS statistics do not capture the contribution of minerals related R&D to commercialisation in existing industries like mining and minerals particularly the contribution to exports, the value of using and generating R&D for commodity products, the linkages to small service providers and universities and the understanding that in a knowledge based industry like mining hi-tech also resides in the highly skilled workforce.

A significant proportion of R&D in the minerals sector and elsewhere in the economy is subject to the industrial context. While new products are invented from time to time, the emphasis is more on process innovations aimed at reducing costs to remain competitive, or now being able to extract minerals previously considered uneconomic due to new and innovative processes. Typically, R&D is linked with the need to improve cost structures. These aim to achieve either:

- A reduction in plant design/project capital costs and/or
- A reduction in operating or "campaign life" costs.

In addition to R&D transferred within the sector itself or from other sectors, there are also significant areas where mining and minerals processing R&D benefits the nation through spillovers to other industries. These include:

- Environmental and rehabilitation applications
- Waste management
- Manufacturing
- Building and construction
- Basic research into process technology & geological theories (eg ground penetration and geological and/or geochemical survey techniques).

It is well recognised from a technical point of view, that minerals process solutions developed in the test laboratory and in small-scale (pilot plant) trials, often do not work as expected in scaled-up versions of processes. Indeed, the majority of research and development activity cannot be modelled in laboratory and pilot plant environments due to often unique mine site rock and mineral characteristics. This activity needs to continue in scaled-up plants and in operational mining trials to enable fully developed process solutions to be achieved.

Another set of circumstances is where a research and development program is dedicated to creating a major step enhancement in the existing state of a particular technology. In this situation, a plant or some part of the plant may provide integral and dedicated support to the particular research and development program.

Constant innovation has provided the Australian industry with the ability to grow new markets and respond quickly to changing markets. This fleet footedness has allowed it to grow by increasing its share of the global minerals market.

The huge scale of this growth has been driven by global demand, and Australia's ability to respond has been achieved by remarkable innovations in technology, process improvements, organisation and education and training. These innovations have been augmented by equally impressive changes in the industry's management and workplace cultures and practices, with respect to health, safety, environment and community relations – especially with indigenous communities – and the broader issues of sustainability. In these areas the Australian minerals industry is a global leader.

In less than forty years the minerals industry has changed almost beyond recognition in scale, technology and culture. These changes have all been directly dependent on constant innovation.

Innovation Minister Senator Kim Carr in 2008 summed up the sector's contribution to research and development:

Australia's mining industry is one of the most technologically advanced in the world. It is a major exporter of mining technology and services. Mining these days is a knowledge-based activity, using advanced ICT for everything from ore body evaluation, 3-D blast and mine design, mineral sampling, seismic monitoring and geological sensing, through to managing data and monitoring the condition of equipment.¹

Senator Carr added that mining innovation was a key driver of industrial activity in other sectors of the economy:

It is surely no accident that manufacturing is booming in Queensland and Western Australia, the two states richest in minerals resources.²

The goal of the legislation is "boosting investment in research and development, supporting jobs and strengthening Australian companies as they continue to seize new opportunities during the economic recovery." Unfortunately, the draft exposure bill has ignored virtually all publicly available submissions in the consultation phase to date.

The legislation needs to be recast to be in line with the Government's stated Innovation policy objectives.

¹ Senator the Hon. Kim Carr, Minister for Innovation, Industry Science and Research, *Address at the launch of Minerals Down Under National Research Flagship*. Canberra, 27 May 2008.

² Ibid

2. THE DRAFT EXPOSURE BILL

On 18 December 2009, the Federal Treasurer and the Minister for Innovation, Industry, Science and Research (IISR) released Exposure Draft (ED) legislation and Explanatory Materials (EM) introducing a new Research and Development (R&D) Tax Credit (the Credit). The draft legislation seeks to introduce three major measures concerned with the new R&D tax incentive:

1. The Business Expenditure on R&D (BERD) Support Measures – The measures to introduce the 40% and 45% Credit;
2. The Definitional Measures – The measures to tighten the eligibility criteria for the Support Measures to ensure that the program better targets genuine R&D; and
3. The Compliance Measures – The measures to enable the joint administration of the program by the Australian Taxation Office (ATO) and AusIndustry.

