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TREASURY EXECUTIVE MINUTE

Minute No.

20 May 2010

Treasurer

MINING PROJECTS AND ROYALTIES IN QUEENSLAND

Timing: Your office has requested this briefing urgently.

Recommendation/Issue:

- That you note this briefing.

Noted Signature:...................................... ...../...../2010

KEY POINTS

- On 19 May 2010, your office requested information regarding mining projects and royalty rates in Queensland.
- Queensland currently has around 60 major development projects in the pipeline with start dates ranging between 2010 and 2018. The majority of these projects are in coal sectors. Information on Queensland's major development projects is at Attachment A.
- In 2007–08, the total value of commodities produced in Queensland was approximately $28.7 billion. This represents 24.5 per cent of the value of total Australian resource production. Further details are contained in Attachment B.
- The 2008–09 Queensland budget replaced the royalty on coal by introducing a two tier coal royalty, with a 7 per cent rate applying up to $100 per tonne and a new 10 per cent rate applying thereafter. This followed a change in 2002 that denied deductions for rail and transport costs when calculating the coal price subject to royalty thereby effectively increasing the royalties paid. The proposed changes to royalties on some commodities in Queensland are contained in Attachment C.
- Information regarding Coal Seam Gas is contained in Attachment D.
- A separate briefing is provided on BG Group.
- Details of the State royalty regimes as of 2007-08 are contained in Attachment E.

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ATTACHMENT A

MAJOR DEVELOPMENT PROJECTS IN QUEENSLAND

As at October 2009.

Coal

Project	Company	Stage	Expected Start Up
Blackwater Creek	Wesfamers	Under Construction	2010
Cameby Downs	Syntech Resources	Under Construction	2010
New Acland	New Hope Coal	Under Construction	2010
Carborough Downs	Vale	Under Construction	2011
Clermont	Rio Tinto	Under Construction	2010
Curragh	Wesfarmers	Under Construction	2011
Daunia	BHP/BMA	Govt Approval Received	2011
Ensham Bord & Pillar	Ensham Resources	Feasibility Study	2011
Hail Creek Expansion	Rio Tinto	Prefeasibility Study	2011
Olive Downs	Macarthur Coal	Feasibility Study	2011
Kestrel	Rio Tinto	Under Construction	2012
Grosvenor	Anglo Coal	EIS	2012
Middlemount 2	Macarthur Coal/Nobel Group	Feasibility Study	2012
Wandoan	Xstrata/Itochu/Sumisho	Feasibility Study	2012
Washpool	Aquila Resources	Feasibility Study	2012
Alpha Coal	Hancock Coal	Feasibility Study	2013
Belvedere	Aquila Resources/Vale	Prefeasibility Study	2013
Caval Ridge	BHP/BMA	Prefeasibility Study	2013
Kevin's Corner	Hancock Coal	Feasibility Study	2013
Waratah Gallilee	Waratah Coal	Feasibility Study	2013
Winchester South	Rio Tinto	Feasibility Study	2013
Wonbindi	Cockatoo Coal	Prefeasibility Study	2013

Woori	Cockatoo Coal	refeasibility Study	2013
Eagle Downs	Aquila Resources	EIS	2014
Lake Vermont	Jellibah Resources	Prefeasibility Study	2014
Middlemount 1	Macarthur Coal/Nobel Group	EIS	2010
Moranbah South	Anglo Coal/Exxaro	Prefeasibility Study	2014
Red Hill Underground	Aquila Resources	Prefeasibility Study	2014
Codrilla	Macarthur Coal	EIS	n/a
Dawson South	Anglo Coal/Mitsui	EIS	n/a
Ellensfield	Nebo Central/Vale	EIS	n/a
Ensham Longwall	Ensham Resources	Prefeasibility Study	n/a
Goonyella Riverside	BHP/BMA	Prefeasibility Study	n/a
Isaac Plains	Aquila/Vale	EIS	n/a
Millennium	Peabody Energy	Feasibility Study	n/a
Monto Coal 1	Burnett Coal/Macarthur Coal	Feasibility Study	n/a
Monto Coal 2	Burnett Coal/Macarthur Coal	Prefeasibility Study	n/a
New Acland	New Hope Coal	EIS	n/a

