(49)

~~IN CONFIDENCE~~

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TREASURY EXECUTIVE MINUTE

Minute No.

17 May 2010

Treasurer

MINING PROJECTS AND ROYALTIES IN WESTERN AUSTRALIA

Timing: Your office requested this urgently.

Recommendation/Issue:

- That you note this briefing.

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

KEY POINTS

- On 16 May 2010, your office requested information regarding mining projects and royalty rates in Western Australia.
- Western Australia currently has over 80 major development projects in the pipeline with start dates ranging between 2010 and 2016. The majority of these projects are in the oil and gas and iron ore sectors. The largest of these are the Gorgon Gas Project, the Browse Basin Development, and BHP Billiton's Rapid Growth Iron Ore projects. Information on Western Australia's major development projects is at Attachment A.
- In 2007-08, the total value of commodities produced in Western Australia was approximately $56.04 billion . This represents 48 per cent of the value of total Australian commodity production. Further details are contained in Attachment B
- The proposed changes to royalties on some commodities in Western Australia are contained in Attachment C. A factsheet, released by the Western Australian Government for the 2009-10 Budget, contains information regarding royalty income (Attachment D). 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 WESTERN AUSTRALIA

As at October 2009.

Oil and Gas

Project	Company	Stage	Expected Start Up
Pluto	Woodside	Under Construction	2010
Pyrenees	BHP/Apache	Under Construction	2010
NWS Rankin B	Woodside/BHP/Chevron Shell/BP	Under Construction	2011
NWS Expansion	Woodside/BHP/Chevron Shell/BP	Under Construction	2012
Reindeer	Apache/Santos	Committed	2011
Macedon	BHP/Apache	Prefeasibility Study	2013
Gorgon	Chevron/Texaco/Shell	EIS	2014
Halyard	Apache/Santos	FEED	2014
Ichthys	Inpex	FEED	2015
Wheatstone	Chevron	Prefeasibility Study	2016
Prelude	Shell	Prefeasibility Study	2016
Browse	Woodside/BHP/BP Chevron/Shell	Feasibility Study	n/a
Pluto (Train 2)	Woodside	Feasibility Study	n/a
Scarborough Gas	ExxonMobil/BHP	Prefeasibility Study	n/a

Uranium

Project	Company	Stage	Expected Start Up
Lake Maitland/ JAURD/Itohe	Mega Uranium	Scoping Study	2012
Wiluna Uranium	Toro Energy	Feasibility Study	2013

Yerilee	BHP Billiton	Feasibility Study	2014

Gold

Project	Company	Stage	Expected Start Up
Aldiss/Randalls	Integra Mining	Feasibility Study	2010
Duketon Gold	Regis Resources	Feasibility Study	2010
Edna May	Catalpa Resources	Feasibility Study	2010
Norseman	Matsa Resources	Prefeasibility Study	2010
Phillips River	Techtonic Resources	Feasibility Study	2010
South Laverton	Saracen Mineral Holdings	Under Construction	2010
White Dam	Exco Resources/Polymetals	Awaiting Govt Approval	2010
Gullewa	ATW Gold	Feasibility Study	2011
Leonora	Navigator Resources	Feasibility Study	2011
St Ives	Gold Fields	Under Construction	2011
Tropicana	Anglo Gold Ashanti	Prefeasibility Study	2013
Lindsays/Brilliant/ Kalpini	Carrick Gold	Prefeasibility Study	n/a
Murchison	Silver Lake	Feasibility Study	n/a
Nullagine Gold	Millenium Minerals	Feasibility Study	n/a
Super Pit Expansion	Newmint/Barrick Gold	Awaiting Govt Approval	n/a
Tower Hill	St Barbara Mines	Prefeasibility Study	n/a

Iron Ore

Project	Company	Stage	Expected Start Up
Extension Hill Direct	Mt Gibson Iron	Under Construction	2010
Brockman 4	Rio Tinto	Under Construction	2010
Chichester Stage 1	FMG	Expansion	
Mesa A	Rio Tinto/Robe River	Under Construction	2010

