Local Government - Accounting for Landfills

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Acknowledgements

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Background

Introduction

Most councils have either operating or closed landfill sites (or both) that give rise to obligations to rehabilitate and monitor sites for significant periods into the future. In most instances these obligations create a liability for councils. The liability can be significant and the correct measurement and treatment is vital to ensure financial reports are presented fairly.

Accounting for landfills is a technically complex accounting issue that gives rise to a number of specific challenges in the local government sector. More recently, the Victoran Environment Protection Authority (EPA) has provided for an opportunity for local governments that hold an operating landfill license to move to a provisioning model to provide a financial security to the EPA to substitute the bank gurantee requirement. Moving to the new provisioning model may necessitate a more active approach by councils to financial management and accounting of landfill assets and liabilities. This can include operating landfills and closed landfill sites.

This Local Government Victoria (LGV) financial guidence has been prepared to assist local government accountants understand the issues and be prepared for the challenges that landfill sites may pose from an accounting perspective. This financial guidence forms part of the suite of guidelines developed by LGV to provide accounting support to councils.

This guide has been prepared to il the long life cycle accounting requirements for a landfill. The guidance is general in nature and is not expected to meet or cover all possible scenarios. To assist in communicating the principles to be applied, illustrative data has been based on a simplistic single cell example. It is acknowledged that in many cases additional complexities will exist, particularly in multi cell environmments.

While the guide has been prepared to assist local government it is not a replacement for specific accounting advice and, where appropriate, councils should seek specific guidance. LGV would like to acknowledge the contributions of Crowe Horwath, the Environment Protection Authority (EPA) Victoria, Local Government Finance Professionals (FinPro), Boroondara City Council, Mitchell Shire Council and Wyndham City Council to this publication. The Victorian Auditor-General's Office (VAGO) also contributed in an observer capacity.

Key Issues

Accounting for landfills give rise to three specific accounting issues, namely:

- Accounting for site improvements;
- Accounting for rehabilitation costs; and
- Accounting for landfill airspace (intangible asset).

While each of these issues are related, from an accounting perspective they each need to be considered separately.

Local councils are strongly encouraged to consider the requirements of this guidance statement well in advance of year end. Where potential issues exist discussions with key stakeholders, including auditors, should be undertaken early to avoid issues impacting on year end timelines.

Professional Guidance

The following accounting standards and interpretations have been issued, providing detailed guidance and direction on the accounting issues associated with landfills:

- AASB 116 – Property, Plant and Equipment;
- AASB 136 - Impairment of Assets;
- AASB 137 - Provisions, Contingent Liabilities and Contingent Assets;
- AASB 138 - Intangible Assets; and
- Interpretation 1 - Changes in Existing Decommissioning, Restoration and Similar Liabilities.

Determination of Future Costs

Given the potential for significant impacts on assets and liabilities the accurate and complete determination of future costs is critical to the integrity of the required calculations. Accordingly, it is expected that councils will utilise appropriate expertise from within (and at times external to) council to ensure the most accurate and complete estimates can be made. It is also expected that the accuracy and completeness of cost estimates will be an area of audit focus. As such councils will be required to document the basis for the determination of the costs to a reasonably high standard.

Guidance

Accounting for site improvements

The establishment of a landfill facility will result in the acquisition/construction of a range of site improvements that are necessary for the appropriate functioning and control of the facility. Upon commencement of a landfill these assets are to be recognised in accordance with council's asset recognition policy. Assets are to be depreciated over the life of the asset to council, or the life of the landfill site, whichever is the shorter.

It is important to note that some site improvements, such as fencing, will potentially have a life that extends beyond the operational life of the site and into its rehabilitation phase, whereas others are unlikely to have a life that could exceed the operational life of the site.

Typically, site improvements capitalised as part of the establishment of a landfill will include:

- Roadways;
- Drainage;
- Leachate ponds;
- Fencing;
- Site huts/shedding; and
- Weighbridge.

Other improvements could also be included as part of this asset. Site improvements do not necessarily need to be accounted for as one asset. Where it makes sense and is more practical to do so the individual improvements can be accounted for within other (consistent) categories. However regardless of the approach taken the improvements should not be given a life greater than that of the overall landfill site.

Accounting for cell construction

In addition to site improvements there will be cost incurred directly in relation to the construction of individual landfill cells. Costs incurred in the construction of the landfill cells should be capitalised as a tangible asset. This asset should then be depreciated over the life of the cell.

It is acknowledged that at times judgement will need to be exercised to determine if particular costs are to be included as part of the cell construction or broader land improvement categories.

Accounting for rehabilitation, monitoring and aftercare costs

Most landfills are subject to Environment Protection Authority (EPA) requirements that result in landfill operators being obligated to rehabilitate the site and continue to monitor and provide aftercare for up to 30 years after the closure of the site. The costs associated with post closure monitoring and after care are to be included in the calculation of the rehabilitation provision. These costs are to be included for the duration of any EPA requirements.

Post closure costs cannot be offset or reduced on the basis of potential future revenue streams (such as from the sale of gas generated by the site). While future revenues may occur, offsetting these against current obligations would be effectively recognising the revenue prior to councils meeting the service delivery requirements of the contract.

Accounting for landfill airspace (intangible asset)

Initial recognition of airspace assets (intangible) and landfill rehabilitation provisions

A rehabilitation provision shall be accounted for in accordance with AASB 137 Provisions, Contingent Liabilities and Contingent Assets (AASB 137). Initially the provision shall be recognised on the same basis as the intangible airspace asset.

An airspace asset is an intangible asset that is measured based on the net present value of the future cash flows required to meet the rehabilitation requirements detailed in the landfill licencing agreement. As such its initial recognition is consistent with that required for the related provision.

The process for the initial measurement of the landfill rehabilitation provision (and airspace asset) requires council to:

- Determine a best estimate of the current cost to rehabilitate the landfill site based on the existing licence conditions, including post closure monitoring and aftercare costs.
- Index that amount out to its future value based on a reasonable estimate of likely cost increases. (Councils should have a reasonable understanding of these cost increases through their capital works program, however the Australian Bureau of Statistics (ABS) at www.abs.gov.au publish a construction price index that may also be of assistance).

Discount the future value back to its Net Present Value (NPV) by applying the long term government bond rate applicable to the discount period (where discount periods match, this should be consistent with the Long Service Leave (LSL) discount rates). Where longer term discount rates are required professional judgement should be applied. One option that may be considered is the Group of 100 (G100) rate which is published at http://group100.com.au/g100-discount-rate/.