Coal Seam Gas

Project	Company	Stage	Expected Start Up
APLNG	Origin Energy/ ConocoPhillips	Under Construction	2010
Curtis LNG	BG Group	FEED	2013
Fisherman's Landing	Arrow Energy	EIS	2012
Gladstone LNG	Santos/Petronas	EIS	2014
Shell LNG	Shell	Feasibility Study	2014
Walloon	BG Group	Feasibility Study	2013

Bauxite

Project	Company	Stage	Expected Start Up
Aurukun	CHALCO	Feasibility Study	2011
Weipa Expansion	Rio Tinto Alcan	Feasibility Study	2013
Pisolite Hill	Cape Alumina	Prefeasibility Study	2014

Copper/Gold

Project	Company	Stage	Expected Start Up
Cloncurry Copper	Exco Resources	Feasibility Study	2010
Mungana	Kagara	Under Construction	2010
Agate Creek	Renison Consolidated Minerals	Feasibility Study	2011
Einasleigh	Copper Strike	Feasibility Study	2011
Ernest Henry Expansion	Xstrata	Feasibility Study	2011
Mt Carlton	Conquest Mining	Feasibility Study	2011
Roseby 1	Universal Resources	Awaiting Govt Approval	2012
Charters Towers	Citigold	Under Construction	2013
Mount Morgan	Norton Gold	Feasibility Study	n/a

Base Metals

Project	Company	Stage	Expected Start Up
Lady Loretta	Xstrata/Mineral Securities	Prefeasibility Study	2011
Dugald River	Minerals and Metals Group	Feasibility Study	n/a

Nickel

Project	Company	Stage	Expected Start Up
Gladstone Nickel Stage 1	Gladstone Pacific Nickel	EIS	2015
Gladstone Nickel Stage 2	Gladstone Pacific Nickel	Prefeasibility Study	2018
Lucky Break	Metallica Minerals	Feasibility Study	2010
Marborough Heap Leach	Gladstone Pacific Nickel	Prefeasibility Study	2013
Nornico	Metallica Minerals	Prefeasibility Study	2012

ATTACHMENT B

TOTAL MINERAL COMMODITIES ($m)									
	NSW	**VIC**	**WA**	**SA**	**TAS**	**NT**	**QLD**	**QLD as a % of Australian Total Mineral Commodities**	**Australia**
2001-02	7869	4617	23962	1722	577	2784	13675	24.77%	55206
2002-03	6797	4510	25301	1683	536	2470	12388	23.08%	53685
2003-04	6706	4396	24046	1756	630	1962	11740	22.91%	51236
2004-05	9197	5187	30626	2425	706	2883	16907	24.89%	67931
2005-06	11783	6082	39251	3270	1002	4042	26465	28.80%	91895
2006-07	12268	6163	49927	3410	1173	6047	27229	25.64%	106216
2007-08	13925	7553	56035	3916	1163	6097	28740	24.47%	117429

Source: ABS Catalogue Number 8155.0 (release date 1 December 2009)

