Agenda

ORDINARY MEETING OF COUNCIL

AGENDA

16 NOVEMBER 2022

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1. MEETING OPENED

1.1 Acknowledgement of Country

The traditional owners of the land on which the meeting is held to be acknowledged.

1.2 Opening Prayer

A minute's silence to be held for those persons recently deceased followed by the opening prayer.

2. LEAVE OF ABSENCE

No Leave Of Absence.

3. CONDOLENCES/GET WELL WISHES

3.1 Condolences/Get Well Wishes

Author: Bella Greinke, Council Business Officer
Responsible Officer: Ian Church, Chief Executive Officer

Officer's Recommendation:

THAT letters of condolence be forwarded to the families of recently deceased persons from within, or associated with, the Lockyer Valley region.

Attachments

There are no attachments for this report.

4. DECLARATION OF ANY PRESCRIBED CONFLICT OF INTERESTS/DECLARABLE CONFLICTS OF INTEREST BY COUNCILLORS

4.1 Declaration of Prescribed Conflict of Interest on any Item of Business

Pursuant to Chapter 5B, Part 2 of the *Local Government Act 2009*, a councillor who has a prescribed conflict of interest in an issue to be considered at a meeting of a local government, or any of its committees must:

(a) inform the meeting of the prescribed conflict of interest in the matter, including the following about the interest –
    i. if it arises because of a gift, loan or contract, the value of the gift, loan or contract
    ii. if it arises because of an application or submission, the subject of the application or submission
    iii. the name of any entity other than the councillor that has an interest in the matter
    iv. the nature of the councillor's relationship with the entity that has an interest in a matter
    v. details of the councillor's and any other entity's interest in the matter; and

(b) leave the meeting room, including any area set aside for the public, and stay out of the meeting room while the matter is being discussed and voted on unless the subject councillor has written notice from the Minister to participate in the matter.

4.2 Declaration of Declarable Conflict of Interest on any Item of Business

Pursuant to Chapter 5B, Part 3 of the *Local Government Act 2009*, a councillor who has a declarable conflict of interest in a matter to be considered at a meeting of the local government or any of its committees must inform the meeting about the personal interest in the matter, including the following particulars about the interests:

(a) the nature of the interests
(b) if it arises because of the councillor's relationship with a related party:
    i. the name of the related party to the councillor
    ii. the nature of the relationship of the related party to the councillor
    iii. the nature of the related party's interest in the matter
(c) if it arises because of a gift or loan from another person to the councillor or a related party:
    i. the name of the other person
    ii. the nature of the relationship of the other person to the councillor or related party
    iii. the nature of the other person's interest in the matter
    iv. the value of the gift or loan and the date the gift or loan was made.

(d) how the councillor intends to handle the matter i.e. leave the meeting or proposes to stay in a meeting.

5. MAYORAL MINUTE

No Mayoral Minute.

6. CONFIRMATION OF MINUTES

6.1 Confirmation of Ordinary Meeting Minutes - 26 October 2022

Author: Ian Church, Chief Executive Officer
Responsible Officer: Ian Church, Chief Executive Officer

Officer's Recommendation:

THAT the Minutes of the Ordinary Meeting of the Lockyer Valley Regional Council held on Wednesday 26 October 2022 be taken as read and confirmed.

Attachments

There are no attachments for this report.

7. BUSINESS ARISING FROM MINUTES

No Business Arising from Minutes.

8. COMMITTEE REPORTS

No Committee Reports.

9. DEPUTATIONS/PRESENTATIONS

No Deputations/Presentations.

10. EXECUTIVE OFFICE REPORTS

10.1 Summary of Council Actual Performance v Budget - 31 October 2022

Author: Dee Stewart, Acting Chief Financial Officer
Responsible Officer: Ian Church, Chief Executive Officer

Purpose:

The purpose of this report is to provide Council with an update of Council's financial performance against budget for the financial year to 31 October 2022.

Officer's Recommendation:
THAT Council receive and note the Summary of Council Actual Financial Performance versus Budget to 31 October 2022.

Executive Summary

In accordance with Section 204 of the *Local Government Regulation 2012*, a financial report summarising the progress of Council's actual performance against budget is to be presented to Council. This report provides a summary of Council's financial performance against budget for the financial year to 31 October 2022.

At 31 October 2022, revenues are above target and expenditures are slightly above target.

The amounts shown in the report relating to the Statement of Financial Position are subject to change as end of year processes are finalised and the 2021-22 audit completed.

Proposal

Monthly reporting of Council's financial performance is a legislative requirement and reinforces sound financial management practices throughout the organisation. The following report provides a summary of Council's financial performance against budget to 31 October 2022.

Operating Revenue - Year to date target $27.67 million actual $28.26 million or 102.14%

At 31 October 2022, overall operating revenue for the year to date is above target.
Rates and Utility Charges (Gross) on target.

The first rates levy for 2022/2023 was raised in September with a due date of 12 October 2022. Rates will be closely monitored throughout the year regarding cash flow and overdue balances as well as whether growth targets are being achieved as forecast. 88.97% of the rates levy was collected as at 28 October 2022.

Fees and Charges over budget by $0.24 million
The favourable variances in fees and charges relates predominately to higher than expected income from plumbing and building fees ($0.15 million) and infrastructure charges ($0.10 million).

Operating Grant and Subsidies over budget by $0.30 million
This line item is over budget due to the receipt of $0.24 million for counter disaster operations funded by QRA. This was budgeted to be received in the 2021/2022 financial year. This will be included as revenue for the 2022/2023 financial as part of the next budget amendment.

Revenue – Contract/Recoverable Works over budget by $.26 million
This line item is performing above budget due to increased income from RMPC at this time of the year.

Operating Expenditure - Year to date target $21.96 million actual $22.38 million or 101.92%

Employee Costs on target
Employee costs are slightly above target however capital wages are underspent by $0.56 million which is being offset by vacant positions. The underspend on capital wages is mostly due to infrastructure staff focusing work on the emergent works flood recovery projects during the earlier weeks of the financial year. This is funded works and therefore the underspend on capital wages will have no impact on the bottom line. Capital wages will be closely monitored throughout the year for possible adjustments at quarterly budget review.

Goods and Services over budget by $.30 million
Goods and services are over budget primarily due to increased operating expenditure on flood recovery works. This is funded works and will not affect the bottom line. There is an overspend of operating expenditure on the REPA flood reconstruction works of $0.38 million. All REPA works are currently budgeted as capital works. The REPA budget will be reviewed during the next quarterly budget amendment for a possible transfer of funds from capital to operating expenditure. The flood recovery works will be closely monitored for budget amendment as the restoration works continues.

Capital Project Expenditure – Year to date target $6.68 million actual $3.92 million or 58.68%

At 31 October 2022, Council has expended $3.92 million on its capital works program with a further $5.78 million in committed costs for works currently in progress. The focus of Council's infrastructure works teams, this financial year to date, has been on emergency works and flood restoration activities which are an operational expense.

Additional detail is provided in the capital works program within the attachment.

Statement of Financial Position

The Statement of Financial Position provides information on the breakdown of Council's assets and liabilities at a point in time. At 31 October 2022, Council had $59.09 million in current assets compared to $19.29 million in current liabilities with a ratio of 3.06:1. This means that for every dollar of current liability, there is $3.06 in assets to cover it.

The opening balances for the year will change as the 2021-22 audit is finalised.

Statement of Cash Flows

The Statement of Cash Flows provides information on the amount of cash coming in and going out. As at 31 October 2022, there has been a net cash inflow of $3.20 million with $4.82 million outflow from operating activities; and a net cash outflow of $1.22 million from investing activities including capital revenue and expenditure.

The Statement of Cash Flows is important as it shows the real movement in Council's cash balances, as opposed to the accounting movements shown in the Statement of Income and Expenditure. To maintain adequate working capital, it is estimated that Council needs around $11.00 million cash at any one time. As at 31 October, Council's cash balance was $51.04 million. Unexpended grant funds which are restricted to be spent in accordance with the terms of the grant are $4.07 million.

Options

Option 1
THAT Council receive and note the Summary of Council Actual Financial Performance versus Budget to 31 October 2022.

Or

Option 2
THAT Council do not receive the Summary of Council Actual Financial Performance versus Budget to 31 October 2022.

Previous Council Resolutions
Nil

Critical Dates
Nil

Strategic Implications

Corporate Plan
Leadership and Council
Outcome:
5.1 Undertake robust and accountable financial, resource and infrastructure planning and management to ensure affordable and sustainable outcomes for our community.
5.7 Compliant with relevant legislation

Finance and Resource
Monitoring of budgets and actuals will remain important if Council is to achieve the financial results adopted as part of the 2022-23 Budget.

Legislation and Policy
In accordance with section 204 of the *Local Government Regulation 2012*, a financial report summarising the progress of Council's actual performance against budgeted performance is to be provided to Council.

Risk Management

Key Corporate Risk Category: FE2

Reference and Risk Description:	Finance and Economic Decision making governance, due diligence, accountability and sustainability.

Consultation

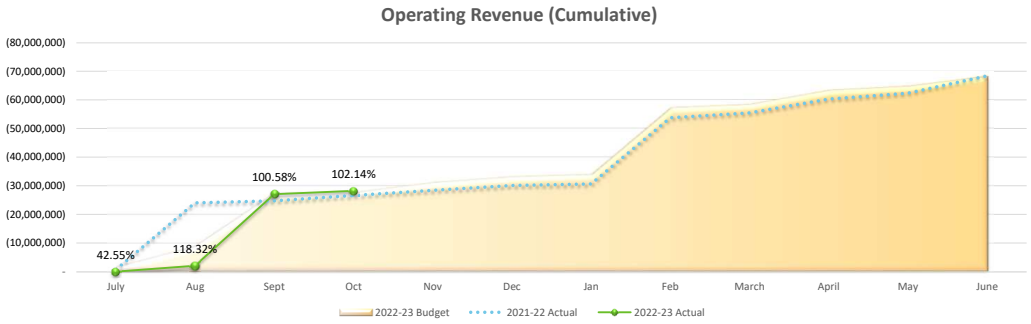
Internal Consultation

- Managers and Group Managers
- Finance Team
- Portfolio Councillor Consultation

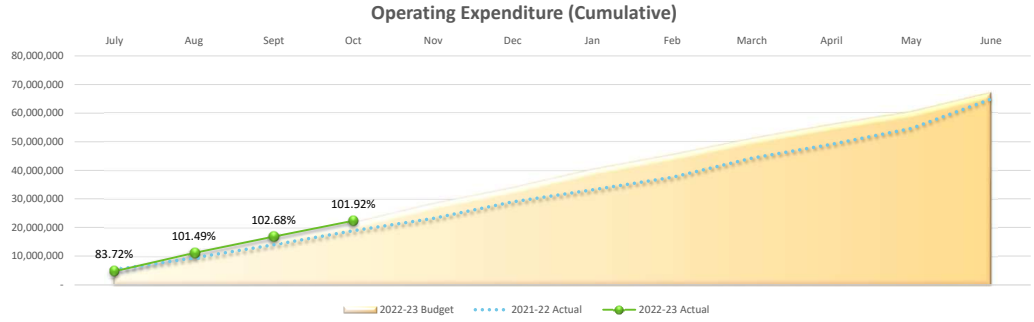
Attachments

1⇩ Monthly Financial Statements - October 2022 18 Pages

LOCKYER VALLEY REGIONAL COUNCIL
Operating Revenue and Expenditure Dashboard
For the Period Ending 31st October, 2022