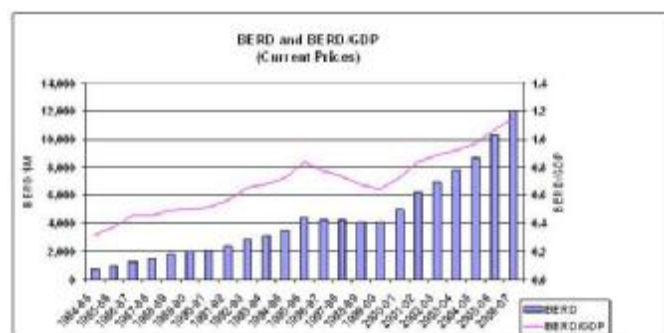
This submission will focus largely on the Definitional and Compliance Measures. In the MCA's view, the Definitional Measures are structurally flawed and will fail to achieve the aims of Government and the needs of business and the Compliance Measures are inefficient, inappropriate and are likely to compound the administrative difficulties associated with the current R&D Concession.

The objectives of the draft legislation, as identified by the Treasurer and the Minister for Innovation, Industry, Science and Research in the accompanying media release on the Exposure Draft and Explanatory Memorandum, are that new R&D Tax Credit:

1. Is more generous with better incentives;
2. Is more predictable with more certainty for businesses;
3. Is less complex with reduced Government red tape;
4. Implements part of the broader Government agendas on productivity and innovation;
5. Will provide beneficial outcomes to Australian businesses, workers and investment in R&D; and
6. Has been prepared in a way that takes on board the views of stakeholders.

In the MCA view, the measures fall well short of achieving any of the six objectives - they will discourage rather than encourage Australian BERD and will do little to assist businesses to be more competitive or to meet the challenges of climate change and globalisation.

The effects of ill-considered change can be profound. The deliberate restriction of the scheme in 1996 saw BERD spending fall for five years, recovering only with changes to the scheme. This experience should not be repeated.



Source:

<http://www.innovation.gov.au/Section/AboutDIISR/FactSheets/Pages/BusinessExpenditureonResearchandDevelopmentFactSheet.aspx>

The draft legislation significantly restricts what constitutes eligible R&D, alters the nature of the R&D tax benefit available by the introduction of the 'augmented feedstock rule' and related expenditure provisions (including 'expenditure not at risk' and the 'on own behalf' rules) and radically alters the compliance regime. The calculation of the expenditure adjustments is complicated and open-ended and the available benefits can only be determined after the market value of the R&D can be assessed.

The draft law seeks to only reward "laboratory type" pure or basic research, with no commercialization objective. This intent is contrary to Australian R&D spend across all industries, which ABS data indicates only 6 per cent of such spend is on basic research, with 94 per cent spent on applied research.

The 2009 May Budget announced that the program would be designed on the basis that it will be revenue neutral for the next four years (\$1.4 billion per annum), yet there is still no publicly released modelling of the effects of the raft of restrictive changes associated with the proposed Credit, nor was the EM accompanied by the customary Revenue Impact Statement. Noting that approximately \$500m of this \$1.4 billion program, in the form of the premium 175 per cent incentive, is to be removed³, the MCA is adamant that less drastic changes can be adopted to meet the Government's 2009 Budget objectives for innovation.

The following analysis considers specific concerns with the details of the Exposure Draft and the Explanatory Memorandum.

³ Treasury FY09/10 estimate of R&D program

3. SPECIFIC CONCERNS

3.1 Definitions

Considerable novelty and high levels of technical risk...

The September 2009 Treasury Consultation Paper raised the possibility of changing the definition of 'core activities' from its current form so that they would need to involve both innovation *and* high levels of technical risk to be regarded as eligible. Such a definitional change has already been rejected by Parliament in 2001 because of its potential adverse impact on support for genuine R&D. As Labor Senators noted at the time in a report on a proposed similar change, it was of concern that project that was genuinely innovative might not be eligible because it was not technically risky. Similarly, the Labor Senators noted that it would be anomalous for a project which is an advancement of a mining process, using a known concept or an accepted methodology, but where the outcome is highly risky to be eligible. It would have a high level of technical risk, but it would not be innovative in terms of that activity.