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ATTACHMENT C

HISTORY OF QUEENSLAND ROYALTIES – MAJOR CHANGES

Year	Coal	BPM	Bauxite	Other	Comment
Pre 1974	Coal consumed in Queensland - $0.05/tonne, export coal $0.10/tonne	Profit based royalty applied to Mount Isa Mines Limited	Bauxite consumed in Queensland $0.05/tonne, export bauxite $0.10/tonne	Petroleum assessed royalty at 10% of wellhead value (wellhead value = sales revenue - allowable deductions) Range of nominal specific rate royalties for other minerals	The petroleum royalty regime has essentially remain unchanged to date.
1974	Domestic coal remained at $0.05/tonne. Export coal increased to 4% (Underground) and 5% of value (Open Cut)	Complex ad valorem system introduced for Mount Isa, effectively 4.5% for copper and 4% of lead, zinc and silver. 2% of proceeds or 5% of profits for other mines, whichever yielded the lower result	Export bauxite determined on basis of higher of three calculations, but generally prevailing at a rate of 10% of value. Domestic bauxite calculated at half the export rate per tonne		First major review of royalties with significant changes introduced in the next couple of years. Note, royalty applied to payable metal for Mount Isa and concentrate value for other producers.
1985		Royalty calculation for mines other than Mount Isa changed to "whichever is the greater" to ensure that some royalty was always paid to the Crown		Increases in specific rates for various industrial minerals	Amendments formulated in 1983, fully operational in 1985
1986				Increases in rates of royalty paid on mineral sands and silica, essentially 2% of value increasing to 5% of value	
1994	Coal royalty rate to be increased in a phased in manner to 7% of value by 2000. Domestic coal at 1% of value increasing annually by 1% to reach 7%. Transition arrangements applied depending on rail freight contracts	Royalty rate on lead, zinc and silver produced at Mount Isa reduced to 2.7% of the value of payable metal			
1996		Uniform arrangements with transitional components introduced for all base and precious metal producers. Election of fixed rate of 2.7% or 1.5% to 4.5% variable rate for 5 years depending on			

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		metal prices. Processing discounts for base metals			
1997	Replacement of *de facto* royalty component of rail freight with various base special royalties applying to various tonnage threshholds for mines terminating existing rail contracts. Applied to several BMA mines and later to Curragh				Effectively, the Department collected what was essentially the *de facto* component of rail freight instead of Queensland Rail, resulting in greater "transparency "of royalty collection
2000	All coal mines to pay flat 7% of value from July 2000 onwards, resulting in several mines paying concessional royalty (4% or 5%) for many years having their royalty increased by 40% to 75%				Announced in 1999 but fully operational from July 2000 onwards - royalty figure opposite is for 2000-01
2002	Rail freight (operating and capital contributions) and road transportation costs no longer deductible in the determination of value on which the 7% royalty is based				Change to policy introduced with effect from January 2002 onwards
2008	Two-tier royalty system for coal - 7% to A$100 per tonne, 10% thereafter. For example: Price <= $100 - 7.00% Price $150 - 8.00% Price $200 - 8.50% Price $250 - 8.80%	Announcement of withdrawal of fixed rate election from 2011 onwards. Consultation paper released in 2009 with new reference prices to apply for variable rates ranging from 2.5% to 5% (increased from previous minimum of 1.5% and maximum of 4.5%). Results of this review still to be announced	Domestically consumed bauxite to pay royalty at 75% of the calculated export rate per tonne as compared with 50% previously	Substantial increases in specific rates on minerals, essentially industrial type minerals. Increase in mineral royalty free threshhold, where applicable, from $30,000 to $100,000	Changes, introduced with 2008-09 State Budget, operational with effect from July 2008 - royalty figure opposite is for 2008-09

ATTACHMENT D

COAL SEAM GAS

Background

Coal seam gas (CSG) which is also know as coal seam methane, occurs naturally within coal deposits. In Queensland's major coal resource 'basins' there are many coal seams existing from close to the surface to those many hundreds of meters underground. Coal seam gas was formed when the coal itself was formed and has been held within the coal under pressure. The gas is largely composed of the gas methane which is also the principal component of natural gas. CSG generally has very little carbon dioxide content, compared to many natural gas deposits, although this is not always the case.

Methane gas is held in coal seams through a number of mechanisms, though principally through weak molecular surface bonding to the coal, called adsorbtion, which is maximised by a fractured or permeable coal offering greater surface area. A lesser effect is through the gas being dissolved in the water in the seam. Both retention mechanisms are promoted by pressure and so, as the pressure is relieved, the methane gas is released.