The amount determined through this calculation is the provision that will require recognition in the balance sheet as a liability. It is also most likely to represent the initial value of the airspace intangible asset.

The basis for recognising the airspace asset is within AASB 116 Property, Plant and Equipment (AASB 116). This standard, at paragraph 16, requires preparers of financial statements to incorporate, as part of the cost of an asset, the costs of site restoration. Nevertheless, it will only require such inclusion where council is obligated to make such restoration at the point of acquisition or as a result of the asset's use. Within the local government context this is interpreted to be the point at which council is obligated to rehabilitate the site in accordance with EPA requirements, typically this would be at the commencement of operations or the construction of the cell. AASB 116 provides guidance on the recognition of the elements of an assets cost, including restoration costs. As an intangible asset, guidance on the accounting for the airspace asset is contained within AASB 138 Intangible Assets (AASB 138).

An intangible airspace asset is subject to impairment tests in accordance with the requirements of AASB 136 Impairment of Assets (AASB 136). If indicators of impairment exist an impairment test will be required. Given the significant impact that minor changes in variables can have on the valuation of an airspace asset it would be prudent to conduct an impairment test each year. An impairment test requires council to determine the future cash flows from the landfill (tipping fees) including notional amounts saved for council's own use of

the facility. The tipping fees are to be indexed out to a future value, based on expected fee growth, and then discounted back to their NPV using the long term government bond rate.

Impairment and Cash Generating Units

Impairment testing, under AASB 136 is to be undertaken on the basis of cash generating units. A cash generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. As such when calculating impairments councils will need to combine the value of the airspace asset, the value of the cell construction and a reasonable portion of the value of site improvements. Importantly council can only support an airspace asset on the basis of the cash flows that that cell will generate, not future cells.

The carrying value of the landfill cell cash generating unit cannot exceed the NPV of the future cash flows that cash generating unit will generate. If it does then only the NPV of the future cash flows is to be recognised as an asset, any amount in excess of the NPV of the future cash flows is to expensed (by reducing intangible airspace asset) in the current period.

Ongoing monitoring of rehabilitation provisions and airspace assets

Both the rehabilitation provision and airspace asset will need to be recalculated annually to ensure that the provision is measured at the NPV of the best estimate of future cash outflows and that the airspace asset meets an impairment test.

The accounting for changes in the rehabilitation provision (and related assets), subject to their initial recognition, is specifically dealt with in AASB Interpretation 1 Changes in Existing Decommissioning, Restoration and Similar Liabilities (Interpretation 1). Interpretation 1 distinguishes between changes that reflect the passage of time (also referred to as the unwinding of the discount) and other changes. The interpretation states that:

- The unwinding of the discount shall be recognised in the profit and loss as a finance cost as it is incurred.
- Other changes such as timing or amount of economic outflow or a change in the discount rate shall be accounted for as follows:
  - If the asset is measured at cost – changes in the provision shall be added to or deducted from the cost of the asset (airspace).
  - If the asset is measured using the revaluation model – changes in the provision shall alter the revaluation increase or decrease previously recognised.

In simple terms the interpretation requires that changes, other than those reflecting the unwinding of the discount, should be recognised by making an equivalent adjustment to the airspace asset. This is always subject to the airspace asset not exceeding the NPV of the future cash flows associated with its ongoing operations.

In practice this will mean that changes to the rehabilitation requirements of a cell as it is nearing the end of its life are less likely to be supported than those that occur earlier in the life of the asset.

Unwinding of the discount rate

In the determination of present value, the unwinding of the discount rate is typically recognised as a finance cost. The unwinding reflects that, in most instances, the discount rate applied (eg. long term bond rate) is lower than the anticipated cost increases (indexation rate). This results in an annual increase in the liability that is to be recognised as a finance cost.

For example, if a council currently expects it to cost $100, in today's value, in 1 year to rehabilitate a site, with an anticipated cost increase of 5% and a discount rate of 2%, the liability in the current year will be $103 (calculated as ($100 * 1.05)/1.02)). In the following year, the cost to rehabilitate will have increased to $105 and the movement from $103 to $105 should be recognised as a finance cost (unwinding of discount). To further illustrate this the following table details the unwinding of the discount over a 5-year period.

Cost of rehabilitation in today's value			$ 100	
Years until rehabilitation			5	
Expected cost increases			4%	
Discount rate			2.50%	
	Present Value 1 July	**Future Value**	**Present Value 30 June**	**Discount Expense**
Year 0			$100.00	0
Year 1	$100.00	$121.67	$107.53	$7.53
Year 2	$107.53	$125.80	$113.97	$6.43
Year 3	$113.97	$128.20	$119.05	$5.08
Year 4	$119.05	$128.76	$122.56	$3.51
Year 5	$122.56	$127.46	$124.35	$1.79

At certain (rare) times in the economic cycle it is possible that the indexation rate will be lower than the discount rate resulting in a revenue impact. In such instances the revenue impact should be treated as a reduction in expense in the period it occurs. It should however be noted that this situation would be unusual as it would be effectively forecasting cost decreases.

Worked example

Details

Council ABC has developed a five cell landfill site that is designed to meet the needs of the municipality for the next twenty-five years. During the current year council has completed all the necessary site improvements and have received a licence from the EPA for the operation of Cell 1. Relevant financial details at the commencement of the landfill are as follows:

- Council spent $430,000 on site improvements which are expected to have a useful life of 10 years.
- Council spent $300,000 on cell construction, for cell 1, with an expected life of 5 years.
- Tipping fees are anticipated at $215,000 per annum.
- The current estimate of rehabilitation costs are for a lump sum cost of $250,000 at the end of year 5 and ongoing monitoring and inspection costs of $10,000 annually for an additional 30 years.
- Costs and revenues are expected to increase annually by around 2%
- The long term government bond rate varies from 1.9% - 3.5% over the thirty-five year period of site operation and aftercare.
- Cells 2, 3, 4 & 5 are in planning but council is yet to commence the licencing approval process for any of these.

Year 0 (30 June 2015)

Balance Sheet

The initial recognition of assets and liabilities occur resulting in the following:

Intangible asset – Airspace:	$477,524
Infrastructure – Site improvements:	$430,000
Infrastructure – Landfill Cell	$300,000
Provision – Landfill rehabilitation:	$477,524

The site improvements and landfill cell are recognised at the cost of construction.

The rehabilitation provision and airspace asset are recognised on the basis of the NPV calculation at Appendix 1.