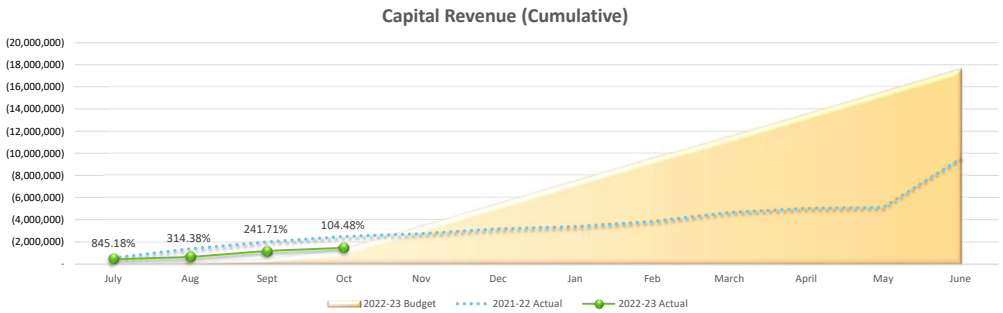


REVENUE TO DATE by Type	Rates and Utility Charges (Gross)	Discount	Charges and Fees	Interest	Operating Grants and Subsidies	Operating Contributions and Donations	Revenue - Contract/Recoverable Works	Other Revenue	Profit from Investments	Total
Actual	(22,336,256)	935,674	(2,153,490)	(550,660)	(2,796,309)	(17,368)	(608,930)	(730,975)	-	**(28,258,313)**
Budget	(22,428,788)	946,008	(1,916,573)	(571,095)	(2,480,995)	(163,750)	(350,000)	(700,340)	-	**(27,665,532)**
Variance	*(92,532)*	*10,334*	*236,917*	*(20,435)*	*315,314*	*(146,382)*	*258,930*	*30,635*	-	***592,781***
Target %	**99.59%**	**98.91%**	**112.36%**	**96.42%**	**112.71%**	**10.61%**	**173.98%**	**104.37%**	**-**	**102.14%**
Movement to Prior Month Target %	→	→	↑	↑	→	→	↓	↑	→	↑



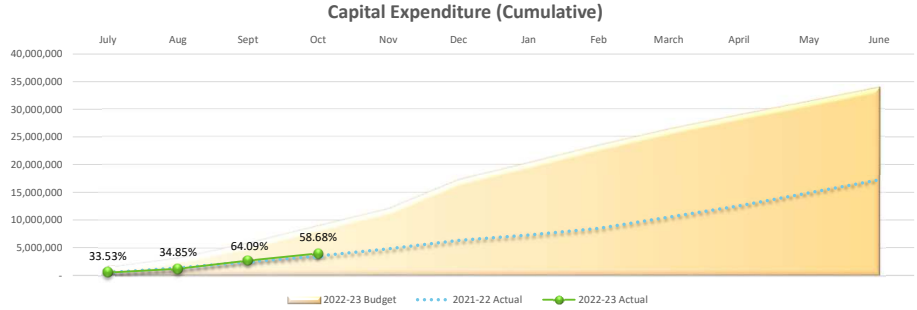
EXPENDITURE TO DATE by Type	Employee Costs	Goods and Services	Finance Costs	Depreciation	Total
Actual	9,342,823	8,734,670	270,594	4,030,728	**22,378,815**
Budget	9,217,996	8,433,917	273,664	4,030,728	**21,956,306**
Variance	*(124,826)*	*(300,753)*	*3,070*	-	***(422,509)***
Target %	**101.35%**	**103.57%**	**98.88%**	**100.00%**	**101.92%**
Movement to Prior Month Target %	→	↑	↓	→	↑

LOCKYER VALLEY REGIONAL COUNCIL
Interim Capital Revenue and Expenditure Dashboard
For the Period Ending 31st October, 2022



REVENUE TO DATE by Type	Capital Grants, Subsidies and Contributions	Profit (Loss) on Disposal of Non Current Assets	Total
Actual	(1,477,823)	-	**(1,477,823)**
Budget	(1,414,443)	-	**(1,414,443)**
Variance	*63,380*	-	**63,380**
Target %	**104.48%**	**-**	**104.48%**
Movement to Prior Month Target %	→	→	→

Note: Graph above is reflecting capital grants and subsidies and developer contributed assets only



EXPENDITURE TO DATE by Group	People, Customer and Corporate Services	Executive Office	Infrastructure	Community and Regional Prosperity	Total
Actual	26,585	3,900	3,878,737	12,138	**3,921,359**
Budget	512,500	260,333	5,825,485	84,822	**6,683,140**
Target %	**5.19%**	**1.50%**	**66.58%**	**14.31%**	**58.68%**
Movement to Prior Month Target %	→	→	↓	↑	↓

Lockyer Valley Regional Council (Whole Council)
Statement of Comprehensive Income
For the Period Ending October 2022

	Current Annual Budget	Actuals YTD	Budget YTD	Variance Amount YTD	Variance % YTD
Income					
Revenue					
Recurrent Revenue					
Rates and Utility Charges (Gross)	44,854,076	22,336,256	22,428,788	92,532	0.41%
Discount	(1,892,017)	(935,674)	(946,008)	(10,334)	1.09%
Charges and Fees	5,668,783	2,153,490	1,916,573	(236,917)	-12.36%
Interest	1,850,320	550,660	571,095	20,435	3.58%
Operating Grants and Subsidies	11,952,947	2,796,309	2,480,995	(315,314)	-12.71%
Operating Contributions and Donations	705,000	17,368	163,750	146,382	89.39%
Revenue - Contract/Recoverable Works	1,050,000	608,930	350,000	(258,930)	-73.98%
Other Revenue	2,231,861	730,975	700,340	(30,635)	-4.37%
Profit from Investments	1,805,837	-	-	-	0.00%
Total Recurrent Revenue	68,226,807	28,258,313	27,665,532	(592,781)	-2.14%
Capital Revenue					
Capital Grants, Subsidies and Contributions	17,646,544	1,477,823	1,414,443	(63,380)	-4.48%
Total Revenue	85,873,351	29,736,137	29,079,975	(656,162)	-2.26%
Capital Income	-	-	-	-	0.00%
Total Income	**85,873,351**	**29,736,137**	**29,079,975**	**(656,162)**	**-2.26%**
Expenses					
Recurrent Expenses					
Employee Costs	28,098,149	9,342,823	9,217,996	(124,826)	-1.35%
Goods and Services	25,798,525	8,734,670	8,433,917	(300,753)	-3.57%
Finance costs	1,047,789	270,594	273,664	3,070	1.12%
Depreciation	12,092,184	4,030,728	4,030,728	-	0.00%
Total Recurrent Expenses	67,036,646	22,378,815	21,956,306	(422,509)	-1.92%
Capital Expenses	-	-	-	-	0.00%
Loss on Sale	(81,465)	-	(40,733)	(40,733)	100.00%
Total Expenses	**66,955,181**	**22,378,815**	**21,915,573**	**(463,242)**	**-2.11%**
Net Recurrent Result/Operating Surplus/(Deficit)	**1,190,161**	**5,879,498**	**5,709,226**	**(170,272)**	**-2.98%**
NET RESULT AFTER CAPITAL ITEMS	**18,918,170**	**7,357,322**	**7,164,402**	**(192,920)**	**-2.69%**

Lockyer Valley Regional Council (Executive Office)
Statement of Comprehensive Income
For Period Ending October 2022

	Current Annual Budget	Actuals YTD	Budget YTD	Variance Amount YTD	Variance % YTD
Income					
Revenue					
Recurrent Revenue					
Rates and Utility Charges (Gross)	35,704,270	17,834,787	17,853,802	19,015	0.11
Discount	(1,642,017)	(825,512)	(821,008)	4,504	(0.55)
Charges and Fees	370,693	84,571	112,359	27,788	24.73
Interest	1,817,320	537,764	560,095	22,331	3.99
Operating Grants and Subsidies	4,333,105	881,562	865,206	(16,357)	(1.89)
Revenue - Contract/Recoverable Works	-	239	-	(239)	-
Other Revenue	1,176,652	315,866	350,134	34,268	9.79
Profit from Investments	1,805,837	-	-	-	-
Total Recurrent Revenue	43,565,860	18,829,276	18,920,587	91,311	0.48
Capital Revenue					
Capital Grants, Subsidies and Contributions	581,832	4,688	-	(4,688)	-
Total Revenue	44,147,692	18,833,965	18,920,587	86,623	0.46
Capital Income	-	-	-	-	-
Total Income	**44,147,692**	**18,833,965**	**18,920,587**	**86,623**	0.46
Expenses					
Recurrent Expenses					
Employee Costs	4,339,233	1,591,112	1,017,797	(573,315)	(56.33)
Goods and Services	3,267,900	725,685	788,539	62,854	7.97
Finance costs	662,744	167,305	176,686	9,381	5.31
Depreciation	10,330,804	3,443,601	3,443,601	-	-
Total Recurrent Expenses	18,600,681	5,927,703	5,426,623	(501,080)	(9.23)
Capital Expenses	-	-	-	-	-
Loss on Sale	-	-	-	-	-
Total Expenses	**18,600,681**	**5,927,703**	**5,426,623**	**(501,080)**	(9.23)
Net Recurrent Result/Operating Surplus/(Deficit)	**24,965,179**	**12,901,573**	**13,493,964**	**592,391**	**4.39**
NET RESULT AFTER CAPITAL ITEMS	**25,547,011**	**12,906,261**	**13,493,964**	**587,703**	**4.36**

Lockyer Valley Regional Council (People, Customer and Corporate Services)
Statement of Comprehensive Income
For Period Ending October 2022

	Current Annual Budget	Actuals YTD	Budget YTD	Variance Amount YTD	Variance % YTD
Income					
Revenue					
Recurrent Revenue					
Rates and Utility Charges (Gross)	7,966,562	3,912,998	3,983,364	70,367	1.77
Discount	(250,000)	(110,162)	(125,000)	(14,838)	11.87
Charges and Fees	579,540	250,438	193,180	(57,258)	(29.64)
Interest	32,000	12,419	10,667	(1,752)	(16.42)
Operating Grants and Subsidies	131,500	103,425	71,500	(31,925)	(44.65)
Operating Contributions and Donations	50,000	-	-	-	-
Other Revenue	542,000	221,048	175,167	(45,882)	(26.19)
Total Recurrent Revenue	9,051,602	4,390,165	4,308,878	(81,288)	(1.89)
Capital Revenue					
Capital Grants, Subsidies and Contributions	1,796,065	21,808	20,000	(1,808)	(9.04)
Total Revenue	10,847,667	4,411,973	4,328,878	(83,095)	(1.92)
Capital Income	-	-	-	-	-
Total Income	**10,847,667**	**4,411,973**	**4,328,878**	**(83,095)**	(1.92)
Expenses					
Recurrent Expenses					
Employee Costs	6,003,710	1,970,262	2,046,430	76,168	3.72
Goods and Services	9,882,360	3,220,818	3,235,438	14,620	0.45
Finance costs	89,019	28,680	22,421	(6,258)	(27.91)
Depreciation	595,940	198,647	198,647	-	-
Total Recurrent Expenses	16,571,028	5,418,406	5,502,936	84,530	1.54
Capital Expenses	-	-	-	-	-
Loss on Sale	-	-	-	-	-
Total Expenses	**16,571,028**	**5,418,406**	**5,502,936**	**84,530**	1.54
Net Recurrent Result/Operating Surplus/(Deficit)	**(7,519,426)**	**(1,028,240)**	**(1,194,058)**	**(165,818)**	**13.89**
NET RESULT AFTER CAPITAL ITEMS	**(5,723,361)**	**(1,006,433)**	**(1,174,058)**	**(167,626)**	**14.28**