The adsorption process is highly efficient allowing for large quantities of gas to be held in a coal seam. The key to exploiting the CSG is in relieving the pressure. The coal seams are held under pressure by the static head of water, and so it is the removal of the water by pumping that is the key to gas release. The general approach is to drill a vertical well past the target coal seam and then placing a pump in the sump of the well. The coal characteristics determine the proximity of wells so that as the subterranean water table is lowered there is a mutual reinforcement. Once depressurised, gas will travel extensive distances through a coal seam to the vertical well. Where the coal is less permeable, a technique of in-seam wells has been developed, to provide a pathway through a seam to the vertical well.

Industry Growth

CSG production has grown quickly over recent years. Specifically, Queensland production in 2002-03 was around 27 petajouls (PJ). By 2008 this had grown to 133 PJ, which represents more than 80 percent of the Queensland gas market.

Proved and probable CSG reserve stood at 15, 714 PJ in 2008. Australia's extensive coal basin deposits contain large resources of CSG, particularly in Queensland and New South Wales. Estimates of gas-in-place in these deposits suggest that they will be proven to be larger than the combined conventional gas resources of Bass Strait, the Cooper Basin and the North West Shelf.

Further growth in this industry is expected with CSG being proposed as feedstock for an export liquefied natural gas industry based at Gladstone Queensland. Although, we are unaware of any CSG project anywhere in the world where the gas has been turned into LNG. However, as the world price for LNG is more than double the price received for gas in the Eastern States of Australia, there is plenty of incentive to develop the process.

State Royalties

At the present, CSG is taxed in Queensland in the same manner as petroleum, which is at a royalty rate of 10 per cent (ad valorem). Exemptions apply to flared or vented CSG, incidental CSG under a mining lease and CSG mined under a mineral hydrocarbon mining lease.

Tasmania taxes CSG at a rate of $24.00 per every $200 of value extracted at the well head. All other States have no CSG taxation arrangements.

Attachment D Comparison of Royalty Systems

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Coal (all types)	Open cut coal 7 percent of the ex mine value, underground coal 6 percent of the ex mine value and deep underground coal (coal greater than 400m), 5 percent of the ex mine value	From the Minerals Resources Development Act 1990, as of 1 January 2006, derived by multiplying $0.0588 per gigojoule of energy by [A+B]: where A is consumer price index number for the quarter ending on 30 June immediately preceding the F/Y for which the determined amount is being calculated; and B is consumer price index number for the F/Y ending on 30 June 2005	7 percent of value	Export - 7.50 percent value Non export - $2.39/ tonne escalated annually	Derived by multiplying $0.0270 per gigajoule of energy by [A+B]: where A is consumer price index in respect of relevant quarter; and B is consumer price index in respect of the quarter ending 30 June 2000	Coal is classed as a mineral and royalty on all minerals is subject to the Mineral Royalty Act (MRA). The Act sets a profit-based royalty at 18 percent of the "Net Royalty Value" (if Net Royalty Value exceeds $50,000) under the MRA	Profits-based royalty. (mine gate) (1) 1.6 percent on net sales plus profit component (1.6 percent only where net sales less than $100,000 p.a.) Maximum royalty limited to 5 percent of net sales	(1) as per Regulations 8-11 of the 'Mineral Resources Regulations 1995'
Crude oil, petroleum, condensate, LPG & LNG.	10 percent based on the net well head value. The net well head value is generally determined by deducting allowable costs from the point that a market value can be independently established for the petroleum product (usually the point of sale) back to the well head							
Gold & Silver	4 percent of ex mine value (mine mouth)	Gold - nil Silver – nil, if silver is a product of the gold recovery process, otherwise 2.75 percent of net market value	Fixed rate of 2.7 percent or variable ad valorem rate (1.5 percent-4.5 percent) as advised by Department each quarter applied to payable metal value. Rate applies to the revenue base less statutory exemption of $7,500 per quarter. (2)	Gold - 2.5 percent of value. (3) Silver - 2.5 percent of value.	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years. For Olympic Dam under the Roxby Downs Indenture Act, basic royalty is 3.5 percent of market value; a surplus royalty may be applicable.	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value".	As for coal	(2) producers elect either fixed or variable rate for a period of 5 years (3) the first 2,500 oz./p.a. is exempt
Copper	4 percent of value (mine mouth)	2.75 percent of net market value	Fixed rate of 2.7 percent or variable ad valorem rate (1.5 percent-4.5 percent) as advised by Department each quarter applied to payable metal value. Rate applies to the revenue base less $7,500 per quarter. A reduced royalty (50 percent) applies to the next $4m/p.a. Discount of 20 percent applies when processed in the State to 95 percent contained metal (4)	5 percent of royalty value for concentrates, 2.5 percent for metallic copper (for copper sold as nickel by product 2.5 percent of copper metal value)	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years. For Olympic Dam under the Roxby Downs Indenture Act – basic royalty is 3.5 percent of market value; a surplus royalty may be applicable.)	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value".	As for coal.	(4) producers elect either fixed or variable rate for a period of 5 years.