Year 1 (30 June 2016)

This is the first completed year of operation, under this worked example there were no changes to any of the underlying assumptions. Accordingly the following impacts were reported in council's financial report:

Statement of Comprehensive Income

Revenue – Tipping fees:	$ 215,000	Tipping fees received
Depreciation – PPE	$ (103,000)	
Amortisation – Airspace	$ (95,505)	Amortisation over 5 year life
Finance costs	$ (6,208)	Unwinding of discount
Impact on operating result:	$ 10,288	

Balance Sheet

Cash at bank	$ 215,000	Tipping fees received
Cell Construction and Site Improvements	$ 730,000	
Accumulated depreciation	$ 103,000	Annual depreciation charge
	$ 627,000	
Airspace	$ 477,524	
Accumulated amortisation	$ 95,505	Annual amortisation charge
	$ 382,019	
Rehabilitation provision	$483,731	Increase $6,208 for unwinding of discount

Impairment test

NPV of future tipping fees (4 years @ $215,000)	$858,305
Unadjusted Cash Generateing Unit Value:	$794,019

The rehabilitation provision and airspace asset are recognised on the basis of the NPV calculation at Appendix 2.

Year 2 (30 June 2017)

At the commencement of year two, council is advised that, as a result of changes in the costs of materials, the rehabilitation provision (in current value) is now estimated to be $300,000. No other changes to the underlying assumptions have been noted. Accordingly the following impacts were reported in council's financial report:

Statement of Comprehensive Income

Revenue – Tipping fees:	$ 219,300	
Depreciation – PPE	$ (103,000)	
Amortisation – Airspace	$ (108,012)	Reflects cost change added to asset
Finance costs	$ (4,200)	
Impact on operating result:	$ 4,088	

Balance Sheet

Cash at bank	$ 434,300	
Cell Construction and Site Improvements	$ 730,000	
Accumulated depreciation	$ 206,000	
	$ 524,000	
Airspace	$ 527,555	Increased to reflect NPV of cost changes
Accumulated amortisation	$ 203,517	
	$ 324,037	
Rehabilitation provision	$ 537,962	Increased for cost changes and unwinding of discount

Impairment test

NPV of future tipping fees (3 years @ $215,000)	$ 642,967
Unadjusted Cash Generateing Unit Value:	$ 633,037

The rehabilitation provision and airspace asset are recognised on the basis of the NPV calculation at Appendix 3.

Year 3 (30 June 2018)

During the third completed year of operation there were no changes to any of the underlying assumptions (as adjusted in year 2). Accordingly the following impacts were reported in council's financial report:

Statement of Comprehensive Income

Revenue – Tipping fees:	$ 223,686	
Depreciation – PPE	$ (103,000)	
Amortisation – Airspace	$ (108,012)	
Finance costs	$ (4,223)	
Impact on operating result:	$ 8,450	

Balance Sheet

Cash at bank	$ 657,986	
Cell Construction and Site Improvements	$ 730,000	
Accumulated depreciation	$ 309,000	
	$ 421,000	
Airspace	$ 527,555	
Accumulated amortisation	$ 311,530	
	$ 216,025	
Rehabilitation provision	$ 542,185	Increased for unwinding of discount

Impairment test

NPV of future tipping fees (2 years @ $215,000)	$ 427,835
Unadjusted Cash Generateing Unit Value:	$ 422,025

The rehabilitation provision and airspace asset are recognised on the basis of the NPV calculation at Appendix 4.

Year 4 (30 June 2019)

During the fourth completed year of operation the licence conditions for the landfill were significantly amended, resulting in significant increases in the obligations on council. The changes took effect at the end of the financial year. As a result the rehabilitation costs on closing are now expected to be $425,000. Accordingly the following impacts were reported in council's financial report:

Statement of Comprehensive Income

Revenue – Tipping fees:	$ 228,160	
Depreciation – PPE	$ (103,000)	
Amortisation – Airspace	$ (108,012)	
Finance costs	$ (1,726)	
Impairment of Airspace	***$ (123,457)***	***Impairment required (see below)***
Impact on operating result:	$ (108,036)	

Balance Sheet

Cash at bank	$ 886,146	
Cell Construction and Site Improvements	$ 730,000	
Accumulated depreciation	$ 412,000	
	$ 318,000	
Airspace	$ 529,478	
Accumulated amortisation	$ 419,542	
	$ 109,936	
Rehabilitation provision	$ 669,292	Increased for licence changes, unwinding of discount

Impairment test

NPV of future tipping fees (1 years @ $215,000)	$ 212,936
Opening Cash Generateing Unit Value	$ 422,025
Annual depreciation/amortisation charge	$ (211,012)
Additional costs to rehabilitate (NPV)	$ 125,381
Unadjusted	$ 336,394
Impairment required	***$ (123,457)***

The rehabilitation provision and airspace asset are recognised on the basis of the NPV calculation at Appendix 5.

Year 5 (30 June 2020)

During the final year of the cells operation the cell was filled and rehabilitation works excluding ongoing monitoring, were completed. All works were completed in line with the prior year estimates and assumptions. Accordingly the following impacts were reported in council's financial report:

Statement of Comprehensive Income

Revenue – Tipping fees:	$ 232,723	
Depreciation – PPE	$ (103,000)	
Amortisation – Airspace	$ (109,936)	
Finance costs	$ 1,531	
Impact on operating result:	$ 18,256	

Balance Sheet

Cash at bank	$ 692,574	reflects payments for rehabilitation works
Cell Construction and Site Improvements	$ 730,000	
Accumulated depreciation	$ 515,000	
	$ 215,000	
Airspace	$ 529,478	
Accumulated amortisation	$ 529,478	
	$ 0	
Rehabilitation provision	$ 244,528	reflects rehabilitation completed

Impairment test

NPV of future tipping fees (0 years @ $215,000)	$0
Unadjusted Cash Generateing Unit Value	$0

The rehabilitation provision and airspace asset are recognised on the basis of the NPV calculation at Appendix 6.