Lockyer Valley Regional Council (Community and Regional Prosperity)
Statement of Comprehensive Income
For Period Ending October 2022

	Current Annual Budget	Actuals YTD	Budget YTD	Variance Amount YTD	Variance % YTD
Income					
Revenue					
Recurrent Revenue					
Rates and Utility Charges (Gross)	319,104	156,402	159,552	3,150	1.97
Charges and Fees	4,368,550	1,685,452	1,494,367	(191,086)	(12.79)
Interest	1,000	477	333	(144)	(43.05)
Operating Grants and Subsidies	1,269,764	293,246	282,123	(11,123)	(3.94)
Operating Contributions and Donations	655,000	17,368	163,750	146,382	89.39
Revenue - Contract/Recoverable Works	-	1,880	-	(1,880)	-
Other Revenue	53,209	22,507	21,726	(781)	(3.59)
Total Recurrent Revenue	6,666,627	2,177,332	2,121,850	(55,482)	(2.61)
Capital Revenue					
Capital Grants, Subsidies and Contributions	95,000	-	-	-	-
Total Revenue	6,761,627	2,177,332	2,121,850	(55,482)	(2.61)
Capital Income	-	-	-	-	-
Total Income	**6,761,627**	**2,177,332**	**2,121,850**	**(55,482)**	(2.61)
Expenses					
Recurrent Expenses					
Employee Costs	7,158,984	2,339,922	2,460,272	120,350	4.89
Goods and Services	5,105,032	1,034,826	1,277,020	242,194	18.97
Finance costs	6,600	(1,134)	2,200	3,334	151.54
Depreciation	26,540	8,847	8,847	-	-
Total Recurrent Expenses	12,297,156	3,382,461	3,748,339	365,878	9.76
Capital Expenses	-	-	-	-	-
Loss on Sale	-	-	-	-	-
Total Expenses	**12,297,156**	**3,382,461**	**3,748,339**	**365,878**	9.76
Net Recurrent Result/Operating Surplus/(Deficit)	**(5,630,529)**	**(1,205,129)**	**(1,626,489)**	**(421,360)**	**25.91**
NET RESULT AFTER CAPITAL ITEMS	**(5,535,529)**	**(1,205,129)**	**(1,626,489)**	**(421,360)**	**25.91**

Lockyer Valley Regional Council (Infrastructure)
Statement of Comprehensive Income
For Period Ending October 2022

	Current Annual Budget	Actuals YTD	Budget YTD	Variance Amount YTD	Variance % YTD
Income					
Revenue					
Recurrent Revenue					
Rates and Utility Charges (Gross)	864,140	432,070	432,070	-	-
Charges and Fees	350,000	133,028	116,667	(16,361)	(14.02)
Operating Grants and Subsidies	4,255,578	562,167	562,167	-	-
Revenue - Contract/Recoverable Works	1,050,000	606,811	350,000	(256,811)	(73.37)
Other Revenue	460,000	171,554	153,313	(18,241)	(11.90)
Total Recurrent Revenue	6,979,718	1,905,630	1,614,217	(291,414)	(18.05)
Capital Revenue					
Capital Grants, Subsidies and Contributions	15,173,647	1,426,114	1,394,443	(31,671)	(2.27)
Total Revenue	22,153,365	3,331,744	3,008,660	(323,084)	(10.74)
Capital Income	-	-	-	-	-
Total Income	**22,153,365**	**3,331,744**	**3,008,660**	**(323,084)**	(10.74)
Expenses					
Recurrent Expenses					
Employee Costs	10,095,222	2,885,090	3,192,497	307,407	9.63
Goods and Services	5,816,732	1,749,379	1,556,421	(192,959)	(12.40)
Finance costs	289,426	75,743	72,357	(3,387)	(4.68)
Depreciation	1,138,900	379,633	379,633	-	-
Total Recurrent Expenses	17,340,281	5,089,846	5,200,907	111,061	2.14
Capital Expenses	-	-	-	-	-
Loss on Sale	(81,465)	-	(40,733)	(40,733)	100.00
Total Expenses	**17,258,816**	**5,089,846**	**5,160,175**	**70,329**	1.36
Net Recurrent Result/Operating Surplus/(Deficit)	**(10,360,563)**	**(3,184,216)**	**(3,586,691)**	**(402,475)**	**11.22**
NET RESULT AFTER CAPITAL ITEMS	**4,894,549**	**(1,758,102)**	**(2,151,515)**	**(393,413)**	**18.29**

Lockyer Valley Regional Council (2021/2022 Flood Events)
Statement of Comprehensive Income
For Period Ending October 2022

	Current Annual Budget	Actuals YTD	Budget YTD	Variance Amount YTD	Variance % YTD
Income					
Revenue					
Recurrent Revenue					
Operating Grants and Subsidies	1,963,000	955,909	700,000	(255,909)	(36.56)
Total Recurrent Revenue	1,963,000	955,909	700,000	(255,909)	(36.56)
Capital Revenue					
Capital Grants, Subsidies and Contributions	-	25,214	-	(25,214)	-
Total Revenue	1,963,000	981,123	700,000	(281,123)	(40.16)
Capital Income	-	-	-	-	-
Total Income	**1,963,000**	**981,123**	**700,000**	**(281,123)**	(40.16)
Expenses					
Recurrent Expenses					
Employee Costs	501,000	556,436	501,000	(55,436)	(11.07)
Goods and Services	1,726,500	2,003,962	1,576,500	(427,462)	(27.11)
Total Recurrent Expenses	2,227,500	2,560,398	2,077,500	(482,898)	(23.24)
Capital Expenses	-	-	-	-	-
Loss on Sale	-	-	-	-	-
Total Expenses	**2,227,500**	**2,560,398**	**2,077,500**	**(482,898)**	(23.24)
Net Recurrent Result/Operating Surplus/(Deficit)	**(264,500)**	**(1,604,489)**	**(1,377,500)**	**226,989**	**(16.48)**
NET RESULT AFTER CAPITAL ITEMS	**(264,500)**	**(1,579,276)**	**(1,377,500)**	**201,776**	**(14.65)**

Lockyer Valley Regional Council
Statement of Cash Flows
For the Period Ending 31 October, 2022

	2022-2023 Annual Budget	2022-2023 YTD Actuals
Cash flows from operating activities:		
Receipts		
Receipts from customers	63,980,000	29,348,898
Dividend received	-	-
Interest received	1,850,000	550,660
Payments		
Payments to suppliers and employees	(54,960,000)	(24,834,674)
Interest expense	(620,000)	(241,077)
Net cash inflow (outflow) from operating activities	10,250,000	4,823,808
Cash flows from investing activities:		
Capital grants, subsidies and contributions	17,650,000	2,477,765
Payments for property, plant and equipment	(36,340,000)	(3,964,448)
Payments for investment property	-	-
Net transfer (to) from cash investments	1,170,000	-
Proceeds from sale of property plant and equipment	300,000	266,798
Net cash inflow (outflow) from investing activities	(17,220,000)	(1,219,885)
Cash flows from financing activities:		
Repayment of borrowings	(7,720,000)	(407,529)
Proceeds from borrowings	-	-
Net cash inflow (outflow) from financing activities	(7,720,000)	(407,529)
Net increase (decrease) in cash and cash equivalents held	(14,690,000)	3,196,394
Cash and cash equivalents at beginning of the financial year	44,090,000	47,845,646
Cash and cash equivalents at end of the financial year	29,400,000	51,042,040

LOCKYER VALLEY REGIONAL COUNCIL
For Period Ended October, 2022

CAPITAL WORKS PROGRAM

	Budget	Actual	Committed	Total (Includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
INFRASTRUCTURE										
Cost Centre: Parks & Open Spaces										
Program: Parks and Open Spaces Projects										
Fairways Park Retention Dam Design	25,000	4,433	17,700	22,133	2,867	-	25,000	50	10	
Fairways Parking and Traffic Controls	30,000	23,848	-	23,848	6,152	-	30,000	100	50	
Fairways Shade and Drainage Improvements	20,000	12,597	800	13,397	6,603	-	20,000	100	50	
FH Tennis Club Synthetic Court Renewal	59,000	-	-	-	59,000	25,000	34,000	100	0	
Jean Biggs Disability Parking	42,000	2,096	-	2,096	39,904	-	42,000	50	0	
Lions Park Laidley Seat Replacement	9,500	-	5,000	5,000	4,500	-	9,500	100	0	
LRR Bubbler Renewal	5,000	-	-	-	5,000	-	5,000	100	0	
McNulty Park Bubbler	5,000	-	-	-	5,000	-	5,000	100	0	
Murphys Creek Ground Playground Renewal	136,000	2,659	-	2,659	133,341	-	136,000	80	0	
Parks and Open Spaces Projects Projects Total	*331,500*	*45,634*	*23,500*	*69,134*	*262,366*	*25,000*	*306,500*			
Cost Centre: Capital Program Delivery										
Program: Asphalt Resheet Programme										
21/22 Asphalt Renewal Gatton CBD (LRCI2)	164,757	133,799	35,985	169,784	(5,027)	153,206	11,551	100	100	
22/23 Asphalt Resheet	500,000	5,465	253,317	258,782	241,218	-	500,000	Not applicable	80	
Asphalt Resheet Programme Projects Total	*664,757*	*139,265*	*289,302*	*428,566*	*236,191*	*153,206*	*511,551*			
Program: Culvert Renewal Programme										
21/22 Culvert Renewal Program (SEQCSP)	241,137	58,272	549	58,821	182,316	238,677	2,460	100	85	
Culvert Renewal Programme Projects Total	*241,137*	*58,272*	*549*	*58,821*	*182,316*	*238,677*	*2,460*			
Program: Future Design Works Programme										
23/24 Culvert Renewal Program	-	4,951	-	4,951	(4,951)	-	-	30	Not applicable	
23/24 Floodway Renewal Program	-	2,246	107,550	109,796	(109,796)	-	-	5	Not applicable	
Cemetery Road/Victor Court Intersection	-	964	-	964	(964)	-	-	30	Not applicable	
Footpath Missing Links - Jones Road	-	1,826	-	1,826	(1,826)	-	-	5	Not applicable	
Future Design - 23/24 Footpath Renewal	-	761	-	761	(761)	-	-	5	Not applicable	
Future Project Design-Budget Only	350,000	-	-	-	350,000	-	350,000	Not applicable	Not applicable	Design Budget Holding Project.
Lawlers Road/Sandy Creek Intersection	-	1,058	-	1,058	(1,058)	-	-	30	Not applicable	