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Lead/ Zinc	Cobar zinc - as for copper. Broken Hill - 20 percent of profit with adjustments for grade of ore and mean depth of ore mined. Other S/L/Z - 4 percent of ex mine value (mine mouth)	2.75 percent of net market value	As for copper except processing discounts are 25 percent for lead and 35 percent for zinc	5 percent of royalty value for concentrates, 2.5 percent for metallic form.	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the *Mineral Royalty Act* at 18 percent of the "Net Royalty Value".	As for coal	No production in Victoria
Bauxite / Alumina	$0.35/tonne -bauxite $0.70/tonne - alumina (mine mouth)	2.75 percent of net market value	For bauxite mined for consumption outside the State royalty is: - a) 10 percent of value, or b) $1 per tonne, whichever is the higher The royalty rate per tonne payable on bauxite mined for consumption within the State is half the royalty worked out under the above provisions	Bauxite - 7.5 percent of value (alumina - 1.65 percent of value – rate specified in several State Agreement Acts)	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the *Mineral Royalty Act* at 18 percent of the "Net Royalty Value", except for Gove project where a special historical arrangement exists	As for coal	No production in Victoria
Silica	(5)	$1.43 per cubic metre	Currently 5 percent of value or $0.50/tonne whichever is the greater. Transition arrangements for 2005-06 with minimum of $0.70 per tonne. From 2006-07 onwards, $0.90 per tonne	$0.56/tonne from 1 July 2005 moving in equal increments to $0.80/tonne on 1 July 2009 (from 1 July 2010 subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	Industrial 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years Extractive minerals $0.35/tonne	Subject to the *Mineral Royalty Act* at 18 percent of the "Net Royalty Value"	Metallurgical, greater of $1.20 tonne or 5 percent of value, other uses $0.60/tonne	(5) silica is not defined as a mineral in NSW
Nickel	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	Fixed rate of 2.7 percent or variable ad valorem rate (1.5 percent-4.5 percent) as advised by Department each quarter applied to payable metal value. Rate applies to the revenue base less $7,500 per quarter. A reduced royalty (50 percent) applies to the next $4m/p.a. Discount of 20 percent applies when processed in the State to 70 percent contained metal	2.5 percent of value of contained nickel	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the *Mineral Royalty Act* at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Mineral Sands (6)	4 percent of F.O.B. value	2.75 percent of net market value	5 percent of the value of the concentrate	5 percent of royalty value. Ilmenite feedstock - $4.16/tonne escalated annually (ilmenite feedstock that is of a marketable quality, 3.5 percent of royalty value from 1 July 2005 with the rate moving in equal annual adjustments to 5 percent on 1 July 2008)	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years.	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	(6) applies to rutile, monazite, zircon and ilmenite
Kaolin	$0.50/tonne (mine mouth)	2.75 percent of net market value	Currently - $0.50/tonne 2005-06 - $0.75/tonne 2006-07 - $1.00/tonne	5 percent of royalty value (7)	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	$1.20/tonne (mine gate)	(7) unless an "extractive mineral lease" (EML) or "extractive mineral permit" (EMP) has been granted under the Mining Act (in which case no royalty is payable). Rental of an EMP or an EML is higher to compensate the lack of royalty
Limestone-Lime Earth	$0.35/tonne (mine mouth)	$1.43 per cubic metre	Limestone (when used for its chemical properties) - $0.30/tonne. Lime, earth - $0.25/tonne	Limestone (including limesands and shellsands) used for agricultural or construction purposes or as a neutralising agent $0.34 per tonne from 1 July 2005 moving in equal increments to $0.50/tonne on 1 July 2009 Limestone (including limesands and shellsands) used for metallurgical purposes $0.56 per tonne from 1 July 2005 moving in equal increments to $0.80/tonne on 1 July 2009 (from 1 July 2010 both rates subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	Industrial 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years. Extractive minerals $0.35/tonne	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value", if the material is used as a mineral and not as an "extractive" mineral product	Chemical and metallurgical: $1.20/tonne. Other Uses: $0.60/tonne (mine gate)	(8) Included under construction materials