APPENDIX 1 – INITIAL NPV CALCLULATIONS

			Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Cell 1 - Year 0 Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures - 30 June 2015								**$ 477,524**
2016	Year 1	1	2%	1.85%	$ -	102.00%		101.85%	
2017	Year 2	2	2%	1.92%	$ -	104.04%		103.88%	
2018	Year 3	3	2%	1.98%	$ -	106.12%		106.06%	
2019	Year 4	4	2%	2.01%	$ -	108.24%		108.29%	
2020	Year 5	5	2%	2.20%	$ 250,000	110.41%	$ 276,020	111.48%	$ 247,600
2021	Year 6	6	2%	2.38%	$ 10,000	112.62%	$ 11,262	115.18%	$ 9,778
2022	Year 7	7	2%	2.55%	$ 10,000	114.87%	$ 11,487	119.25%	$ 9,633
2023	Year 8	8	2%	2.69%	$ 10,000	117.17%	$ 11,717	123.68%	$ 9,473
2024	Year 9	9	2%	2.84%	$ 10,000	119.51%	$ 11,951	128.64%	$ 9,290
2025	Year 10	10	2%	2.93%	$ 10,000	121.90%	$ 12,190	133.42%	$ 9,137
2026	Year 11	11	2%	2.97%	$ 10,000	124.34%	$ 12,434	137.92%	$ 9,015
2027	Year 12	12	2%	3.05%	$ 10,000	126.82%	$ 12,682	143.48%	$ 8,839
2028	Year 13	13	2%	3.10%	$ 10,000	129.36%	$ 12,936	148.72%	$ 8,698
2029	Year 14	14	2%	3.20%	$ 10,000	131.95%	$ 13,195	155.38%	$ 8,492
2030	Year 15	15	2%	3.20%	$ 10,000	134.59%	$ 13,459	160.35%	$ 8,393
2031	Year 16	16	2%	3.20%	$ 10,000	137.28%	$ 13,728	165.48%	$ 8,296
2032	Year 17	17	2%	3.20%	$ 10,000	140.02%	$ 14,002	170.77%	$ 8,200
2033	Year 18	18	2%	3.37%	$ 10,000	142.82%	$ 14,282	181.50%	$ 7,869
2034	Year 19	19	2%	3.42%	$ 10,000	145.68%	$ 14,568	189.45%	$ 7,690
2035	Year 20	20	2%	3.48%	$ 10,000	148.59%	$ 14,859	198.21%	$ 7,497
2036	Year 21	21	2%	3.50%	$ 10,000	151.57%	$ 15,157	205.94%	$ 7,360
2037	Year 22	22	2%	3.51%	$ 10,000	154.60%	$ 15,460	213.38%	$ 7,245
2038	Year 23	23	2%	3.51%	$ 10,000	157.69%	$ 15,769	221.10%	$ 7,132
2039	Year 24	24	2%	3.51%	$ 10,000	160.84%	$ 16,084	228.86%	$ 7,028
2040	Year 25	25	2%	3.51%	$ 10,000	164.06%	$ 16,406	236.90%	$ 6,925
2041	Year 26	26	2%	3.51%	$ 10,000	167.34%	$ 16,734	245.21%	$ 6,824
2042	Year 27	27	2%	3.51%	$ 10,000	170.69%	$ 17,069	253.82%	$ 6,725
2043	Year 28	28	2%	3.51%	$ 10,000	174.10%	$ 17,410	262.73%	$ 6,627
2044	Year 29	29	2%	3.51%	$ 10,000	177.58%	$ 17,758	271.95%	$ 6,530
2045	Year 30	30	2%	3.51%	$ 10,000	181.14%	$ 18,114	281.49%	$ 6,435
2046	Year 31	31	2%	3.51%	$ 10,000	184.76%	$ 18,476	291.37%	$ 6,341
2047	Year 32	32	2%	3.51%	$ 10,000	188.45%	$ 18,845	301.60%	$ 6,248
2048	Year 33	33	2%	3.51%	$ 10,000	192.22%	$ 19,222	312.19%	$ 6,157
2049	Year 34	34	2%	3.51%	$ 10,000	196.07%	$ 19,607	323.15%	$ 6,067
2050	Year 35	35	2%	3.51%	$ 10,000	199.99%	$ 19,999	334.49%	$ 5,979

APPENDIX 2 NPV CALCULATIONS YEAR 1

			Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Cell 1 - Year 1 Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures - 30 June 2016								**$ 483,731.48**
2016	Year 1	1	2%	0.00%	$ -	100.00%		100.00%	
2017	Year 2	2	2%	1.85%	$ -	102.00%		101.85%	
2018	Year 3	3	2%	1.92%	$ -	104.04%		103.88%	
2019	Year 4	4	2%	1.98%	$ -	106.12%		106.06%	
2020	Year 5	5	2%	2.01%	$ 250,000	108.24%	$270,608.04	108.29%	$249,882.39
2021	Year 6	6	2%	2.20%	$ 10,000	110.41%	$11,040.81	111.48%	$9,903.99
2022	Year 7	7	2%	2.38%	$ 10,000	112.62%	$11,261.62	115.18%	$9,777.64
2023	Year 8	8	2%	2.55%	$ 10,000	114.87%	$11,486.86	119.25%	$9,632.53
2024	Year 9	9	2%	2.69%	$ 10,000	117.17%	$11,716.59	123.68%	$9,473.46
2025	Year 10	10	2%	2.84%	$ 10,000	119.51%	$11,950.93	128.64%	$9,290.07
2026	Year 11	11	2%	2.93%	$ 10,000	121.90%	$12,189.94	133.42%	$9,136.78
2027	Year 12	12	2%	2.97%	$ 10,000	124.34%	$12,433.74	137.92%	$9,015.08
2028	Year 13	13	2%	3.05%	$ 10,000	126.82%	$12,682.42	143.48%	$8,839.42
2029	Year 14	14	2%	3.10%	$ 10,000	129.36%	$12,936.07	148.72%	$8,698.40
2030	Year 15	15	2%	3.20%	$ 10,000	131.95%	$13,194.79	155.38%	$8,491.89
2031	Year 16	16	2%	3.20%	$ 10,000	134.59%	$13,458.68	160.35%	$8,393.31
2032	Year 17	17	2%	3.20%	$ 10,000	137.28%	$13,727.86	165.48%	$8,295.88
2033	Year 18	18	2%	3.20%	$ 10,000	140.02%	$14,002.41	170.77%	$8,199.57
2034	Year 19	19	2%	3.37%	$ 10,000	142.82%	$14,282.46	181.50%	$7,869.17
2035	Year 20	20	2%	3.42%	$ 10,000	145.68%	$14,568.11	189.45%	$7,689.84
2036	Year 21	21	2%	3.48%	$ 10,000	148.59%	$14,859.47	198.21%	$7,496.78
2037	Year 22	22	2%	3.50%	$ 10,000	151.57%	$15,156.66	205.94%	$7,359.63
2038	Year 23	23	2%	3.51%	$ 10,000	154.60%	$15,459.80	213.38%	$7,245.27
2039	Year 24	24	2%	3.51%	$ 10,000	157.69%	$15,768.99	221.10%	$7,131.99
2040	Year 25	25	2%	3.51%	$ 10,000	160.84%	$16,084.37	228.86%	$7,027.95
2041	Year 26	26	2%	3.51%	$ 10,000	164.06%	$16,406.06	236.90%	$6,925.43
2042	Year 27	27	2%	3.51%	$ 10,000	167.34%	$16,734.18	245.21%	$6,824.40
2043	Year 28	28	2%	3.51%	$ 10,000	170.69%	$17,068.86	253.82%	$6,724.85
2044	Year 29	29	2%	3.51%	$ 10,000	174.10%	$17,410.24	262.73%	$6,626.74
2045	Year 30	30	2%	3.51%	$ 10,000	177.58%	$17,758.45	271.95%	$6,530.07
2046	Year 31	31	2%	3.51%	$ 10,000	181.14%	$18,113.62	281.49%	$6,434.81
2047	Year 32	32	2%	3.51%	$ 10,000	184.76%	$18,475.89	291.37%	$6,340.94
2048	Year 33	33	2%	3.51%	$ 10,000	188.45%	$18,845.41	301.60%	$6,248.44
2049	Year 34	34	2%	3.51%	$ 10,000	192.22%	$19,222.31	312.19%	$6,157.29
2050	Year 35	35	2%	3.51%	$ 10,000	196.07%	$19,606.76	323.15%	$6,067.47