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
Main Camp Creek Road (BSBR)	-	507	-	507	(507)	-	-	5	Not applicable	
Mountain Rd/Range Crescent Intersection	-	3,419	-	3,419	(3,419)	-	-	30	Not applicable	
Tenthill Ropeley Rockside Steinhardt	-	838	-	838	(838)	-	-	5	Not applicable	
Waterhouse Road	-	2,305	-	2,305	(2,305)	-	-	90	Not applicable	
William St, Forest Hill (Future Design)	-	2,025	-	2,025	(2,025)	-	-	10	Not applicable	
Future Design Works Programme Projects Total	350,000	*20,900*	*107,550*	128,450	221,550	-	350,000			
Program: Footpath Renewal Programme										
21/22 Footpath Renewal Program (SEQCSP)	339,976	7,021	-	7,021	332,955	339,976	-	100		
Murphys Creek Road, Footpath (LRCI2)	7,850	-	-	-	7,850	7,850	-	100	95	
Footpath Renewal Programme Projects Total	347,826	*7,021*	-	7,021	340,805	347,826	-			
Program: Floodway Renewal Programme										
21/22 Floodway Renewal Program (SEQCSP)	400,000	1,481	41,420	42,901	357,099	383,000	17,000	100		
Floodway Renewal Programme Projects Total	400,000	*1,481*	*41,420*	42,901	357,099	383,000	17,000			
Program: Other Infrastructure Projects										
Betterment Design Projects	150,000	-	-	-	150,000	-	150,000	0	0	
Bridge Improvements	100,000	-	-	-	100,000	-	100,000	0	0	
Bus Shelter Drayton St (BSSP + PTAIP)	32,000	213	980	1,193	30,807	27,686	4,314	100	0	
Digital Signage (LER)	431,293	875	380,988	381,863	49,430	431,293	-	100	10	
Flagstone Cr/Lockyer Cr Rd (HVSPP)	613,250	258,074	40,591	298,665	314,585	225,000	388,250	100	95	
Flagstone Creek Rd/Carpendale Rd (HVSPP)	-	103,694	-	103,694	(103,694)	-	-	100	100	Expected completion November 2022.
Gatton Central Drainage Upgrade - Design	338,943	7,839	-	7,839	331,104	-	338,943	5		
Gatton Industrial Estate (HVSPP)	640,000	273,963	144,186	418,149	221,851	225,000	415,000	100	90	
Gehrke Road/Lorikeet Road (BS)	450,000	52,646	38,633	91,279	358,721	224,500	225,500	100		
Grantham Scrub/Grantham Winwill (HVSPP)	1,000,000	39,833	180,338	220,171	779,829	167,220	832,780	100	10	
Lake Clarendon Way (LRCI3)	799,158	1,075	-	1,075	798,083	799,158	-	60		
North East St Stormwater Renewal(SEQCSP)	208,000	67,509	11,292	78,801	129,199	208,000	-	100	75	
North East Street Kerb & Chanel (SEQCSP)	300,000	2,699	74,379	77,078	222,922	300,000	-	100	5	
North Street / East Street, Gatton (BS)	302,000	34,320	41,469	75,789	226,211	262,000	40,000	100	10	
Safe Schools Program - TIDS 21/22&22/23	58,134	4,001	165,481	169,482	(111,348)	29,067	29,067	100	80	
Safe Schools Program - TIDS 22/23	60,000	-	-	-	60,000	30,000	30,000			
Spencer & Maitland (Black Spot 22/23)	219,000	8,124	-	8,124	210,876	189,000	30,000	30	0	
Spencer Street/East Street, Gatton (BS)	74,205	58,873	-	58,873	15,332	74,205	-	100	100	
Springbrook Park Entry Upgrade (LRCI3)	450,000	51,342	32,613	83,956	366,044	450,000	-	100	15	
Other Infrastructure Projects Total	6,225,983	*965,079*	*1,110,949*	2,076,029	4,149,954	3,642,129	2,583,854			
Program: Pavement Renewal Programme										
Gehrke Road, Plainland - TIDS 21/22	505,861	443,650	51,082	494,732	11,129	505,861	-	100	95	
Pavement Renewal Programme Projects Total	505,861	*443,650*	*51,082*	494,732	11,129	505,861	-			

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
Program: Pavement Widening Programme										
Grantham Scrub Road - TIDS 21/22&22/23	2,699,983	163,198	634,885	798,083	1,901,900	974,429	1,725,554	100	15	
Woodlands Rd Pavement Rehab (LRCI2)	84,959	-	-	-	84,959	84,959	-			
Pavement Widening Programme Projects Total	2,784,942	*163,198*	*634,885*	798,083	1,986,859	1,059,388	1,725,554			
Program: REPA Programme										
REPA Complimentary Gravel Works Program	1,000,000	-	-	-	1,000,000	-	1,000,000	Not applicable	10	
REPA Programme Projects Total	1,000,000	-	-	-	1,000,000	-	1,000,000			
Program: Seal Renewal Programme										
21/22 Bitumen Reseal Program (RTR)	-	58,112	-	58,112	(58,112)	-	-	100	100	
22/23 Bitumen Reseal (R2R)	1,700,000	31,629	1,526,299	1,557,928	142,072	927,079	772,921	Not applicable	0	
Seal Renewal Programme Projects Total	1,700,000	*89,741*	*1,526,299*	1,616,039	83,961	927,079	772,921			
Program: Seal Road Upgrade Programme										
Twidales Rd Helidon Spa Upgrade (SEQCSP)	13,368			-	13,368	13,368	-			
Seal Road Upgrade Programme Projects Total	13,368	-	-	-	13,368	13,368	-			
Cost Centre: DRFA New Event - REPA										
Program: REPA Programme										
DRFA - Feb 2022 - Adare Rd Floodway	-	2,721	-	2,721	(2,721)	-	-			Funded from Repa (Holding Project)
DRFA - Feb 2022 - Rockmount Road	-	11,406	54,352	65,759	(65,759)	-	-			Funded from Repa (Holding Project)
DRFA - Feb 2022 - Roches Road	-	11,352	39,786	51,138	(51,138)	-	-			Funded from Repa (Holding Project)
DRFA - Feb 2022 - Unsealed Roads	-	61,097	3,576	64,673	(64,673)	-	-			Funded from Repa (Holding Project)
DRFA - Feb 2022 - Woolshed Creek Rd Floodway	-	15,854	-	15,854	(15,854)	-	-			Funded from Repa (Holding Project)
DRFA - May 2022 - East Egypt Landslip	-	15,911	23,969	39,880	(39,880)	-	-			Funded from Repa (Holding Project)
DRFA - May 2022 - Berlin Road Landslip	-	12,411	27,469	39,880	(39,880)	-	-			Funded from Repa (Holding Project)
DRFA - May 2022 - Mountain View Drive Landslip	-	9,360	6,738	16,098	(16,098)	-	-			Funded from Repa (Holding Project)
DRFA - May 2022 - Steinkes Bridge	-	3,287	10,836	14,123	(14,123)	-	-			Funded from Repa (Holding Project)
DRFA - May 2022 - Litfin Bridge	-	9,360	6,738	16,098	(16,098)	-	-			Funded from Repa (Holding Project)
REPA (Holding Project)	7,000,000	-	-	-	7,000,000	7,000,000	-			REPA Budget Holding Project
REPA Programme Projects Total	7,000,000	*152,759*	*173,464*	326,224	6,673,776	7,000,000	-			
Cost Centre: Fleet										
Program: Fleet Projects										
21/22 Earthmoving Equipment Replacement	1,170,000	797,012	337,361	1,134,373	35,627	358,000	812,000	Not Applicable	Not Applicable	
21/22 Light Commercials Replacement	133,238	-	140,329	140,329	(7,091)	-	133,238	Not Applicable	Not Applicable	
21/22 Mowers Replacement	205,555	214,455	-	214,455	(8,900)	-	205,555	Not Applicable	Not Applicable	
21/22 Tractors Replacement	80,000	64,500	-	64,500	15,500	-	80,000	Not Applicable	Not Applicable	
21/22 Trailers Replacement	270,000	-	178,844	178,844	91,156	-	270,000	Not Applicable	Not Applicable	
22/23 Earthmoving Equipment	949,700	-	-	-	949,700	-	949,700	Not Applicable	Not Applicable	

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
22/23 Light Trucks	705,000	-	-	-	705,000	138,000	567,000	Not Applicable	Not Applicable	
22/23 Mowers	150,000	-	-	-	150,000	23,150	126,850	Not Applicable	Not Applicable	
22/23 Passenger Vehicles	200,000	-	-	-	200,000	-	200,000	Not Applicable	Not Applicable	
22/23 Trailers	80,000	-	-	-	80,000	48,500	31,500	Not Applicable	Not Applicable	
22/23 Trucks	270,000	-	-	-	270,000	60,000	210,000	Not Applicable	Not Applicable	
Light Commercial Vehicles	80,000	85,418	688	86,107	(6,107)	16,000	64,000	Not Applicable	Not Applicable	
New Light Commercial	45,000	-	-	-	45,000	-	45,000	Not Applicable	Not Applicable	
Passenger Vehicles	55,075	24,629	285	24,914	30,161	58,000	(2,925)	Not Applicable	Not Applicable	
Trucks	696,370	-	-	-	696,370	-	696,370	Not Applicable	Not Applicable	
Fleet Projects Projects Total	5,089,938	*1,186,014*	*657,507*	1,843,522	3,246,416	701,650	4,388,288			
Cost Centre: Cemetery										
Program: Cemetery Projects										
Gatton Cemetery Seam Strip Installation	35,000	-	-	-	35,000	-	35,000	100	0	
Gatton Cemetery Seating	6,000	-	3,372	3,372	2,628	-	6,000	100	0	
Laidley Cemetery Seam Strip Installation	20,000				20,000		20,000	100	0	
Laidley Cemet Seam Strip Install (LRCI1)	50,000	2,173	48,650	50,823	(823)	50,000	-	100	20	
Laidley Cemetery Seam Strip Renewal	35,000	324	-	324	34,676	-	35,000	100	0	
Cemetery Projects Projects Total	146,000	*2,496*	*52,022*	54,518	91,482	50,000	96,000			
Cost Centre: Camping Grounds										
Program: Camping Grounds Projects										
Disabled Toilet Lake Dyer	25,000	3,979	-	3,979	21,021	-	25,000	50	0	
Picnic Setting Renewal	27,000	2,267	-	2,267	24,733	-	27,000	50	0	
Camping Grounds Projects Projects Total	52,000	*6,246*	-	6,246	45,754	-	52,000			
Cost Centre: Facilities										
Program: Facilities Projects										
Bore Infrastructure Improvements(SEQCSP)	32,007	13,470	-	13,470	18,537	32,007	-	100	100	
Cahill Park Machinery Shed (SEQCSP)	21,567	13,602	-	13,602	7,965	21,567	-	100	100	
Catering Equipment Colonial Cafe	25,000	-	-	-	25,000	-	25,000	100	100	
Community Facilities Design Packages	70,000	-	-	-	70,000	-	70,000	Not applicable	Not applicable	
Depot Containers	10,000	-	-	-	10,000	-	10,000	100	0	
Electrical Infrastructure Program	98,527	49,353	9,967	59,320	39,207	-	98,527	100	90	
Electrical Upgrades	159,300	849	9,940	10,789	148,511	-	159,300	20	0	
Gatton Admin Building Works (LRCI3)	510,000	4,716	324,409	329,124	180,876	510,000	-	100	20	
Gatton Depot Action Plan	17,772	11,150	15,050	26,200	(8,428)	-	17,772	100	70	
Gatton Depot Fuel Tank	58,415	9,635	38,921	48,556	9,859	-	58,415	100	50	
Gatton Shire Hall (BSBR)	210,000	-	-	-	210,000	210,000	-	0	0	
Gatton Showgrounds Program	-	407	-	407	(407)	-	-	100	100	
Grantham Butter Factory Upgrade (LER)	32,555	20,088	3,067	23,155	9,400	-	32,555	100	100	