The ED also changes the definition of the first element – 'innovation involving appreciable novelty' becomes 'involves considerable novelty'. The change from "appreciable" to "considerable" is subjective and breaks the connection to understood definitions and legal precedent, especially the Unisys decision on the meaning of "appreciable" (AAT decision N95/1263). It is not clear whether this change is meant to be the same, a greater or a lesser test of novelty. As there is no measure of what considerable or appreciable novelty is, and no way of accurately measuring degrees of novelty, unintended consequences are likely to result.

Splitting R&D Activities into Core and Supporting Activities and Related Costs...

Supporting activities are currently included as part of R&D only if they are directly related to the core R&D activity. That is, they are necessarily incurred as part of the R&D project. Currently there is no need to separate the activities or to separately cost them because all are part of eligible R&D activities. Attempting to distinguish between the two sets of activities for claim purposes is very difficult and compounded in projects that extend beyond a year-end and by projects where an activity may be core during one set of experiments and supporting in another, all within the same R&D project.

This will result in significant additional compliance burdens (both in time and cost) without making the program better able to support genuine R&D, adversely impacting both large organisations responsible for complex technical processes and on single project SMEs.

Dominant purpose test...

In addition to the added burden of having to split activities, those deemed to be supporting will need to pass another new eligibility test – a dominant purpose test. Where an activity is performed as a necessary part of a legitimate R&D activity but also for another purpose that is regarded as more important, then the R&D activities will no longer be eligible.

This measure will increase uncertainty because a taxpayer may self-assess an activity's dominant purpose differently from a Government assessor. This may put a well intentioned taxpayer who may be ultimately proved correct in dispute with the ATO or AusIndustry in a way that is not currently possible.

Expenditure not at risk provision...

The replacement of the Section 73CA "Guaranteed Returns To Investors" provision to prevent syndication and similar financing arrangements with the much less constrained "Expenditure not at risk" provisions (s 355-405) opens up the possibility of the type of unintended consequences considered in the recent ATO discussion paper. These unintended consequences were largely rejected on the basis of wording in s 73CA that has been removed from s 355-405. The wording of the new provision does nothing to clear up the confusion in the ATO paper between who ultimately bears the risk and incurs the R&D expenditure with a sales contract for the output of R&D

activities. There is no need for the inclusion of the 'expenditure not at risk' provision, given that the concept of 'on own behalf' has been retained.

3.2 Certainty and the "reward for failure"

The 'Augmented Feedstock' proposals discourage BERD, punish success and promote failure...

The proposed 'augmented feedstock rule' goes way beyond the current feedstock offset which removes the R&D Concession from the costs of materials and goods made or acquired in processes prior to the R&D activities and the process energy inputs into these activities unless a loss is made on the costs of these materials, goods and energies. The augmented feedstock rule proposed is essentially a commercial return clawback. This will eliminate a great proportion of legitimate R&D carried out by business. It will punish successful R&D and arguably encourages R&D that is likely to fail.

Of all the proposed measures, this will have the most significant impact on reducing BERD in Australia irrespective of what definition of R&D applies. The restrictive impact of the augmented feedstock provisions would apply equally if the definition of R&D had been widened from the current version or had remained the same.

The commercial return feedstock clawback is highly complicated. It relies on establishing a market value of the feedstock output and it makes the valuation of the R&D benefit an *ex-post* tax calculation. Currently *ex-post* tax calculations are restricted to the 175% premium amount.

The current 'raw materials and energy' feedstock exclusion is limited to the year of the R&D activity whereas the examples in the EM demonstrate the potential for proposed feedstock rules to impact later years. The current rules do not eliminate any R&D expenditures except those associated with raw materials and energy whilst the new rules can eliminate all genuine R&D expenditure (including depreciating asset expenditure) except conceptual design.

As with the current R&D Premium rules, the proposed rules would prove difficult to apply to complex long processing streams. Establishing a market value for an intermediate product at the time of its production can be problematic when the R&D activity does not produce a completed saleable product. Equally, the EM fails to be explicit in recognising and allowing for the existence of separate upstream and downstream sets of R&D activities. For example, the feedstock rule should not exclude either R&D project where there is an R&D project in an earlier stage like mining or basic product manufacture and another R&D project concerned with ore processing or finished goods manufacture.