APPENDIX 3 NPV CALCULATIONS YEAR 2

			Cell 1 - Year 2 - step one financing cost						
		Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures - 30 June 2017							**$ 487,931.39**
2017	Year 2	2	2%	0.00%	$ -	100.00%		100.00%	
2018	Year 3	3	2%	1.85%	$ -	102.00%		101.85%	
2019	Year 4	4	2%	1.92%	$ -	104.04%		103.88%	
2020	Year 5	5	2%	1.98%	$ 250,000	106.12%	$265,302.00	106.06%	$250,154.48
2021	Year 6	6	2%	2.01%	$ 10,000	108.24%	$10,824.32	108.29%	$9,995.30
2022	Year 7	7	2%	2.20%	$ 10,000	110.41%	$11,040.81	111.48%	$9,903.99
2023	Year 8	8	2%	2.38%	$ 10,000	112.62%	$11,261.62	115.18%	$9,777.64
2024	Year 9	9	2%	2.55%	$ 10,000	114.87%	$11,486.86	119.25%	$9,632.53
2025	Year 10	10	2%	2.69%	$ 10,000	117.17%	$11,716.59	123.68%	$9,473.46
2026	Year 11	11	2%	2.84%	$ 10,000	119.51%	$11,950.93	128.64%	$9,290.07
2027	Year 12	12	2%	2.93%	$ 10,000	121.90%	$12,189.94	133.42%	$9,136.78
2028	Year 13	13	2%	2.97%	$ 10,000	124.34%	$12,433.74	137.92%	$9,015.08
2029	Year 14	14	2%	3.05%	$ 10,000	126.82%	$12,682.42	143.48%	$8,839.42
2030	Year 15	15	2%	3.10%	$ 10,000	129.36%	$12,936.07	148.72%	$8,698.40
2031	Year 16	16	2%	3.20%	$ 10,000	131.95%	$13,194.79	155.38%	$8,491.89
2032	Year 17	17	2%	3.20%	$ 10,000	134.59%	$13,458.68	160.35%	$8,393.31
2033	Year 18	18	2%	3.20%	$ 10,000	137.28%	$13,727.86	165.48%	$8,295.88
2034	Year 19	19	2%	3.20%	$ 10,000	140.02%	$14,002.41	170.77%	$8,199.57
2035	Year 20	20	2%	3.37%	$ 10,000	142.82%	$14,282.46	181.50%	$7,869.17
2036	Year 21	21	2%	3.42%	$ 10,000	145.68%	$14,568.11	189.45%	$7,689.84
2037	Year 22	22	2%	3.48%	$ 10,000	148.59%	$14,859.47	198.21%	$7,496.78
2038	Year 23	23	2%	3.50%	$ 10,000	151.57%	$15,156.66	205.94%	$7,359.63
2039	Year 24	24	2%	3.51%	$ 10,000	154.60%	$15,459.80	213.38%	$7,245.27
2040	Year 25	25	2%	3.51%	$ 10,000	157.69%	$15,768.99	221.10%	$7,131.99
2041	Year 26	26	2%	3.51%	$ 10,000	160.84%	$16,084.37	228.86%	$7,027.95
2042	Year 27	27	2%	3.51%	$ 10,000	164.06%	$16,406.06	236.90%	$6,925.43
2043	Year 28	28	2%	3.51%	$ 10,000	167.34%	$16,734.18	245.21%	$6,824.40
2044	Year 29	29	2%	3.51%	$ 10,000	170.69%	$17,068.86	253.82%	$6,724.85
2045	Year 30	30	2%	3.51%	$ 10,000	174.10%	$17,410.24	262.73%	$6,626.74
2046	Year 31	31	2%	3.51%	$ 10,000	177.58%	$17,758.45	271.95%	$6,530.07
2047	Year 32	32	2%	3.51%	$ 10,000	181.14%	$18,113.62	281.49%	$6,434.81
2048	Year 33	33	2%	3.51%	$ 10,000	184.76%	$18,475.89	291.37%	$6,340.94
2049	Year 34	34	2%	3.51%	$ 10,000	188.45%	$18,845.41	301.60%	$6,248.44
2050	Year 35	35	2%	3.51%	$ 10,000	192.22%	$19,222.31	312.19%	$6,157.29