Sino Iron	CITIC Pacific Mining	Under Construction	2010
RGP4	BHP Billiton	Under Construction	2010
Nullagine Iron Ore	BC Iron	Prefeasibility Study	2010
Karara Hemitite	Gindablie Metals/Ansteel	Feasibility Study	2010
RGP 5	BHP Billiton	Under Construction	2011
Extension Hill Magnetite	Asia Iron/Sino	Feasibility Study	2011
Karara Magnetite	Gindablie Metals/Ansteel	Feasibility Study	2011
Railway Iron Ore	United Iron	EIS	2011
Weld Range	Sinosteel	Prefeasibility Study	2011
Yilgarn	Polaris	EIS	2011
Balmoral South	Australasian Resources	EIS	2012
Chichester Stage 2	FMG	Expansion	2012
Marillana	Brockman Resources	Prefeasibility Study	2012
Yalgoo	FerroWest	Prefeasibility Study	2012
East Pilbara	FerrAus	Feasibility Study	2013
Jack Hills	Crosslands Resources	Feasibility Study	2013
Southdown Magnetite	Grange Resources	Feasibility Study	2013
Weld Range	Sinosteel Midwest	Feasibility Study	2013
West Pilbara	Aquila Resources	Prefeasibility Study	2013
Abydos	Atlas Iron	Feasibility Study	n/a
Brockman 4 (Phase B)	Rio Tinto	Feasibility Study	n/a
Cape Lambert	MCC Mining/Evraz	Feasibility Study	n/a
Hardey	Aquila Resources	Prefeasibility Study	n/a
Ridley Magnetite	Atlas Iron	Feasibility Study	n/a
Roy Hill	Hancock Prospecting	Prefeasibility Study	n/a
RPG6	BHP Billiton	Prefeasibility Study	n/a
Western Turner	Rio Tinto	Feasibility Study	n/a
Wiluna West	Golden West Resources	Prefeasibility Study	n/a

Iron Ore – Infrastructure

Project	Company	Stage	Expected Start Up
Utah Point Berth	Port Hedland Authority	Under Construction	2010
WA Iron Ore	BHP Billiton	Committed	2011
Yilgarn Rail	Yilgarn Infrastructure	Prefeasibility Study	2011
Oakajee Port & Rail	Murchison Metals/Mitsubishi	Feasibility Study	2014
Cape Lambert	Rio Tinto/Robe River	Prefeasibility Study	n/a

Base Metals

Project	Company	Stage	Expected Start Up
Lennard Shelf (Zinc)	Meridian Resources	Scoping Study	2011
Panorama	CBH Resources	Scoping Study	n/a

Mineral Sands

Project	Company	Stage	Expected Start Up
Coburn	Gunson Resources	EIS Received	2010
Keysbrook	Olympia	EIS	2010
Dongara	Tronox/Exxaro	Feasibility Study	2011

Nickel

Project	Company	Stage	Expected Start Up
Flying Fox	Western Areas	Under Construction	2010
Spotted Quoll	Western Areas	Under Construction	2010
New Morning/ Daybreak	Western Areas	Prefeasibility Study	2011
Talc Redesign (Mt Keith)	Western Areas	Under Construction	2011
Kalgoorlie Nickel	Heron Resources/Vale	Prefeasibility Study	2013
Perseverance Deeps	BHP Billiton	Feasibility Study	2013
Cosmos	Xstrata	Feasibility Study	n/a

Diggers South	Western Areas	Feasibility Study	n/a
Sherlock Bay	Australasian Resources	Feasibility Study	n/a
Wingellina	Metals X	Feasibility Study	n/a
Yerilla	Heron Resources	Prefeasibility Study	n/a

Diamonds

Project	Company	Stage	Expected Start Up
Argyle Underground	Rio Tinto	Under Construction	n/a

ATTACHMENT B

TOTAL MINERAL COMMODITIES									
	NSW	VIC	QLD	SA	TAS	NT	WA	WA as a % of Australian Total Mineral Commodities	Australia
2001-02	7869	4617	13675	1722	577	2784	23962	43.40%	55206
2002-03	6797	4510	12388	1683	536	2470	25301	47.13%	53685
2003-04	6706	4396	11740	1756	630	1962	24046	46.93%	51236
2004-05	9197	5187	16907	2425	706	2883	30626	45.08%	67931
2005-06	11783	6082	26465	3270	1002	4042	39251	42.71%	91895
2006-07	12268	6163	27229	3410	1173	6047	49927	47.01%	106216
2007-08	13925	7553	28740	3916	1163	6097	56035	47.72%	117429

Source: ABS Catalogue Number 8155.0

ATTACHMENT C

CHANGES TO IRON ORE ROYALTY RATES

- Western Australian Premier Colin Barnett has indicated that the Pilbara iron ore royalty concession is to be withdrawn with effect from 1 July 2010 and BHP Billiton and Rio Tinto must start paying the full industry standard royalty rate of 5.625 per cent.
  - The current rate is 3.75 per cent (the rate set during the development of the Pilbara project in the 1960s). This represents a royalty increase in the order of $300 million per year.
- The current taxation rates on iron ore in Western Australia are as outlined in the table below.