In its application, the augmented feedstock rules will disproportionately disadvantage R&D that must be done using existing processes and production facilities. Among the most disadvantaged will be SMEs who are unable to afford and use pilot plants or separate laboratories. Others affected include resource and manufacturing R&D projects that by necessity use large-scale assets. Process improvements to boost competitiveness, reduce carbon, water and other environmental impacts will be similarly discouraged. The MCA contends that the augmented feedstock rules must not be enacted.

Typical minerals processing plant projects require extensive trials developed and conducted with years of planning and modification. Similar, experimental programs, such a robotics and remote control machinery require extensive testing to ensure safety.

3.3 Administration

The increased powers of review by AusIndustry on registration and other compliance issues

In general, the proposed overhaul of the compliance measures is positive. The replacement of Part IIIa with the proposed Part III is not too dissimilar to the current system. The elimination of the overall planning requirement

whilst retaining a view that the experimental documentation demonstrates planning should improve the process. The refocussing of documentation requirements on registration is welcome.

The increased power to reject registrations is, however, a major concern. To allow the addition of a process that allows activities assessed by the taxpayer to be re-assessed purely on the contents of a submitted form is counter to the self-assessment philosophy. This uncertainty can only be overcome by increasing the effort required to prepare registrations, thereby increasing compliance costs. The inclusion of processes to allow the Board to seek additional information before making such a re-assessment does not address this concern because this is not a required step. Once a registration rejection decision has been made under this proposed legislation, the taxpayer, ATO and AusIndustry are already in a form of dispute prior to any risk review, audit or meeting between the parties to determine if the difference in views are validly held.

The expansion of the registration process to split and cost R&D activities separately as Core or Supporting will add greatly to the compliance costs.

The proposed legislation fails to give certainty to the taxpayer regarding the review processes. In a number of sections (e.g. s 27C(4)), the Board is not required to meet the requirements of the legislation yet validity of its decision stands. In the review process under s 30D, the Board is required to make a decision within 90 days of a request to review a reviewable decision. The proposed legislation allows for the Board to not review the decision at all in the 90 days – not even to confirm its original assessment. After 90 days, if the taxpayer has not yet made an application to the AAT, the Board can still make a decision. The changes introduce an open-ended aspect to the review processes.

ATTACHMENT A: SPECIFIC ANALYSIS OF MINING EXAMPLES

The Explanatory Memorandum provides a series of examples of the operation of the R&D Tax Credit when applied to R&D activities undertaken by mining companies. In the MCA's view these examples add little value as they do not provide an accurate reflection of the drivers or realities of R&D undertaken by the mining industry. Furthermore, the application of the proposed rules in the EM examples is contradictory in a number of instances. Our comments on the examples are as follows:

1. *Boulevard Mining*

In Example 2.3, *Boulevard Mining I*, the EM argues the output from the "normal" bulk extraction phase" needs to be treated differently to the output from the "more considered fine extraction phase". If, as this example states, both outputs are mixed and sold, it is unclear exactly how a company would calculate the value of these different outputs. Whilst the example states that each lump of coal is a separate output, in reality, no coal producer can or will track each lump of coal excavated.

Boulevard Mining II (Example 2.4) is used to illustrate the distinction between what are considered experimental activities conducted for the purpose of producing knowledge versus those that attempt to resolve problems in applying knowledge. The EM argues that although "a degree of trial and error is required and further useful knowledge might be gained in the process" the activities undertaken by *Boulevard Mining II* do not constitute R&D activities because they are purely the implementation of technology. The technical justification for this distinction is misguided and without precedent from a scientific perspective. Where current knowledge and/or practices are inadequate, then experimental activities *will* be required to achieve the desired outcome. Whether this is viewed as producing new knowledge or resolving inadequacies within the current realm of understanding is a matter of semantics and should not be a basis for determining eligibility.

Furthermore, it is hard to see how the *Boulevard Mining II* example is any different from the example in *Boulevard Mining III* (Example 2.6). In *Boulevard Mining III*, the company was unsure whether the truss design could be used to significantly increase widths in "crumbly coal" seams. In both examples, the company was unsure of the answer to the technical questions posed and therefore was required to undertake experimental activities to resolve the technical uncertainty.