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
GSH External Cladding and Gutters	370,000	21,816	3,360	25,176	344,824	-	370,000	90	0	
Helidon Community Centre (BSBR)	55,000	-	-	-	55,000	55,000	-	0	0	
Hydraulic Renewal Program	72,068	15,894	-	15,894	56,174	-	72,068	100	100	
Laidley Cultural Centre (BSBR)	210,000	-	-	-	210,000	210,000	-	0	0	
Laidley IGA Carpark	60,000	-	-	-	60,000	-	60,000	0	0	
Laidley Rec Grounds Program	75,000	53,336	-	53,336	21,664	-	75,000	100	100	
Laidley Rec Lights	-	1,037	-	1,037	(1,037)	-	-			
Laidley Showgrounds Bore Pump	12,500	14,025	-	14,025	(1,525)	-	12,500	100	100	
Lake Apex Amphitheatre (SEQLCSP)	365,026				365,026	365,026	-	100	0	
Laidley Saleyards Program (SECSP)	56,413				56,413	56,413	-	100	75	
LVSAC Pool Side Grates	35,000	1,173	-	1,173	33,827	-	35,000	100	25	
LVSAC Revitalisation (SEQCSP)	165,179	139,408	22,760	162,169	3,010	165,179	-	100	95	
Murphy's Creek Community Centre (BSBR)	30,000	-	-	-	30,000	30,000	-	0	0	
Solar to Gatton Depot Workshop	22,392	14,611	6,298	20,909	1,483	-	22,392	100	100	
Withcott Sports Centre (BSBR)	100,000	-	-	-	100,000	100,000	-	0	0	
Facilities Projects Projects Total	*2,873,721*	*384,571*	*433,771*	*818,342*	*2,055,379*	*1,755,192*	*1,118,529*			
Cost Centre: DRFA New Event - REPA										
Program: REPA Programme										
DRFA - Feb 2022 - Complementary Works	-	28,710	20,413	49,124	(49,124)	-	-			
DRFA - Feb 2022 - LVRC.0024.2122H.REC	-	1,776	-	1,776	(1,776)	-	-			
DRFA - Feb 2022 - LVRC.0027.2122H.REC	-	100,451	110,031	210,482	(210,482)	-	-			
DRFA - Feb 2022 - LVRC.0030.2122H.REC	-	-	63,978	63,978	(63,978)	-	-			
DRFA - Feb 2022 - LVRC.0031.2122H.REC	-	60,584	14,603	75,186	(75,186)	-	-			
DRFA - Feb 2022 - LVRC.0032.2122H.REC	-	20,888	34,660	55,548	(55,548)	-	-			
REPA Programme Projects Total	-	*212,408*	*243,685*	*456,093*	*(456,093)*	-	-			
Total for Group	**$ 29,727,033**	***$ 3,878,737***	***$ 5,345,985***	**$ 9,224,722**	**$ 20,502,311**	**$ 16,802,376**	**$ 12,924,657**			

PEOPLE AND BUSINESS PERFORMANCE

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
Cost Centre: Information Communication Technology										
Program: Information Communication Technology Projects										
22/23 LVCC Audio Visual Renewals	71,000	-	-	-	71,000	-	71,000	10	0	
Library People Counter Renewals	8,000	-	-	-	8,000	-	8,000	0	0	
Network Perimeter Security (Firewalls)	34,000	-	-	-	34,000	-	34,000	0	0	
UPS Renewal	50,000	-	-	-	50,000	-	50,000	0	0	
Information Communication Technology Projects Projects Tot	163,000	-	-	-	163,000	-	163,000			
Cost Centre: Waste Disposal										
Program: Waste Disposal Projects										
Laidley Leachate Tank Replacement	125,000	-	-	-	125,000	-	125,000	0	0	
Waste Disposal Projects Projects Total	125,000	-	-	-	125,000	-	125,000			
Cost Centre: Transfer Stations										
Program: Transfer Station Projects										
Gatton Landfill Cell 5 (SEQCSP)	3,796,065	*21,807*	*371,033*	392,840	3,403,225	1,796,065	2,000,000	10	0	
Laidley Landfill Capping Design	12,070	-	*8,800*	8,800	3,270	-	12,070	0	0	
Materials Recov Fac Asphalt Replacement	70,000	-	-	-	70,000	-	70,000	100	100	
Materials Recovery Facility Fire Systems	80,000	-	-	-	80,000	-	80,000	5	0	
Old Gatton Landfill Capping	8,550	-	*12,500*	12,500	(3,950)	-	8,550	5	0	
Transfer Station Projects Projects Total	3,966,685	*21,807*	*392,333*	414,140	3,552,545	1,796,065	2,170,620			
Cost Centre: Public Order & Safety										
Program: Public Order and Safety Projects										
22/23 LVRC CCTV	44,000	-	-	-	44,000	-	44,000	Not applicable	0	
LVRC CCTV	5,000	*4,777*	-	4,777	223	-	5,000	Not applicable	100	
Public Order and Safety Projects Projects Total	49,000	*4,777*	-	4,777	44,223	-	49,000			
Total for Group	**$ 4,303,685**	**$ 26,585**	**$ 392,333**	**$ 418,918**	**$ 3,884,767**	**$ 1,796,065**	**$ 2,507,620**			

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
COMMUNITY AND REGIONAL PROSPERITY										
Cost Centre: Regional Development										
Program: Regional Developments Projects										
Strategic Land Acquisition	1,250,000	-	-	-	1,250,000	-	1,250,000	0	0	
Regional Developments Projects Projects Total	1,250,000	-	-	-	1,250,000	-	1,250,000			
Cost Centre: Tourism Initiatives										
Program: Toursim Projects										
FH Rec Grounds Parking & Viewing Silos	100,000	-	-	-	100,000	-	100,000	0	0	
Toursim Projects Projects Total	100,000	-	-	-	100,000	-	100,000			
Cost Centre: Pest Management										
Program: Pest Management Projects										
Loan Spray Equipment	20,000	-	-	-	20,000	-	20,000	0	0	
Pest Management Projects Projects Total	20,000	-	-	-	20,000	-	20,000			
Cost Centre: Gatton Child Care Centre										
Program: Gatton Child Care Projects										
Gatton Childcare Centre Refurbishment	13,155	*11,956*	-	11,956	1,199	-	13,155	100	100	
Gatton Child Care Projects Projects Total	13,155	11,956	-	11,956	1,199	-	13,155			
Cost Centre: Art Galleries & RADF										
Program: Art Gallery & RADF Projects										
Art Gallery Lighting Upgrade (LRCI3)	95,000	*181*	-	181	94,819	95,000	-	100	0	
Art Gallery & RADF Projects Projects Total	95,000	181	-	181	94,819	95,000	-			
Total for Group	**$ 1,478,155**	***$ 12,138***	**$ -**	**$ 12,138**	**$ 1,466,017**	**$ 95,000**	**$ 1,383,155**			

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget	Total Amount of Funding	Council Contribution	Design Completion %	Construction Completion %	Comments
EXECUTIVE OFFICE										
Cost Centre: Disaster Management										
Program: Disaster Management Projects										
DM Donga Pathway	30,000	-	-	-	30,000	-	30,000	5	0	
DM Evacuation Centre Trailer	16,000	86	-	86	15,914	16,000	-	Not applicable	100	
Flood Intelligence Infrastructure	135,000	-	-	-	135,000	-	135,000	10	0	
Flood Warning System Upgrade	23,500	-	-	-	23,500	-	23,500	0	0	
QRRRF Flood Cameras & Electronic Signage	600,000	3,814	-	3,814	596,186	540,000	60,000	10	0	
Upgrade Flood Cameras Equipmen (SEQCSP)	25,832	-	38,375	38,375	(12,543)	25,832	-	0	0	
Disaster Management Projects Projects Total	830,332	3,900	38,375	42,275	788,057	581,832	248,500			
Total for Group	**$ 830,332**	***$ 3,900***	***$ 38,375***	**$ 42,275**	**$ 788,057**	**$ 581,832**	**$ 248,500**			
Total for Council	**$ 36,339,205**	***$ 3,921,359***	***$ 5,776,693***	**$ 9,698,052**	**$ 26,641,153**	**$ 19,275,273**	**$ 17,063,932**			

LOCKYER VALLEY REGIONAL COUNCIL
For Period Ended October, 2022

CAPITAL WORKS PROGRAM SUMMARY

	Budget	Actual	Committed	Total (includes committed costs)	Remaining Budget
INFRASTRUCTURE					
Camping Grounds	52,000	6,246	-	6,246	45,754
Capital Program Delivery	14,233,874	1,888,607	3,762,036	5,650,643	8,583,231
Cemetery	146,000	2,496	52,022	54,518	91,482
DRFA New Event - REPA	7,000,000	365,168	417,149	782,317	6,217,683
Facilities	2,873,721	384,571	433,771	818,342	2,055,379
Fleet	5,089,938	1,186,014	657,507	1,843,522	3,246,416
Not Applicable	-	-	-	-	-
Parks & Open Spaces	331,500	45,634	23,500	69,134	262,366
Total for Group	**$ 29,727,033**	***$ 3,878,737***	***$ 5,345,985***	**$ 9,224,722**	**$ 20,502,311**
PEOPLE AND BUSINESS PERFORMANCE					
Information Communication Technology	163,000	-	-	-	163,000
Public Order & Safety	49,000	*4,777*	-	4,777	44,223
Transfer Stations	3,966,685	*21,807*	*392,333*	414,140	3,552,545
Waste Disposal	125,000	-	-	-	125,000
Total for Group	**$ 4,303,685**	***$ 26,585***	***$ 392,333***	**$ 418,918**	**$ 3,884,767**
COMMUNITY AND REGIONAL PROSPERITY					
Art Galleries & RADF	95,000	*181*	-	181	94,819
Gatton Child Care Centre	13,155	*11,956*	-	11,956	1,199
Pest Management	20,000	-	-	-	20,000
Regional Development	1,250,000	-	-	-	1,250,000
Tourism Initiatives	100,000	-	-	-	100,000
Total for Group	**$ 1,478,155**	**$ 12,138**	**$ -**	**$ 12,138**	**$ 1,466,017**
EXECUTIVE OFFICE					
Disaster Management	830,332	3,900	38,375	42,275	788,057
Total for Group	**$ 830,332**	**$ 3,900**	**$ 38,375**	**$ 42,275**	**$ 788,057**
Total for Council	**$ 36,339,205**	***$ 3,921,359***	***$ 5,776,693***	**$ 9,698,052**	**$ 26,641,153**

10.2	**Rates - Nil Valuation Request - Lake Clarendon Grazing Association**
Author:	Kirsty Johnson, Coordinator Revenue Services; Dee Stewart, Acting Chief Financial Officer
Responsible Officer:	Ian Church, Chief Executive Officer

Purpose:

The purpose of this report is to seek Council's endorsement to request the Department of Resources to issue a nil valuation for Property ID 166020 effective from 11 March 2022 whilst it remains in the ownership of the Lake Clarendon Grazing Association Inc.

Officer's Recommendation:
THAT Council request the Department of Resources to issue a nil valuation for Property ID 166020 from 11 March 2022 whilst it remains in the ownership of the Lake Clarendon Grazing Association Inc.

Executive Summary

The *Local Government Act 2009* and *Local Government Regulation 2012* make provision for land exempt from rating if:

(b) land vested in, or placed under the management and control of, a person under an act for
i) a public purpose that is recreational or sporting purpose; or
ii) a charitable purpose.