Type of iron ore	Percentage of royalty value
Lump ore	5.5%
Fine ore	5.625%
Beneficiated ore	5%
Kaolin	5%

CHANGES TO GOLD ROYALTY RATES

- The Western Australian Premier, Colin Barnett, has also alluded to lifting the gold royalty rate from 2.5 per cent in response to the soaring price of gold. (The West Australian, Gold industry unites to fight tax grab, February 22, 2010).
  - Gold royalties commenced on 1 July 1998. No royalty is payable in respect of the first 2,500 ounces of gold metal produced during a financial year from gold bearing material produced or obtained from the same gold royalty project.

Mineral Production Period	Gold royalty rates
Before 1 July 1998	Nil
1 July 1998 - 30 June 2000	1.25% of the royalty value of the gold metal produced
After 30 June 2000	2.5% of royalty value of gold metal produced If, during the period commencing on 1 July 2000 and ending on 30 June 2005, the average gold spot price for a quarter is less than $450 per ounce in Australian currency, the rate of royalty payable for gold metal produced during that quarter is 1.25 per cent of the royalty value of the gold metal produced.

- Western Australia indicated at a recent Commonwealth Grants Commission meeting (prior to the announcement of the Resource Super Profits Tax) it was considering increasing the royalty rate on iron ore fines from the current rate of 5.625 per cent, to the 7.5 per cent rate for lump ore.

CHANGES TO MINERAL ROYALTY RATES

In Western Australia, there are three systems of mineral royalty collections that are used:

1. Specific rate- flat rate per tonne

2. Ad Valorem- percentage of value

3. Profit based- percentage of profit

Recent changes have been made to minerals taxed at specific rates and at ad valorem rates.

Changes to minerals taxed at specific rate

Construction materials and metallurgical content are taxed at a specific rate (that is, the flat rate per tonne) and their rates were changed from 1 July 2005 as outlined in the table below. The increases in royalty rates from 2005 were greater than increases in CPI.

Mineral production period	Construction materials	Metallurgical content
Before 1 July 2005	30 cents/tonne	50 cents/tonne
1 July 2005 to 30 June 2006	34 cents/tonne	56 cents/tonne
1 July 2006 to 30 June 2007	38 cents/tonne	62 cents/tonne
1 July 2007 to 30 June 2008	42 cents/tonne	68 cents/tonne
1 July 2008 to 30 June 2009	46 cents/tonne	74 cents/tonne
1 July 2009 to 30 June 2010	50 cents/tonne	80 cents/tonne
After 1 July 2010 these flat rates will be calculated with reference to the Non-Metallic Mineral Products Price Index.		

Changes to minerals taxed at Ad valorem and quantum rates

From 1 July 2000, royalty rates on the following minerals were changed. These were included in *Mining Amendment Regulations (No.4) 2000* and outlined in the table below.

Mineral production period	Cobalt	Copper	Lead	Zinc
Between 1981 and 1 July 2000	2.5% of realised value	5% of realised value	5% of realised value	5% of realised value
From 1 July 2000	**If sold** as concentrate 5% **If sold in metallic**	**If sold** as concentrate 5% **If sold in metallic**	**If sold** as concentrate 5% **If sold in metallic**	**If sold** as concentrate 5% **If sold in metallic**

	form 2.5% **If sold as nickel** by-product $/tonne calculated using the gross cobalt metal price per tonne	form 2.5% **If sold as nickel** by-product $/tonne calculated using the gross copper metal price per tonne	form 2.5%	form 2.5%

2009-10 Budget

FACT SHEET ATTACHMENT D

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ROYALTY INCOME

The State Government collects royalty income in return for the extraction by mining companies of resources that are owned by Western Australia citizens.

Royalties in Western Australia are generally calculated on an *ad valorem* basis (i.e. according to the Australian dollar value of the resources produced). Royalty rates vary according to the type of commodity and the level of processing that has been undertaken. These rates are generally specified in either the *Mining Act 1978* or Agreement Acts negotiated for individual projects.