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Salt	4 percent of ex mine value (mine mouth)	It is outside the scope of mineral, extractive and the petroleum legislations in Victoria	$1.00/tonne	$0.34/tonne from 1 July 2005 moving in equal increments to $0.50/tonne on 1 July 2009 (from 1 July 2010 subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index (a number of different rates are also contained in various State Agreement Acts for specific projects)	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years. Certain existing operations pay royalty under State or Crown Agreements	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	
Gemstone	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	2.7 percent of value after deducting $30,000	7.5 percent of royalty value	Currently not applicable but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value", unless produced by recreational fossicking which is exempt	As for coal	No production in Victoria
Magnetite	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	$0.50/tonne	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Bentonite	$0.70/tonne (mine mouth)	2.75 percent of net market value	Currently - $1.00/tonne 2005/06 - $1.40/tonne 2006/07 - $1.80/tonne	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Exempt from Act	As for coal	No production in Victoria

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MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Clay	Brick clay - $0.25/tonne. Pottery clay - $0.50/ tonne (mine mouth)	Fine clay 2.75 percent of net market value Building clay $1.43 per cubic metre	Clay shale - $0.25/tonne. Fireclay - $0.25/tonne. Pottery clay - $0.50/ tonne. Building brick, roof tile & glazed earthenware pipe clay - $0.25/ tonne	$0.34/tonne from 1 July 2005 moving in equal increments to $0.50/tonne on 1 July 2009 (from 1 July 2010 subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	$0.35/tonne	Exempt from Act	$1.20/tonne (mine gate)	(9) as kaolin in Victoria
Tin Concentrate	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	2 percent of value after deducting $30,000	2.5 percent of royalty value of tin metal (or 2.5 percent of contained tin metal value)	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years.	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value".	As for coal	No production in Victoria
Dolomite	$0.50/tonne (mine mouth)	2.75 percent of net market value	$0.25/tonne	$0.34/tonne from 1 July 2005 moving in equal increments to $0.50/tonne on 1 July 2009 (from 1 July 2010 subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value", if the material is used as a mineral and not as an "extractive" mineral product	Chemical and metallurgical: $1.20/ tonne, other uses $0.60/tonne (mine gate)	No production in Victoria
Diatomite	$0.50/tonne (mine mouth)	$1.43 per cubic metre	$0.50/tonne	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Exempt from Act	As for coal	No production in Victoria
Perlite	$0.35/tonne (mine mouth)	2.75 percent of net market value	$0.25/tonne	N/A	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Exempt from Act	As for coal	No production in Victoria
Peat	$0.70/tonne (mine mouth)	2.75 percent of net market value	2 percent of value after deducting $30,000	Nil	N/A under the Mining Act	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Phosphate	$0.50/tonne (mine mouth)	2.75 percent of net market value	Phosphate royalty formula per tonne of phosphate rock: $\$1 \times \frac{G}{3\ 3} \times \frac{Pcurr}{\$2\ .8}$, where G is the average P2O5 content of the rock for the period Pcurr is the average price in $A of Moroccan phosphate rock with 32.3 percent P2O5 content Minimum rate is $0.80 per tonne	N/A	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Magnesite	$0.70/tonne (mine mouth)	2.75 percent of net market value	$0.50/tonne	N/A	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for silica	No production in Victoria
Iron Ore-Iron Stone	$0.35/tonne (mine mouth)	2.75 percent of net market value	$0.35/tonne	Lump export - 7.5 percent FOB, fine export - 5.625 percent, beneficiated - 5.0 percent (a number of different rates are also contained in various State Agreement Acts for specific projects)	Minimum $1.10/tonne plus agreed adjustments delivered to steelworks ('BHP Indenture Act')	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Tungsten	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	2 percent of value after deducting $30,000	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Marble	$0.50/tonne (mine mouth)	$8.07 per cubic metre as dimension stone	$ 0.50/tonne	N/A	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years.	Exempt from Act	As for coal	(10) provided under construction materials for Victoria