Proposal

The property is under the ownership of trusteeship of deed of grant in trust (DOGIT) for pasturage and recreation purposes and for no other purpose whatsoever. This resulted in a nil valuation from the Department of Resources and no rates were raised on the property. The property was gifted to the people of Lake Clarendon for the use of local farmers to graze stock when in drought. A local cricket and tennis club also use the property.

Trusteeship of the DOGIT was held by individual trustees (four individuals). The trustees were then advised by the Department of Resources that they no longer accept individual trustees. The trusteeship of the DOGIT was then changed to the Lake Clarendon Grazing Association as a corporate trustee. The change in the trusteeship resulted in a valuation being issued for this property. The change in Trustee did not change ownership of the land, only the trustee. A title search still shows that the land to be held as a Deed of Grant in Trust.

Effective from 11 March 2022 the valuation was $520,000.

A supplementary notice was issued to the property owners, which is when the valuation of the land was brought to their attention.

Being land that is used for recreation or sporting purposes as well as a charitable purpose, under the Local Government Regulation 2012 the land may be exempt from rating.

Options

Option one: THAT Council resolve to request the nil valuation from the Department of Resources effective from 11 March 2022. [Property ID 166020]

Option two: That Council does not resolve to request the nil valuation from the Department of Resources effective from 11 March 2022. [Property ID 166020]

Previous Council Resolutions
Due to the nature of this report, there is no previous Council resolution.

Critical Dates
Due to the nature of this report, there are no critical dates.

Strategic Implications

Corporate Plan
Lockyer Leadership and Council

Finance and Resource
Council currently has sufficient budgeted funds available to request the nil valuation.

By allowing the nil valuation, Council will incur a loss of rates revenue of $4,983.66 for the financial year ended 30 June 2023.

If a zero valuation is applied to the property all future general rates will be foregone.

Legislation and Policy
Section 73 of the *Local Government Regulation 2012* gives Council the power to request exemption of a valuation if:

(b) land vested in, or placed under the management and control of, a person under an act for
i) a public purpose that is recreational or sporting purpose; or
ii) a charitable purpose.

Risk Management

Key Corporate Risk Code and Category:	FE12
Key Corporate Risk Descriptor:	Finance and Economic Decision making governance, due diligence, accountability and sustainability.

Consultation

Portfolio Councillor Consultation
Cr Wilson, as portfolio Councillor.

Internal Consultation
Due to the nature of this report, there has been no Internal Consultation completed.

External Consultation
Due to the internal administrative nature of this report, there has been no external consultation.

Community Engagement
Due to the internal administrative nature of this report, there has been no community engagement.

Attachments

There are no attachments for this report.

10.3 Appointment of Acting Chief Executive Officer

Author: Vickie Wieland, Executive Assistant Chief Executive Officer
Responsible Officer: Ian Church, Chief Executive Officer

Purpose:

The purpose of this report is to request Council appoint an Acting Chief Executive Officer from Thursday 17 November to Friday 25 November 2022 inclusive, for the period of the Chief Executive Officer's annual leave, in accordance with Section 195 of the *Local Government Act 2009*.

Officer's Recommendation:
THAT Council appoint the Group Manager People, Customer and Corporate Services as the Acting Chief Executive Officer, in accordance with Section 195 of the *Local Government Act 2009*, for the period Thursday, 17 to Friday 25 November 2022, inclusive.

Executive Summary

Councils are required by the *Local Government Act 2009* (LGA) to employ a Chief Executive Officer (CEO). Section 195 of the LGA provides a mechanism for the appointment of an Acting Chief Executive Officer (A/CEO) when the current CEO is absent.

The appointment of an A/CEO for the period of the CEO's absence contributes to achieving the "Lockyer Leadership and Council" Corporate Plan strategic vision of a well-managed, transparent and accountable organisation.

Proposal

The appointment of an A/CEO can be made under Section 195 of the LGA, however it is worth noting that an appointment under Section 195 need not be by resolution, providing the CEO or Mayor have been given delegated power under Section 257 of the LGA to make an acting appointment as the need arises.

Section 195 of the *LGA* states that:

"A Local Government may appoint a qualified person to act as the CEO during:
- *a) Any vacancy, or all vacancies, in the position*
- *b) Any period, or all periods, when the CEO is absent from duty or cannot, for another reason perform the CEO's responsibilities."*

The CEO will be on annual leave for the period 17 to 25 November 2022. Council is required to appoint an A/CEO to fulfil the duties and responsibilities of the position for that period.

It is recommended that Council appoint the Group Manager People, Customer and Corporate Services as the A/CEO for the period stated above. The Group Manager People, Customer and Corporate Services will be provided with the required delegated authority to carry out the role.

Options
Council could appoint another member of the Executive Leadership Team as A/CEO.

Previous Council Resolutions

Council has resolved to appoint an A/CEO on a number of occasions in the past.

Critical Dates
The period of leave being from 17 to 25 November inclusive.

Strategic Implications

Corporate Plan
Lockyer Leadership and Council

Finance and Resource
When a staff member is appointed to an acting role for a period of time, it is usual practice to make an additional payment part way between the staff members existing remuneration and that of the position they are appointed to.

Legislation and Policy
A resolution to appoint an A/CEO in accordance with the LGA ensures legislative compliance regarding this matter.

Risk Management
The appointment of an A/CEO reduces any residual risk to the organisation that may be created by not having a responsible Officer in that position for a period of time.

Consultation

Portfolio Councillor Consultation
Consultation was undertaken with the Mayor and members of the Executive Leadership Team.

Internal Consultation

All staff and key contacts will be advised by email of the CEO's absence and the appointment of an A/CEO for the period of absence.

External Consultation
Nil

Community Engagement
Nil

Attachments

There are no attachments for this report.

11. PEOPLE, CUSTOMER & CORPORATE SERVICES REPORTS

11.1 Adoption of the Public Interest Disclosure (PID) Policy & Procedure

Author: Caitlan Natalier, Coordinator Governance and Property
Responsible Officer: Dan McPherson, Group Manager People, Customer and Corporate Services

Purpose:

The purpose of this report is to seek adoption by Council of the Public Interest Disclosure (PID) Policy & Procedure as per the *Local Government Act 2009*.

Officer's Recommendation:
THAT Council adopt the Public Interest Disclosure (PID) Policy & Procedure as attached to this report.

Executive Summary

Council is required under the *Local Government Act 2009* to adopt specific policies, procedures and guidelines for the good governance of the organisation.

Proposal

The *Public Interest Disclosure Act 2010* facilitates the disclosure, in the public interest, of information about wrongdoing in the public sector and provides protection for those who make such disclosures.

As a public sector entity Lockyer Valley Regional Council is subject to the *Public Interest Disclosure Act 2010* and all Council employees and Councillors are public officers for the purposes of the legislation. Council, therefore, has obligations placed on it related to receiving public interest disclosures and to ensure that persons making such disclosures are protected from reprisal.

In accordance with section 28 of the *Public Interest Disclosure Act 2010*, Council is required to adopt a policy and procedure clearly articulating the procedures Council has in place to deal with public interest disclosures ensuring they are appropriately assessed, managed and that disclosers are provided the proper protections from reprisal.

Council's policy and procedure have been updated to reflect the requirements of the *Public Interest Disclosure Act 2010* and the Public Interest Disclosure Standard No.1/2019. In addition, the self-assessment checklist for the documents were completed.

The updated versions of these documents are presented in this report to Council for adoption.

Options

1. Council adopt the Public Interest Disclosure (PID) Policy and Procedure as attached to the report.
2. Council request amendments to the Public Interest Disclosure (PID) Policy and Procedure.

Previous Council Resolutions
14/10/2020 – 20-24/0157

Strategic Implications

Corporate Plan
Lockyer Leadership and Council;

- Commit to open and accountable governance to ensure community confidence and trust in council and our democratic values.
- Compliance with relevant legislation.

Finance and Resource
Budget implications will continue to be addressed through existing allocations.

Legislation and Policy
Council's policy framework has been adhered to in the development and review of the policy outlined in this report. It complies with the requirements of relevant legislation. Any future policy and legal implications will be addressed as matters arise before Council.

Risk Management

Key Corporate Risk Category:	FE2
Reference & Risk Descriptor:	Finance and Economic Decision making governance, due diligence, accountability and sustainability

Consultation

Internal Consultation

- Executive Leadership Team

Attachments

1⇩	PID Policy	3 Pages
2⇩	PID Procedure	20 Pages

Policy

STRATEGIC

PUBLIC INTEREST DISCLOSURE

Head of Power

Public Interest Disclosure Act 2010

Key Supporting Council Document

Lockyer Valley Regional Council Corporate Plan 2022-2027

- Commit to open and accountable governance to ensure community confidence and trust in council and our democratic values.
- Compliant with relevant legislation.

Definitions

PID Act	means the *Public Interest Disclosure Act 2010.*
Public Interest Disclosures (PID)	are broadly defined in the PID Act as being all information about suspected wrongdoing in the public sector disclosed to a Proper Authority under Chapter 2 of the PID Act.
Proper Authority	means a person or organisation that is authorised under the PID Act to receive disclosures.

Policy Objective

The objectives of this policy are:

a) To establish Council's commitment to:
   a. supporting and encouraging the reporting of information about suspected wrongdoing in Council

b. the promotion and proper management of Public Interest Disclosures (PIDs).

b) To acknowledge Council's obligations as a Public Sector Entity as defined in the *Public Interest Disclosure Act 2010.*
c) To implement the PID management program set out in Council's Public Interest Disclosure Procedure (PID Procedure) that provides for practical and effective procedures for reporting and managing PIDs which comply with the requirements of the PID Act.
d) To ensure that Council fulfils its responsibilities under the PID Act.

Policy Statement

Council is committed to fostering an ethical, transparent culture. In pursuit of this, Council values the disclosure of information about suspected wrongdoing in the public sector so that it can be properly assessed and, if necessary, appropriately investigated.

By virtue of their office or position, Council recognises the important role Councillors, Council employees and members of the public can play in the identification of suspected wrongdoing in the public sector. Council will provide support to any employee or other person who makes a disclosure about matters in the public interest.

In accordance with the objectives of the PID Act, Council will:

- promote the public interest by facilitating PIDs of wrongdoing
- ensure that PIDs are properly assessed and, where appropriate, properly investigated and dealt with
- ensure that appropriate consideration is given to the interests of persons who are the subject of a PID and
- afford protection from reprisals to persons making PIDs.

These outcomes (including information regarding how a PID may be made) are achieved through the implementation of the PID management program which is set out in Council's PID Procedure. This has been developed and implemented by the Chief Executive Officer. A Public Interest Disclosure Coordinator (PID Coordinator) is appointed by the Chief Executive Officer to be responsible for the implementation of Council's PID management program and any issues related to the management of PIDs. The Chief Executive Officer will implement effective systems to inform improvements to service delivery, business processes and internal controls raised in the management of PIDs. Council's PID Policy and Procedure will be evaluated and monitored regularly to ensure their effectiveness in the management of PIDs.

Council recognises the sensitivities which can be associated with PIDs and the need to maintain public confidence in its process for managing PIDs.