			Cell 1 - Year 2 - step two - change in EPA Requirements costs						
			Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures - 30 June 2017								**$ 537,962.29**
2016	Year 1	1	2%	0.00%	$ -	100.00%		100.00%	
2017	Year 2	2	2%	0.00%	$ -	100.00%		100.00%	
2018	Year 3	3	2%	1.85%	$ -	102.00%		101.85%	
2019	Year 4	4	2%	1.92%	$ -	104.04%		103.88%	
2020	Year 5	5	2%	1.98%	$ 300,000	106.12%	$318,362.40	106.06%	$300,185.37
2021	Year 6	6	2%	2.01%	$ 10,000	108.24%	$10,824.32	108.29%	$9,995.30
2022	Year 7	7	2%	2.20%	$ 10,000	110.41%	$11,040.81	111.48%	$9,903.99
2023	Year 8	8	2%	2.38%	$ 10,000	112.62%	$11,261.62	115.18%	$9,777.64
2024	Year 9	9	2%	2.55%	$ 10,000	114.87%	$11,486.86	119.25%	$9,632.53
2025	Year 10	10	2%	2.69%	$ 10,000	117.17%	$11,716.59	123.68%	$9,473.46
2026	Year 11	11	2%	2.84%	$ 10,000	119.51%	$11,950.93	128.64%	$9,290.07
2027	Year 12	12	2%	2.93%	$ 10,000	121.90%	$12,189.94	133.42%	$9,136.78
2028	Year 13	13	2%	2.97%	$ 10,000	124.34%	$12,433.74	137.92%	$9,015.08
2029	Year 14	14	2%	3.05%	$ 10,000	126.82%	$12,682.42	143.48%	$8,839.42
2030	Year 15	15	2%	3.10%	$ 10,000	129.36%	$12,936.07	148.72%	$8,698.40
2031	Year 16	16	2%	3.20%	$ 10,000	131.95%	$13,194.79	155.38%	$8,491.89
2032	Year 17	17	2%	3.20%	$ 10,000	134.59%	$13,458.68	160.35%	$8,393.31
2033	Year 18	18	2%	3.20%	$ 10,000	137.28%	$13,727.86	165.48%	$8,295.88
2034	Year 19	19	2%	3.20%	$ 10,000	140.02%	$14,002.41	170.77%	$8,199.57
2035	Year 20	20	2%	3.37%	$ 10,000	142.82%	$14,282.46	181.50%	$7,869.17
2036	Year 21	21	2%	3.42%	$ 10,000	145.68%	$14,568.11	189.45%	$7,689.84
2037	Year 22	22	2%	3.48%	$ 10,000	148.59%	$14,859.47	198.21%	$7,496.78
2038	Year 23	23	2%	3.50%	$ 10,000	151.57%	$15,156.66	205.94%	$7,359.63
2039	Year 24	24	2%	3.51%	$ 10,000	154.60%	$15,459.80	213.38%	$7,245.27
2040	Year 25	25	2%	3.51%	$ 10,000	157.69%	$15,768.99	221.10%	$7,131.99
2041	Year 26	26	2%	3.51%	$ 10,000	160.84%	$16,084.37	228.86%	$7,027.95
2042	Year 27	27	2%	3.51%	$ 10,000	164.06%	$16,406.06	236.90%	$6,925.43
2043	Year 28	28	2%	3.51%	$ 10,000	167.34%	$16,734.18	245.21%	$6,824.40
2044	Year 29	29	2%	3.51%	$ 10,000	170.69%	$17,068.86	253.82%	$6,724.85
2045	Year 30	30	2%	3.51%	$ 10,000	174.10%	$17,410.24	262.73%	$6,626.74
2046	Year 31	31	2%	3.51%	$ 10,000	177.58%	$17,758.45	271.95%	$6,530.07
2047	Year 32	32	2%	3.51%	$ 10,000	181.14%	$18,113.62	281.49%	$6,434.81
2048	Year 33	33	2%	3.51%	$ 10,000	184.76%	$18,475.89	291.37%	$6,340.94
2049	Year 34	34	2%	3.51%	$ 10,000	188.45%	$18,845.41	301.60%	$6,248.44
2050	Year 35	35	2%	3.51%	$ 10,000	192.22%	$19,222.31	312.19%	$6,157.29

APPENDIX 4 NPV CALCULATIONS YEAR 3

			Index - Projected cost increases	Cell 1 - Year 3 - step one - financing costs Illustrative Long Term Govt Bond rate	Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures - 30 June 2018								**$ 542,185.38**
2018	Year 3	3	2%	0	$ -	100.00%		100.00%	
2019	Year 4	4	2%	1.85%	$ -	102.00%		101.85%	
2020	Year 5	5	2%	1.92%	$ 300,000	104.04%	$312,120.00	103.88%	$300,471.14
2021	Year 6	6	2%	1.98%	$ 10,000	106.12%	$10,612.08	106.06%	$10,006.18
2022	Year 7	7	2%	2.01%	$ 10,000	108.24%	$10,824.32	108.29%	$9,995.30
2023	Year 8	8	2%	2.20%	$ 10,000	110.41%	$11,040.81	111.48%	$9,903.99
2024	Year 9	9	2%	2.38%	$ 10,000	112.62%	$11,261.62	115.18%	$9,777.64
2025	Year 10	10	2%	2.55%	$ 10,000	114.87%	$11,486.86	119.25%	$9,632.53
2026	Year 11	11	2%	2.69%	$ 10,000	117.17%	$11,716.59	123.68%	$9,473.46
2027	Year 12	12	2%	2.84%	$ 10,000	119.51%	$11,950.93	128.64%	$9,290.07
2028	Year 13	13	2%	2.93%	$ 10,000	121.90%	$12,189.94	133.42%	$9,136.78
2029	Year 14	14	2%	2.97%	$ 10,000	124.34%	$12,433.74	137.92%	$9,015.08
2030	Year 15	15	2%	3.05%	$ 10,000	126.82%	$12,682.42	143.48%	$8,839.42
2031	Year 16	16	2%	3.10%	$ 10,000	129.36%	$12,936.07	148.72%	$8,698.40
2032	Year 17	17	2%	3.20%	$ 10,000	131.95%	$13,194.79	155.38%	$8,491.89
2033	Year 18	18	2%	3.20%	$ 10,000	134.59%	$13,458.68	160.35%	$8,393.31
2034	Year 19	19	2%	3.20%	$ 10,000	137.28%	$13,727.86	165.48%	$8,295.88
2035	Year 20	20	2%	3.20%	$ 10,000	140.02%	$14,002.41	170.77%	$8,199.57
2036	Year 21	21	2%	3.37%	$ 10,000	142.82%	$14,282.46	181.50%	$7,869.17
2037	Year 22	22	2%	3.42%	$ 10,000	145.68%	$14,568.11	189.45%	$7,689.84
2038	Year 23	23	2%	3.48%	$ 10,000	148.59%	$14,859.47	198.21%	$7,496.78
2039	Year 24	24	2%	3.50%	$ 10,000	151.57%	$15,156.66	205.94%	$7,359.63
2040	Year 25	25	2%	3.51%	$ 10,000	154.60%	$15,459.80	213.38%	$7,245.27
2041	Year 26	26	2%	3.51%	$ 10,000	157.69%	$15,768.99	220.86%	$7,139.92
2042	Year 27	27	2%	3.51%	$ 10,000	160.84%	$16,084.37	228.60%	$7,036.10
2043	Year 28	28	2%	3.51%	$ 10,000	164.06%	$16,406.06	236.61%	$6,933.80
2044	Year 29	29	2%	3.51%	$ 10,000	167.34%	$16,734.18	244.90%	$6,832.98
2045	Year 30	30	2%	3.51%	$ 10,000	170.69%	$17,068.86	253.49%	$6,733.62
2046	Year 31	31	2%	3.51%	$ 10,000	174.10%	$17,410.24	262.37%	$6,635.71
2047	Year 32	32	2%	3.51%	$ 10,000	177.58%	$17,758.45	271.57%	$6,539.23
2048	Year 33	33	2%	3.51%	$ 10,000	181.14%	$18,113.62	281.09%	$6,444.14
2049	Year 34	34	2%	3.51%	$ 10,000	184.76%	$18,475.89	290.94%	$6,350.44
2050	Year 35	35	2%	3.51%	$ 10,000	188.45%	$18,845.41	301.14%	$6,258.11