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Chromite	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	$0.50/tonne	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years.	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Granite/ Sandstone	$0.50/tonne (mine mouth)	$1.43 per cubic metre (11)	$0.50/tonne	N/A	Dimension Stone 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years Extractive minerals $0.35/tonne	Exempt from Act	Building stone - $5/ cu.m. (mine gate)	(11) under Extractive Industries Development Act Provided under construction materials for Victoria
Calcite	$0.35/tonne (mine mouth)	$1.43 per cubic metre (12)	$0.25/tonne	N/A	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value", if the material is used as a mineral and not as an "extractive" mineral product	As for coal	(12) under Extractive Industries Development Act
Serpentine	$0.50/tonne (mine mouth)	$1.43 per cubic metre (13)	$0.25/tonne	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Exempt from Act	As for coal	(13) under Extractive Industries Development Act
Cobalt	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	Fixed rate of 2.7 percent or variable ad valorem rate (1.5 percent-4.5 percent) as advised by Department each quarter applied to payable metal value. Rate applies to the revenue base less $7,500 per quarter. A reduced royalty (50 percent) applies to the next $4m/p.a. Discount of 20 percent applies when processed in the State to50 percent contained metal	2.5 percent of royalty value in metallic form, 5 percent in concentrate form (for cobalt sold as nickel by-product 2.5 percent of cobalt metal value)	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria

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MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Gypsum	$0.35/tonne (mine mouth)	2.75 percent of net market value	$0.25/tonne	$0.34 per tonne from 1 July 2005 moving in equal increments to $0.50/tonne on 1 July 2009 (from 1 July 2010 subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	3.5percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 per-cent of the "Net Royalty Value", if the material is used as a mineral and not as an "extractive" mineral product	As for coal	
Manganese Ore	4 percent of ex-mine value (mine mouth)	2.75 percent of net market value	Currently 2 percent of value after deducting $30,000. From 2005/06, 2.7 percent of value after deducting $30,000. Discount of 35 percent applies when processed in the State to 75 per-cent contained metal	7.5 percent of royalty value	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5percent for the first 5 years	Subject to the Mineral Royalty Act at 18 per-cent of the "Net Royalty Value"	As for coal	No production in Victoria
Platinoids	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	2 percent of value after deducting $30,000	2.5 percent of royalty value for metals	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5percent for the first 5 years	Subject to the Mineral Royalty Act at 18 per-cent of the "Net Royalty Value"	As for coal	No production in Victoria
Construction Materials	Various (mine mouth)	$1.43 per cubic metre (14)	$0.50/tonne (only if used on mining lease) (14)	Rock - $0.34 per tonne from 1 July 2005 moving in equal increments to $0.50/tonne on 1 July 2009 (from 1 July 2010 subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	Extractive minerals $0.35/tonne	Exempt from Act	Building stone $5/m3 Gravel $0.60/tonne Pebbles $2.40/tonne Stone crushed and broken $0.60/tonne (mine gate)	(14) construction materials are not classified as minerals in Victoria and Queensland
Quartzite	$0.45/tonne (mine mouth)	$1.43 per cubic metre (15)	As for gemstones 2 percent of value after deducting $30,000	N/A	Extractive mineral $0.35/tonne.	Exempt from Act	As for coal	(15) under Extractive Industries Development Act