To that end Council will:

- ensure that PIDs are managed appropriately in accordance with the requirements of the PID Act and Council's PID management program
- maintain confidentiality of PIDs received (as per section 65 of the PID Act)
- prosecute any person who provides a false or misleading statement or information to Council with the intention of it being processed as a PID (as per section 66 of the PID Act)
- prosecute and/or take disciplinary action against any Councillor or Council employee who takes or attempts to take a reprisal action (refer section 40 & section 41 of the PID Act)

- ensure that proper records of PIDs received (as per section 29 of the PID Act) are maintained, and that the confidentiality of all records created during the investigation and reporting of PIDs are preserved (as per section 65 of the PID Act).

Human Rights Compatibility Statement

Consideration has been given to the requirements of the *Human Rights Act 2019* in developing this policy, and in particular to the right to privacy and reputation. The subject matter of this policy supports a human rights approach to decision making by Council and is not incompatible with human rights as the right to privacy and reputation is only limited to the extent permitted by the *Human Rights Act 2019* to provide for natural justice or comply with lawful requirements.

Relevant Legislation

Crime and Corruption Act 2001
Local Government Act 2009
Public Interest Disclosure Act 2010
Public Records Act 2002
Public Sector Ethics Act 1994

Related Documents

Public Interest Disclosure Procedure – September 2020
Public Interest Disclosure Standard No. 1/2019
Public Interest Disclosure Standard No. 2/2019
Public Interest Disclosure Standard No. 3/2019

Procedure

Public Interest Disclosure

November 2022

Document Control

This page will be re-issued every time amendments are made to controlled documents. Amended documents will have their revision status and issue date updated accordingly.

Version	Clause(s)	Changes	Author	Issue Date
0		Initial draft	Susan Boland	01/08/2017
1		Adopted by Council		17/01/2018
2		Amendment to definition "Public Officer" removal of volunteer	Susan Boland	06/03/2018
3		Reviewed	Susan Boland	27/08/2020
4		Approved	Council Meeting (20-24/0157)	14/10/2020
5		Reviewed	Caitlan Natalier	8/11/2022
6		Approved	Council Meeting	

Contents

1. Introduction

The *Public Interest Disclosure Act 2010* facilitates the disclosure, in the public interest, of information about wrongdoing in the public sector and provides protection for those who make such disclosures.

As a public sector entity Lockyer Valley Regional Council is subject to the *Public Interest Disclosure Act 2010* (PID Act) and all Council employees and Councillors are public officers for the purposes of the legislation. Council, therefore, has obligations placed on it related to receiving Public Interest Disclosures (PIDs) and to ensure that persons making such disclosures are protected from reprisals.

Council is committed to fostering an ethical, transparent culture. In pursuit of this, Council values the disclosure of information about suspected wrongdoing in the public sector so that it can be properly assessed and, if necessary, appropriately investigated. Council will provide support to an employee or others who make disclosures about matters in the public interest.

This Procedure demonstrates this commitment and ensures that practical and effective procedures are implemented which comply with the requirements of the PID Act.

2. Definitions

The following definitions apply for the purposes of this procedure:

Administrative Action — as defined in Schedule 4 of the PID Act:

(a) means any action about a matter of administration, including, for example:
  (i) a decision and an act; and
  (ii) a failure to make a decision or do an act, including a failure to provide a written statement of reasons for a decision; and
  (iii) the formulation of a proposal or intention; and
  (iv) the making of a recommendation, including a recommendation made to a Minister; and
  (v) an action taken because of a recommendation made to a Minister; and

(b) does not include an operational action of a police officer or of an officer of the Crime and Corruption Commission.

Chief Executive Officer — is the Chief Executive Officer of the Lockyer Valley Regional Council.

Confidential Information — as defined in Section 65 of the PID Act:

(a) includes:
  (i) information about the identity, occupation, residential or work address or whereabouts of a person:
    A. who makes a public interest disclosure; or
    B. against whom a public interest disclosure has been made; and
  (ii) information disclosed by a public interest disclosure; and
  (iii) information about an individual's personal affairs; and
  (iv) information that, if disclosed, may cause detriment to a person; and

(b) does not include information publicly disclosed in a public interest disclosure made to a court, tribunal or other entity that may receive evidence under oath, unless further disclosure of the information is prohibited by law.

Corrupt Conduct as defined in Section 15 of the *Crime and Corruption Act 2001*:

(1) ***Corrupt conduct*** means conduct of a person, regardless of whether the person holds or held an appointment, that:
- (a) adversely affects, or could adversely affect, directly or indirectly, the performance of functions or the exercise of powers of:
  - (i) a unit of public administration; or
  - (ii) a person holding an appointment; and
- (b) results, or could result, directly or indirectly, in the performance of functions or the exercise of powers mentioned in paragraph (a) in a way that:
  - (i) is not honest or is not impartial; or
  - (ii) involves a breach of the trust placed in a person holding an appointment, either knowingly or recklessly; or
  - (iii) involves a misuse of information or material acquired in or in connection with the performance of functions or the exercise of powers of a person holding an appointment; and
- (c) would, if proved, be:
  - (i) a criminal offence; or
  - (ii) a disciplinary breach providing reasonable grounds for terminating the person's services, if the person is or were the holder of an appointment.

(2) ***Corrupt conduct*** also means conduct of a person, regardless of whether the person holds or held an appointment, that:
- (a) impairs, or could impair, public confidence in public administration; and
- (b) involves, or could involve, any of the following:
  - (i) collusive tendering;
  - (ii) fraud relating to an application for a licence, permit or other authority under an Act with a purpose or object of any of the following (however described):
    - A. protecting health or safety of persons;
    - B. protecting the environment;
    - C. protecting or managing the use of the State's natural, cultural, mining or energy resources;
  - (iii) dishonestly obtaining, or helping someone to dishonestly obtain, a benefit from the payment or application of public funds or the disposition of State assets;
  - (iv) evading a State tax, levy or duty or otherwise fraudulently causing a loss of State revenue;
  - (v) fraudulently obtaining or retaining an appointment; and
- (c) would, if proved, be:
  - (i) a criminal offence; or
  - (ii) a disciplinary breach providing reasonable grounds for terminating the person's services, if the person is or were the holder of an appointment.

Councillor	means all elected representatives of Council, including the Mayor.
Detriment	as defined in Schedule 4 of the PID Act, includes: (a) personal injury or prejudice to safety; (b) property damage or loss; (c) intimidation or harassment; (d) adverse discrimination, disadvantage or adverse treatment about career, profession, employment, trade or business; (e) financial loss; and (f) damage to reputation, including, for example, personal, professional or business reputation.
Disability	As defined in Section 11 of the *Disability Services Act 2006*, for the purposes of this Procedure: (1) a disability is a person's condition that: (a) is attributable to: (i) an intellectual, psychiatric, cognitive, neurological, sensory or physical impairment; or (ii) a combination of impairments mentioned in subparagraph (i); and (b) results in: (i) a substantial reduction of the person's capacity for communication, social interaction, learning, mobility or self-care or management; and (ii) the person needing support. (2) for subsection (1), the impairment may result from an acquired brain injury. (3) the disability must be permanent or likely to be permanent. (4) the disability may be, but need not be, of a chronic episodic nature.
Discloser	is a person who makes a disclosure in accordance with the PID Act.
Employee	of Council, includes a person engaged by Council under a contract of service.
Investigation	for the purposes of this Procedure, investigation includes any enquiry undertaken to establish whether the information provided in a PID can be substantiated, including a review of audit.
Journalist	a person engaged in the occupation of writing or editing material intended for publication in the print or electronic news media.
Maladministration	as defined in Schedule 4 of the PID Act, maladministration is administrative action that: (a) was taken contrary to law; or (b) was unreasonable, unjust, oppressive, or improperly discriminatory; or (c) was in accordance with a rule of law or a provision of an Act or a practice that is or may be unreasonable, unjust, oppressive, or improperly discriminatory in the particular circumstances; or (d) was taken: (i) for an improper purpose; or (ii) on irrelevant grounds; or (iii) having regard to irrelevant considerations; or (e) was an action for which reasons should have been given, but were not given; or (f) was based wholly or partly on a mistake of law or fact; or

	(g) was wrong.
Natural Justice	natural justice, also referred to as 'procedural fairness' applies to any decision that can affect the rights, interests or expectations of individuals in a direct or immediate way. Natural justice is at law a safeguard applying to an individual whose rights or interests are being affected. The rules of natural justice, which have been developed to ensure that decision-making is fair and reasonable, are: • avoid bias; • give a fair hearing; and • act only on the basis of logically probative evidence.
PID Act	means the *Public Interest Disclosure Act 2010*.
Proper Authority	is a person or organisation that is authorised under the PID Act to receive disclosures.
Public Interest Disclosure (PID)	are broadly defined in the PID Act as being information about suspected wrongdoing in the public sector disclosed to a Proper Authority under Chapter 2 of the PID Act.
Public Officer	is a person who is an employee, member or officer of a public sector entity.
Reasonable Belief	a view which is objectively fair or sensible.
Reasonable Management Action	action taken by a manager in relation to an employee, including any of the following taken by the manager: (a) a reasonable appraisal of the employee's work performance (b) a reasonable requirement that the employee undertake counselling (c) a reasonable suspension of the employee from the employment workplace (d) a reasonable disciplinary action (e) a reasonable action to transfer or deploy the employee; (f) a reasonable action to end the employee's employment by way of redundancy or retrenchment (g) a reasonable action in relation to an action mentioned in paragraphs (a) to (f) (h) a reasonable action in relation to the employee's failure to obtain a promotion, reclassification, transfer or benefit, or to retain a benefit, in relation to the employee's employment.
Reprisal	occurs when any person causes or attempts or conspires to cause detriment to another person because or in the belief that they or someone else: (a) has made or intends to make a disclosure; or (b) has been, or intends to be, involved in a proceeding under the PID Act against any person. Reprisal under the PID Act is a criminal offence and investigations may be undertaken by the Queensland Police Service.
Subject Officer	is an officer who is the subject of allegations of wrongdoing made in a disclosure.
Substantial and Specific	Substantial means 'of a significant or considerable degree'. It must be more than trivial or minimal and have some weight or importance.

	Specific means 'precise or particular'. This refers to conduct or detriment that is able to be identified or particularised as opposed to broad or general concerns or criticisms.
Support	for the purposes of this Procedure, support means actions such as, but not limited to: (a) providing moral and emotional support (b) advising disclosers about agency resources available to handle any concerns they have as a result of making their disclosure; (c) appointing a mentor, confidante or other support officer to assist the discloser through the process (d) referring the discloser to the agency's Employee Assistance Program or arranging for other professional counselling (e) generating support for the discloser in their work unit where appropriate (f) ensuring that any suspicions of victimisation or harassment are dealt with (g) maintaining contact with the discloser negotiating with the discloser and their support officer a formal end to their involvement with the support program when it is agreed that they no longer need assistance.
Wrongdoing	means conduct or another matter as defined at section 12(1) and section 13(1) of the PID Act.

3. Statement of commitment

By complying with the PID Act, Council will:

- promote the public interest by facilitating PIDs of wrongdoing
- ensure that PIDs are properly assessed and, where appropriate, properly investigated and dealt with
- ensure appropriate consideration is given to the interests of persons who are the subject of a PID
- ensure protection from Reprisal is afforded to persons making PIDs.

As required under the PID Act, the Chief Executive Officer will implement procedures to ensure that:

- any Public Officer who makes a PID is given appropriate support
- PIDs made to Council are properly assessed and, where appropriate, properly investigated and dealt with
- appropriate action is taken in relation to any wrongdoing which is the subject of a PID
- a management program for PIDs made to Council, consistent with the standards issued by the Queensland Ombudsman, is development and implemented
- Public Officers who make PIDs are offered protection from Reprisal by Council or other Public Officers of Council.