APPENDIX 5 NPV CALCULATIONS YEAR 4

			Cell 1 - Year 4 - financing						
			Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures 30 June 2019								**$ 543,911.30**
2019	Year 4	4	2%	0%	$ -	102.00%		100.00%	
2020	Year 5	5	2%	1.85%	$ 300,000	104.04%	$312,120.00	103.72%	$300,913.85
2021	Year 6	6	2%	1.92%	$ 10,000	106.12%	$10,612.08	105.87%	$10,023.57
2022	Year 7	7	2%	1.98%	$ 10,000	108.24%	$10,824.32	108.15%	$10,008.24
2023	Year 8	8	2%	2.01%	$ 10,000	110.41%	$11,040.81	110.47%	$9,994.12
2024	Year 9	9	2%	2.20%	$ 10,000	112.62%	$11,261.62	113.93%	$9,884.90
2025	Year 10	10	2%	2.38%	$ 10,000	114.87%	$11,486.86	117.92%	$9,741.06
2026	Year 11	11	2%	2.55%	$ 10,000	117.17%	$11,716.59	122.29%	$9,581.15
2027	Year 12	12	2%	2.69%	$ 10,000	119.51%	$11,950.93	127.01%	$9,409.62
2028	Year 13	13	2%	2.84%	$ 10,000	121.90%	$12,189.94	132.29%	$9,214.37
2029	Year 14	14	2%	2.93%	$ 10,000	124.34%	$12,433.74	137.32%	$9,054.66
2030	Year 15	15	2%	2.97%	$ 10,000	126.82%	$12,682.42	142.01%	$8,930.50
2031	Year 16	16	2%	3.05%	$ 10,000	129.36%	$12,936.07	147.86%	$8,749.01
2032	Year 17	17	2%	3.10%	$ 10,000	131.95%	$13,194.79	153.33%	$8,605.60
2033	Year 18	18	2%	3.20%	$ 10,000	134.59%	$13,458.68	160.35%	$8,393.31
2034	Year 19	19	2%	3.20%	$ 10,000	137.28%	$13,727.86	165.48%	$8,295.88
2035	Year 20	20	2%	3.20%	$ 10,000	140.02%	$14,002.41	170.77%	$8,199.57
2036	Year 21	21	2%	3.20%	$ 10,000	142.82%	$14,282.46	176.23%	$8,104.38
2037	Year 22	22	2%	3.37%	$ 10,000	145.68%	$14,568.11	187.61%	$7,765.10
2038	Year 23	23	2%	3.42%	$ 10,000	148.59%	$14,859.47	195.93%	$7,584.25
2039	Year 24	24	2%	3.48%	$ 10,000	151.57%	$15,156.66	205.11%	$7,389.56
2040	Year 25	25	2%	3.50%	$ 10,000	154.60%	$15,459.80	213.15%	$7,252.97
2041	Year 26	26	2%	3.51%	$ 10,000	157.69%	$15,768.99	221.10%	$7,131.99
2042	Year 27	27	2%	3.51%	$ 10,000	160.84%	$16,084.37	228.86%	$7,027.95
2043	Year 28	28	2%	3.51%	$ 10,000	164.06%	$16,406.06	236.90%	$6,925.43
2044	Year 29	29	2%	3.51%	$ 10,000	167.34%	$16,734.18	245.21%	$6,824.40
2045	Year 30	30	2%	3.51%	$ 10,000	170.69%	$17,068.86	253.82%	$6,724.85
2046	Year 31	31	2%	3.51%	$ 10,000	174.10%	$17,410.24	262.73%	$6,626.74
2047	Year 32	32	2%	3.51%	$ 10,000	177.58%	$17,758.45	271.95%	$6,530.07
2048	Year 33	33	2%	3.51%	$ 10,000	181.14%	$18,113.62	281.49%	$6,434.81
2049	Year 34	34	2%	3.51%	$ 10,000	184.76%	$18,475.89	291.37%	$6,340.94
2050	Year 35	35	2%	3.51%	$ 10,000	188.45%	$18,845.41	301.60%	$6,248.44