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Diamonds	4 percent of ex-mine value (mine mouth)	2.75 percent of net market value	As for gemstones	7.5 percent of realised value. (For Ellendale project - 7.5 percent FOB or 22.5 percent of accounting profit if greater) (For Argyle project – from 1 January 2006, a flat royalty rate of 5% of gross revenue)	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	No production in Victoria
Spodumeme	4 percent of ex-mine value (mine mouth)	2.75 percent of net market value	2 percent of value after deducting $30,000	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	As for coal
Talc	$0.50/tonne (mine mouth)	2.75 percent of net market value	$0.50/tonne	$0.56 per tonne from 1 July 2005 moving in equal increments to $0.80/tonne on 1 July 2009 (from 1 July 2010, subject to five yearly reviews in accordance with increases in ABS Non-Metallic Mineral Products Price Index)	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Tantalum	4 percent of ex mine value (mine mouth)	2.75 percent of net market value	Currently 2 percent of value after deducting $30,000. From 2005-06, 2.7 percent of value after deducting $30,000. Discount of 35 percent applies when processed in the State to 95 percent contained metal	5 percent of royalty value for concentrates (or 5 percent of the value in concentrate form if processed further before sale)	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria
Pyrophyllite	$0.85/tonne (mine mouth)	2.75 percent of net market value	2 percent of value after deducting $30,000	N/A	N/A but would be 3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value"	As for coal	No production in Victoria

MINERAL	NEW SOUTH WALES (1)	VICTORIA (2)	QUEENSLAND (3)	WESTERN AUSTRALIA (4)	SOUTH AUSTRALIA (5)	NORTHERN TERRITORY (6)	TASMANIA (7)	COMMENTS
Uranium Oxide	Uranium mining in NSW is prohibited	Uranium mining is prohibited in Victoria	2 percent of value after deducting $30,000 – no production in Queensland	WA Government policy does not support mining and export of uranium. All mining leases granted after 22 June 2002 exclude uranium mining	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	NT uranium is owned by the Commonwealth which determines the royalty rate to applying to each mine on a case by case basis (16)	As for coal	(16) a range of relevant issues including the world market for uranium, previously negotiated non-statutory payments to Aboriginal communities, the loss or damage likely to be suffered by Aboriginal communities and the royalty rates set for other mines are taken into account in determining the royalty applying to NT uranium mines. Ranger is subject to a 5.5 percent ad valorem royalty comprising a 4.25 percent payment to Aboriginal Benefit Account and a 1.25 percent payment to the NT in lieu of royalties. No other uranium mines currently operate in the NT
Miscellaneous	Various	Various	Unless otherwise specified, 2 percent of value after deducting $30,000	Any other mineral not specifically listed in the Mining Regulations Table -if sold as crushed or screened material, 7.5 percent of the royalty value or if sold as a concentrate, 5 percent of the royalty value	3.5 percent of market value, ex mineral production tenement. New mines may qualify for a rate of 1.5 percent for the first 5 years	Subject to the Mineral Royalty Act at 18 percent of the "Net Royalty Value", if the material is used as a mineral and not as an "extractive" mineral product	Various	

**note:*

- *base metals – copper, lead, zinc, bauxite/alumina, nickel, magnetite, tin, iron ore, magnesite, tungsten, chromite, cobalt*
- *precious metals – gold, silver, gemstones, diamonds, platinoids, manganese, tantalum*

other minerals – mineral sands, silica, limestone/lime earth, bentonite, salt, kaolin, clay, dolomite, diatomite, phosphate, perlite, peat, marble, granite, calcite, serpentine, construction materials, gypsum, pyrophillites, quartzite, spodumene, talc, uranium

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