Boulevard Mining IV (Example 2.7) concerns the eligibility of road construction, access tunnel construction and construction of "a lengthy railway spur line to the mine and coal train loading facilities". The example provides two scenarios that leave the question of eligibility apparently revolving around the company's "mainly envisaged" use which provides little guidance as to how the dominant purpose test can be applied to various fact situations. The example certainly contemplates a second scenario where such activities could be found to be supporting R&D activities without providing any detail of what such a scenario might involve.

2. *Mimic Mining*

The *Mimic Mining* (Example 2.5) example states that it "decides to conduct its own experiments, rather than purchase the knowledge from Boulevard Mining".

This example is of particular concern as it suggests that, if certain knowledge exists, any activities to develop such knowledge by conducting one's own experiments fail the test for novelty. Most notably, in a commercial environment, a rival company may not be willing to on-sell the knowledge gained through R&D activities in order to maintain a competitive advantage.

Furthermore, a claimant company may be totally unaware that any particular knowledge or process may exist at the time of the R&D as the results may not have been publicised.

Finally, the notion that Mimic could “purchase the knowledge” from Boulevard is misdirected as mining companies do not customarily sell a mining process because of the limited circumstances in which a process can be applied in a different mining environment.

Notwithstanding, even if the results were commercially accessible, the experimentation related to the application of the new truss design in the *Mimic Mining* scenario may need to be significantly different to what was conducted at Boulevard’s mine sites due to local circumstances such as prior mine history (e.g. proximity of old workings), ore body orientation, applicable mining methodologies, available equipment and numerous geotechnical factors. These differences would present a novel and technically risky application of the truss technology in a similar fashion to *Boulevard* applying the technology to a crumbly coal seam in the *Boulevard Mining III* example (Example 2.9) which is considered claimable. If these activities were not necessary to resolve technical issues then the need for costly and time-consuming experimental activities would be superfluous and not undertaken.

The uncertainty generated by the examples is underlined by the introductory wording attached to Examples 2.8 and 2.9. Example 2.8 is held to be ineligible even though it can be seen as applying known technology in locations involving “unique circumstances...faced in different contexts”. Example 2.9 is said to be eligible as it involves applying known technology in a “fundamentally different” location. There may be an instance where “unique circumstances...faced in different contexts” does not equate with “fundamentally different” but we cannot articulate one.

3. *Grandheap Mining*

The examples provided in relation to *Grandheap Mining* illustrate a preoccupation with the commercial purposes of activities. The examples seem to ignore technical considerations and look to the commercial reasons for undertaking work as the determinative factor in assessing eligibility. These examples seem to contradict logic from the previous examples and also provide little illustration of how companies undertake R&D activities in a commercial environment.

In *Grandheap Mining I* (Example 2.11) the experimental activities and removal of the overburden are stated to be eligible primarily because there is no commercial purpose to any of the work. This example loses sight of the fact that there is an overriding commercial purpose to the activities; that is to develop and implement, in a real world environment, ground vibration sensor technology to assist in optimising slope angles for overburden heaps. Companies would not undertake, nor commit any funding, to any experimental activities that did not ultimately have a commercial purpose.

The apparent logic in stating that the activities (testing and overburden removal) are eligible in *Grandheap Mining I* is that these are undertaken in a spare, abandoned mine and therefore there is no commercial purpose. The inference is that had there been a commercial purpose to the activities, the overburden removal would not satisfy the dominant purpose test because a commercial purpose would apparently always override a technical purpose.

Furthermore, this example bears little resemblance to commercial reality. Mining companies do not have spare mine sites (that have not already commenced to be rehabilitated) where they could conduct such experimental activities.

Grandheap Mining II (Example 2.12) is undertaken in a live production environment and therefore the business case of the activities is “a key consideration in determining whether the activities were primarily for other than the purpose of knowledge/improvements”. This example applies the PKI test in a different way to its application in *Boulevard Mining I*. Just as extracting the coal forms part of the core experimental activity in making the tunnel to test the truss design, so does the overburden removal to

test the vibration sensor technology to identify incipient heap instability. There is no rationale for proposing to treat these activities any differently.

In summary, these examples appear to suggest that the location of the R&D is the key determinant of how much of the project receives the R&D Tax Credit. A greater level of government support is said to be available for work done by companies in isolation from their productive capacity and assets. Given that innovation is commonly held to be the commercial application of ideas, this would seem to be a bizarre feature of the new R&D Tax Credit.