			Cell 1 - Year 4 - licence changes						
			Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures 30 June 2019								**$ 669,292.07**
2016	Year 1	1	2%	0%	$ -	100.00%		100.00%	
2017	Year 2	2	2%	0%	$ -	100.00%		100.00%	
2018	Year 3	3	2%	0%	$ -	100.00%		100.00%	
2019	Year 4	4	2%	0%	$ -	102.00%		100.00%	
2020	Year 5	5	2%	1.85%	$ 425,000	104.04%	$442,170.00	103.72%	$426,294.62
2021	Year 6	6	2%	1.92%	$ 10,000	106.12%	$10,612.08	105.87%	$10,023.57
2022	Year 7	7	2%	1.98%	$ 10,000	108.24%	$10,824.32	108.15%	$10,008.24
2023	Year 8	8	2%	2.01%	$ 10,000	110.41%	$11,040.81	110.47%	$9,994.12
2024	Year 9	9	2%	2.20%	$ 10,000	112.62%	$11,261.62	113.93%	$9,884.90
2025	Year 10	10	2%	2.38%	$ 10,000	114.87%	$11,486.86	117.92%	$9,741.06
2026	Year 11	11	2%	2.55%	$ 10,000	117.17%	$11,716.59	122.29%	$9,581.15
2027	Year 12	12	2%	2.69%	$ 10,000	119.51%	$11,950.93	127.01%	$9,409.62
2028	Year 13	13	2%	2.84%	$ 10,000	121.90%	$12,189.94	132.29%	$9,214.37
2029	Year 14	14	2%	2.93%	$ 10,000	124.34%	$12,433.74	137.32%	$9,054.66
2030	Year 15	15	2%	2.97%	$ 10,000	126.82%	$12,682.42	142.01%	$8,930.50
2031	Year 16	16	2%	3.05%	$ 10,000	129.36%	$12,936.07	147.86%	$8,749.01
2032	Year 17	17	2%	3.10%	$ 10,000	131.95%	$13,194.79	153.33%	$8,605.60
2033	Year 18	18	2%	3.20%	$ 10,000	134.59%	$13,458.68	160.35%	$8,393.31
2034	Year 19	19	2%	3.20%	$ 10,000	137.28%	$13,727.86	165.48%	$8,295.88
2035	Year 20	20	2%	3.20%	$ 10,000	140.02%	$14,002.41	170.77%	$8,199.57
2036	Year 21	21	2%	3.20%	$ 10,000	142.82%	$14,282.46	176.23%	$8,104.38
2037	Year 22	22	2%	3.37%	$ 10,000	145.68%	$14,568.11	187.61%	$7,765.10
2038	Year 23	23	2%	3.42%	$ 10,000	148.59%	$14,859.47	195.93%	$7,584.25
2039	Year 24	24	2%	3.48%	$ 10,000	151.57%	$15,156.66	205.11%	$7,389.56
2040	Year 25	25	2%	3.50%	$ 10,000	154.60%	$15,459.80	213.15%	$7,252.97
2041	Year 26	26	2%	3.51%	$ 10,000	157.69%	$15,768.99	221.10%	$7,131.99
2042	Year 27	27	2%	3.51%	$ 10,000	160.84%	$16,084.37	228.86%	$7,027.95
2043	Year 28	28	2%	3.51%	$ 10,000	164.06%	$16,406.06	236.90%	$6,925.43
2044	Year 29	29	2%	3.51%	$ 10,000	167.34%	$16,734.18	245.21%	$6,824.40
2045	Year 30	30	2%	3.51%	$ 10,000	170.69%	$17,068.86	253.82%	$6,724.85
2046	Year 31	31	2%	3.51%	$ 10,000	174.10%	$17,410.24	262.73%	$6,626.74
2047	Year 32	32	2%	3.51%	$ 10,000	177.58%	$17,758.45	271.95%	$6,530.07
2048	Year 33	33	2%	3.51%	$ 10,000	181.14%	$18,113.62	281.49%	$6,434.81
2049	Year 34	34	2%	3.51%	$ 10,000	184.76%	$18,475.89	291.37%	$6,340.94
2050	Year 35	35	2%	3.51%	$ 10,000	188.45%	$18,845.41	301.60%	$6,248.44

APPENDIX 6 NPV CALCULATIONS YEAR 5

			Index - Projected cost increases	Illustrative Long Term Govt Bond rate	Cell 1 - Year 5 Raw cash flow	Indexation factor	FV	Discount factor	PV
	Present Value Disclosures 30 June 2020								**$ 244,527.76**
2016	Year 1	1	2%	0%	$ -	100.00%		100.00%	
2017	Year 2	2	2%	0%	$ -	100.00%		100.00%	
2018	Year 3	3	2%	0%	$ -	100.00%		100.00%	
2019	Year 4	4	2%	0%	$ -	102.00%		100.00%	
2020	Year 5	5	2%	0%	$ -	100.00%	$0.00	100.00%	$0.00
2021	Year 6	6	2%	1.85%	$ 10,000	102.00%	$10,612.08	105.64%	$10,045.73
2022	Year 7	7	2%	1.92%	$ 10,000	104.04%	$10,824.32	107.90%	$10,031.43
2023	Year 8	8	2%	1.98%	$ 10,000	106.12%	$11,040.81	110.29%	$10,010.30
2024	Year 9	9	2%	2.01%	$ 10,000	108.24%	$11,261.62	112.70%	$9,992.94
2025	Year 10	10	2%	2.20%	$ 10,000	110.41%	$11,486.86	116.43%	$9,865.84
2026	Year 11	11	2%	2.38%	$ 10,000	112.62%	$11,716.59	120.73%	$9,704.62
2027	Year 12	12	2%	2.55%	$ 10,000	114.87%	$11,950.93	125.40%	$9,530.04
2028	Year 13	13	2%	2.69%	$ 10,000	117.17%	$12,189.94	130.43%	$9,346.21
2029	Year 14	14	2%	2.84%	$ 10,000	119.51%	$12,433.74	136.05%	$9,139.28
2030	Year 15	15	2%	2.93%	$ 10,000	121.90%	$12,682.42	141.34%	$8,973.29
2031	Year 16	16	2%	2.97%	$ 10,000	124.34%	$12,936.07	146.22%	$8,846.72
2032	Year 17	17	2%	3.05%	$ 10,000	126.82%	$13,194.79	152.37%	$8,659.53
2033	Year 18	18	2%	3.10%	$ 10,000	129.36%	$13,458.68	158.08%	$8,513.78
2034	Year 19	19	2%	3.20%	$ 10,000	131.95%	$13,727.86	165.48%	$8,295.88
2035	Year 20	20	2%	3.20%	$ 10,000	134.59%	$14,002.41	170.77%	$8,199.57
2036	Year 21	21	2%	3.20%	$ 10,000	137.28%	$14,282.46	176.23%	$8,104.38
2037	Year 22	22	2%	3.20%	$ 10,000	140.02%	$14,568.11	181.87%	$8,010.30
2038	Year 23	23	2%	3.37%	$ 10,000	142.82%	$14,859.47	193.93%	$7,662.41
2039	Year 24	24	2%	3.42%	$ 10,000	145.68%	$15,156.66	202.63%	$7,480.12
2040	Year 25	25	2%	3.48%	$ 10,000	148.59%	$15,459.80	212.25%	$7,283.88
2041	Year 26	26	2%	3.50%	$ 10,000	151.57%	$15,768.99	220.61%	$7,147.86
2042	Year 27	27	2%	3.51%	$ 10,000	154.60%	$16,084.37	228.86%	$7,027.95
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References

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AASB 136 - Impairment of Assets, www.aasb.gov.au

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Australian Bureau of Statistics, 6427.0 Producer Price Indexes, Australia, Table 17. Output of the Construction industries, subdivision and class index numbers, www.abs.gov.au

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