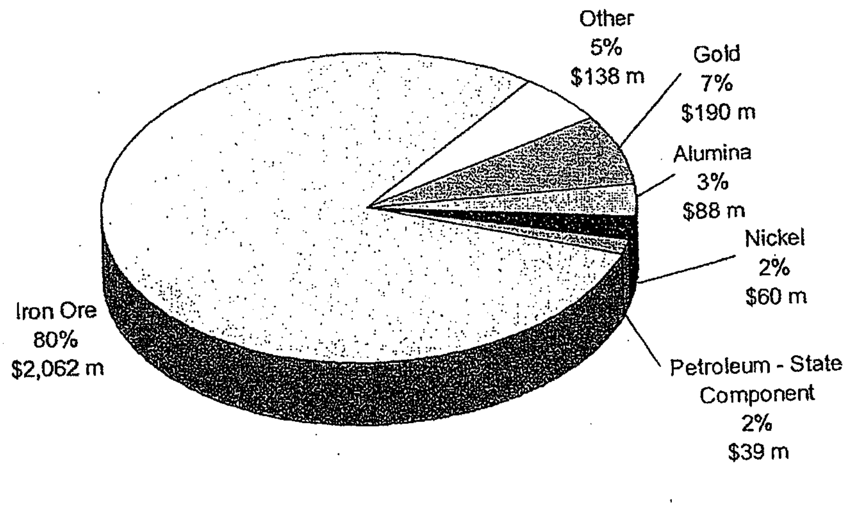
Attachment A includes an outline of the principles that underpin the setting of royalty rates in Western Australia.

COMPOSITION OF WESTERN AUSTRALIA'S ROYALTY INCOME

Although Western Australia has over 50 different types of commodities being produced, iron ore royalties are expected to account for around 80% of total royalty income in 2009-10. Other key royalties include gold (7%), alumina (3%), nickel (2%) and petroleum (2%).

Figure 1

ROYALTY INCOME 2009-10
Western Australia



TOTAL = $2,577 MILLION

North West Shelf grants

Under a long-standing agreement with the Commonwealth Government, Western Australia also receives grants that are linked to the value of petroleum production (gas, oil, condensate and LNG) from the North West Shelf gas fields in Commonwealth waters. These are valued at an estimated $990 million in 2009-10 (including compensation for changes in Commonwealth crude oil excise arrangements).

Western Australia is not entitled to royalties from this project as it is located outside the State's jurisdiction. Accordingly, these payments are classified as a grant from the Commonwealth.

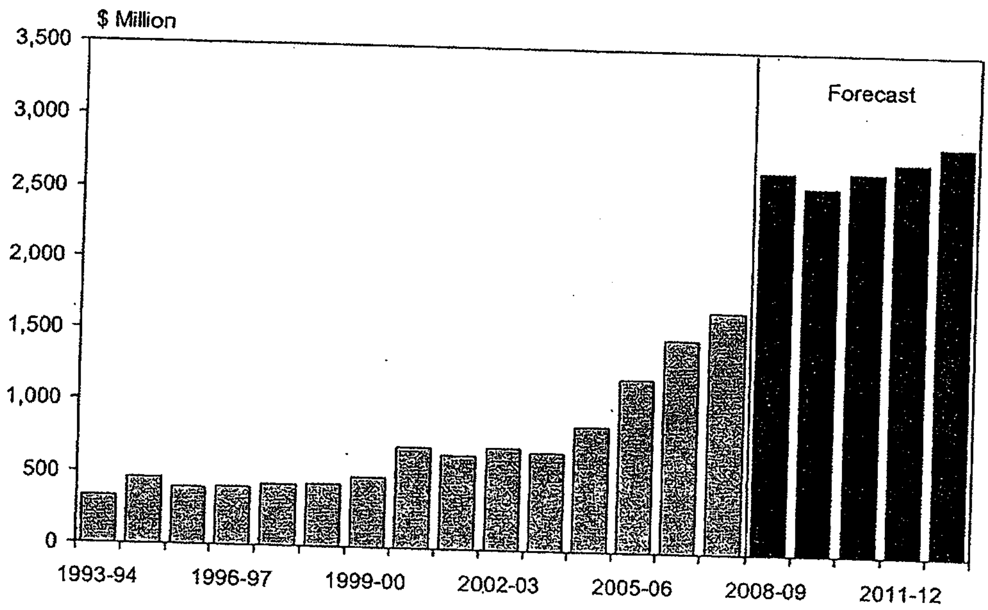
The State will receive no grants, royalties or petroleum resource rent taxes from the Pluto or potential Gorgon LNG projects, reflecting that the Commonwealth has not been prepared to enter into new revenue sharing arrangements since the time of the North West Shelf project. However, the current Commonwealth Government gave an election commitment to pay a total of up to $100 million per annum from these projects into a Western Australian infrastructure fund, quarantined from the Commonwealth Grants Commission process.

2009-10 BUDGET ROYALTY ESTIMATES

Despite the deterioration in global economic activity and commodity markets, royalty income has soared by almost 60% during 2008-09. Growth has been underpinned by the hike in contract iron ore prices (of 85%), while the rapid depreciation of the $A has helped to cushion the impact of lower $US commodity prices since the global financial crisis began to bite.

ROYALTY INCOME
Western Australia

Figure 2



In 2009-10, royalty income is expected to fall slightly (by 3.7% or $98 million) to $2,577 million. This mainly reflects an assumed reduction in iron ore prices in the 2009-10 Japanese fiscal year, which is expected to more than offset a modest improvement in other commodity prices (including nickel, copper and zinc), and continued expansion in iron ore production.

PRINCIPLES UNDERPINNING ROYALTY RATES IN WESTERN AUSTRALIA

Most mineral and petroleum royalties in Western Australia are designed to return to the community about 10% of the wellhead or minehead value of the resource – this is the purchase price paid by the producer to the people of Western Australia for the resource (producers are also subject to all the usual State and Commonwealth taxes).

- An ad valorem royalty applies to petroleum (both oil and gas) produced onshore and in offshore areas within the State's jurisdiction, based on the value of petroleum at the wellhead.
- An ad valorem royalty applies to most minerals produced in Western Australia, designed broadly to apply to the value of the mineral at the minehead (although a set rate royalty per tonne is applied to low-value, bulk commodities).

Accordingly, certain deductions from the sales value of minerals and petroleum are permitted under Western Australia's ad valorem royalty schemes. For petroleum, these include the cost of processing, storing and transporting the petroleum, where these costs are incurred post-wellhead by the producer.

For minerals, deductions are limited to certain transport costs. However, the royalty rates for minerals attempt to recognise the varying levels of processing costs incurred post-minehead – a rate of 7.5% applies to bulk material, 5% for mineral concentrates and 2.5% for minerals in metallic form.

In addition a resource rent royalty applies to petroleum produced on Barrow Island, while until recently a profits-based royalty applied to the Argyle diamond mine (albeit with an ad valorem 'floor'). A petroleum resource rent tax applies to petroleum produced in waters within the Commonwealth's jurisdiction.

Over the period 2010-11 to 2012-13, royalty income is expected to grow at an average of around 3.7% per year, mainly on the back of assumed continued growth in iron ore output.

Estimating assumptions

The royalty estimates are determined by the underlying price and volume assumptions.

The commodity price forecasts are generally calculated with reference to futures markets, long-term price averages and private sector forecasts.

The mining production forecasts are based on an annual survey undertaken by the Department of Mines and Petroleum. Only those new mining projects or project expansions assessed as having a strong likelihood of proceeding have been included in the estimates (in most cases this will involve the new project or project expansion having received both final investment approval by the company and formal government approvals).

As many commodities are traded in $US terms, the royalty estimates are also sensitive to the assumed level of the $US/$A exchange rate. Each US1 cent increase in the $US/$A exchange rate (holding all other factors constant) reduces royalty income (including North West Shelf grants) by about $55 million per annum.

ROYALTY INCOME AND THE GRANTS COMMISSION PROCESS

Western Australia effectively only retains a fraction (around 40%) of the royalty income it collects.

Under the Grants Commission process, the national pool of GST revenue is distributed among the States according to the principle of 'horizontal fiscal equalisation'. To the extent that Western Australia's own-source revenue raising capacity is greater than other States (e.g. due to its strong royalty income base), then it will receive a smaller share of national GST revenue.

Attachment E 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.

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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
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

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: $\$1 \times \frac{G}{3\,3} \times \frac{Pcurr}{52\,.8}$, 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 percent 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 percent 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 percent 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 percent 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