The Public Interest Disclosure Procedure will be reviewed regularly and updated as required to ensure it meets the requirements of the PID Act and the standards issued by the Queensland Ombudsman.

4. PID Management Program

The Chief Executive Officer has overall responsibility for ensuring that Council develops, implements and maintains a PID management program. Council's PID management program, as developed and contained in this procedure, encompasses:

- commitment to encouraging the internal reporting of wrongdoing
- senior management endorsement of the value to Council of PIDs and the proper management of PIDs
- a communication and training strategy to raise awareness among employees about PIDs and Council's PID Procedure
- a communication and training strategy to raise awareness among employees about PIDs and Council's PID Procedure and to give them access to training about how to make a PID, information on the support available to a discloser, and advice on how PIDs will be managed
- specialist training and awareness about PIDs for senior management and other staff who may receive or manage PIDs, disclosers or workplace issues relating to PIDs
- the appointment of a specialist officer to be responsible for issues related to the management of PIDs
- ensuring effective systems and procedures are in place so that issues and outcomes from PIDs inform improvements to service delivery, business processes and internal controls
- regulator review of the PID Procedure and evaluation of the effectiveness of the PID management program.

5. Roles and Responsibilities

The Chief Executive Officer has designated the following roles and responsibilities for managing PIDs within Council:

Role	Responsibilities	Officer
PID Coordinator	• principal contact for PID issues within Council • document and manage implementation of PID management program • review and update PID Procedure regularly • maintain and update internal records of PIDs received • report data on PIDs to Queensland Ombudsman • assess PIDs received • provide acknowledgement of receipt of PID to discloser • undertake risk assessments in consultation with disclosers and other relevant officers • liaise with other agencies about referral of PIDs • allocate Investigator and Support Officer to PID matter	Coordinator Governance & Property

PID Support Officer	• provide advice and information to discloser on Council's PID Procedure • provide personal support and referral to other sources of advice or support as required • facilitate updates on progress of investigation • proactively contact discloser throughout the PID management process	An appropriate person nominated by the Chief Executive Officer or the PID Coordinator
Investigator	• conduct investigation of information in PID in accordance with terms of reference • prepare report for delegated decision-maker	An appropriate internal or external investigator will be appointed for each PID investigated depending upon the type of disclosure and other relevant considerations.
Delegated decision-maker	• review investigation report and determine whether alleged wrongdoing is substantiated	An appropriate decision-maker will be appointed for each PID investigated.

6. Why make a PID?

Employees who are prepared to speak up about public sector misconduct, wastage of public funds, suspected unlawful activity or danger to health, safety or the environment can be the most important sources of information to identify and address problems in public sector administration. Council supports the disclosure of information about wrongdoing because:

- implementing systems for reporting and dealing with wrongdoing contributes to the integrity of Council
- the outcomes of PIDs can include improvements to systems that prevent fraud and other economic loss to Council
- the community's trust in public administration is strengthened by having strong processes in place for reporting wrongdoing.

When making a PID the discloser receives the protections provided under the PID Act, including:

- confidentiality – the discloser's name and other identifying information will be protected to the extent possible
- protection against reprisal – the discloser is protected from unfair treatment by Council and employees of Council as a result of making the PID
- immunity from liability – the discloser cannot be prosecuted for disclosing the information but is not exempt from action if they have engaged in wrongdoing
- protection from defamation – the discloser has a defence against an accusation of defamation by any subject officer.

7. What is a PID?

What constitutes a PID depends on who is making the disclosure, with the PID Act distinguishing between disclosures made by a public officer and those made by anyone else.

Any person can report wrongdoing to a proper authority about:

a) a substantial and specific danger to the health or safety of a person with a disability; or
b) the commission of an offence, or a contravention of a condition imposed under a provision of environmental legislation mentioned in Schedule 2 of the PID Act, if the offence or contravention would be a substantial and specific danger to the environment; or
c) the conduct of another person that could, if proved, be a reprisal because of a belief that a person has made, or intends to make, a disclosure.

In addition, public sector officers can make a disclosure to a proper authority about the following public interest matters:

a) the conduct of another person that could, if proved, be—
    i. corrupt conduct; or
    ii. maladministration that adversely affects a person's interests in a substantial and specific way; or
b) a substantial misuse of public resources (other than an alleged misuse based on mere disagreement over policy that may properly be adopted about amounts, purposes or priorities of expenditure); or
c) a substantial and specific danger to public health or safety; or
d) a substantial and specific danger to the environment.

For a disclosure to be a PID, the discloser can have either:

a) an honest belief, on reasonable grounds, that wrongdoing has occurred (subjective test) or
b) provide evidence which tends to show the wrongdoing has occurred, regardless of whether the discloser honestly believes the information (objective test).

A disclosure amounts to a PID and is covered by the PID Act even if the:

- discloser reports the information as part of their duties – such as an auditor reporting a fraud or an occupational health and safety officer reporting a safety breach
- disclosure is made anonymously – the discloser is not required to give their name or any identifying information
- discloser has not identified the material as a PID – it is up to Council to assess information received and decide if it is a PID
- disclosure is unsubstantiated following investigation – the discloser is protected when the information they provide is assessed as a PID, whether or not it is subsequently investigated or found to be substantiated.

8. Who can a PID be disclosed to?

The PID Act only protects PIDs that are made to the "proper authority" to receive disclosures of the type being made. Council is a proper authority for conduct concerning the Council, a councillor or Council employee or behaviour that Council has the power to investigate or remedy.

Disclosures made otherwise than in accordance with this procedure may not attract the protection of the PID Act, including disclosures made to the media (except in special circumstances outlined below and in Part 4 Section 20 of the PID Act), unions or professional associations, federal government departments and agencies, private organisations and organisations operating outside of Queensland.

Disclosers are encouraged to make a disclosure to an appropriate officer of Council first. If the matter is not resolved, or the discloser is concerned about confidentiality, the disclosure may be made to another appropriate agency.

Who to contact within Council:	**Other agencies that can receive PIDs:**
Any person (including employees) can make a disclosure to: • the Chief Executive Officer • the PID Coordinator • their manager or supervisor (if an employee) or a person in a managerial or supervisory position (if a member of the public) • the human resources team. To make a disclosure, please contact Ian Church, Chief Executive Officer or Caitlan Natalier, PID Coordinator as follows: Phone: 1300 005 872 Email: complaints@lvrc.qld.gov.au Post: PO Box 82, Gatton Qld 4343	Disclosures can be made to an agency that has a responsibility for investigating the information disclosed: • Crime and Corruption Commission (CCC) for disclosures about corrupt conduct including reprisal • Queensland Ombudsman for disclosures about maladministration • Queensland Audit office for disclosures about a substantial misuse of resources • Department of Children, Youth Justice and Multicultural Affairs for disclosures about danger to the health and safety of a child or young person with a disability • Department of Seniors, Disability Services, and Aboriginal and Torres Strait Islander Partnerships for disclosures about danger to the health and safety of a person with a disability • Office of the Public Guardian for disclosures about danger to the health and safety of a person with a disability • Department of Environment and Science for disclosures about danger to the environment • A Member of the Legislative Assembly (MP) for any wrongdoing or danger • The Chief Judicial Officer of a court or tribunal in relation to a disclosure about wrongdoing by a judicial officer.

A disclosure can also be made to a journalist if the following conditions have been met:

- a valid PID was initially made to a proper authority; and
- the proper authority:
  - decided not to investigate or deal with the disclosure, or
  - investigated the disclosure but did not recommend taking any action, or
  - failed to notify the discloser within six months of making the disclosure whether or not the disclosure was to be investigated or otherwise dealt with.

A person who makes a disclosure to a journalist in these circumstances is protected under the PID Act. However, disclosers should be aware that journalists are not bound under the confidentiality provisions of section 65 of the PID Act.

9. How to make a PID

A discloser can make a PID in any way, including anonymously, either verbally or in writing. To assist in the assessment, and any subsequent investigation of a PID, disclosers are requested to:

- provide contact details (this could be an email address that is created for the purpose of making the disclosure or a telephone number)
- provide as much information as possible about the suspected wrongdoing, including:
    - who was involved
    - what happened
    - when it happened
    - where it happened
    - whether there were any witnesses, and if so, who they are
    - any evidence that supports the PID, and where the evidence is located
    - any further information that could help investigate the PID.
- provide this information in writing.

A disclosure may be made anonymously; however, it is difficult in these circumstances to protect the person making the disclosure from any retributive action or reprisal. As such, although anonymous disclosures are permitted under the PID Act, disclosers are encouraged to provide their contact details when making a disclosure.

A disclosure should be in writing, although it may be made orally. If a supervisor or manager receives a PID, they should encourage the discloser to put the information in writing. If the discloser is unable or unwilling to do so, the supervisor or manager should document the disclosure and ask the discloser to confirm the contents before signing it. If circumstances prevent this occurring (e.g. telephone caller who remains anonymous), the supervisor or manager should promptly make a written note recording the precise matters raised and this should be referred to the Chief Executive Officer and the PID Coordinator.

A Public Interest Disclosure (PID) can be made about an unidentified person. A person can involuntarily make a PID if they are legally compelled to do so. A PID can be made in a proceeding in a court or tribunal as part of giving information to the court or tribunal.

A PID can concern an event that happened or may have happened even if the event occurred before the enactment of the PID Act. The PID can also concern a current or potential event that will or may happen.

Each separate allegation should be reported as a separate PID, unless the matters are clearly linked, and it would be reasonable to view them as a single disclosure.

10. Deciding whether a matter is a PID

If there is any doubt as to whether a matter is a PID, further information may be obtained to inform the decision. If doubt still remains, the matter will be considered and managed as a PID.

Mere disagreements over policy do not meet the threshold for a PID under the PID Act.

There is no limit to the number of PIDs that can be made. When making a PID, the discloser has the responsibility to provide honest and accurate information. It is an offence under the PID Act to intentionally give false or misleading information intending it to be acted on as a PID. Employees may face disciplinary action and criminal prosecution for intentionally giving false or misleading information in a PID or during an investigation into a PID. Knowingly providing false or misleading information is different to providing information that turns out to be incorrect or unable to be substantiated.

Council encourages persons contemplating the making of a PID to give due prior consideration to that course to ensure that matters raised have substance and are soundly based. Under the PID Act a person is not liable civilly, criminally or under an administrative process, including disciplinary action, for making a PID.

Where a discloser states they are making a PID, but it is assessed that the matter is not a PID, Council will advise the discloser:

- that their information has been received but was not assessed as a PID
- the reasons for the decision
- the review rights available if the discloser is dissatisfied with the decision and how to request review
- any action Council proposes to take in relation to the matter
- any other options the discloser has in relation to the matter.

11. Assessing a PID

When a disclosure is made to a supervisor or manager, the supervisor or manager must communicate the disclosure immediately to the Chief Executive Officer and the PID Coordinator. The Chief Executive Officer must ensure that a disclosure made to Council or referred to it by another entity or Member of the Legislative Assembly is assessed.

Council cannot decline to receive and/or assess a disclosure as a PID. The disclosure will be assessed in accordance with the PID Act, the PID standards, Council's PID Procedure and any other relevant procedure(s).

In assessing a disclosure, the Chief Executive Officer will determine if:

- the person making the disclosure is able to receive the protection of the *Public Interest Disclosure Act 2010*
- the disclosure concerns a matter about which a PID can be made
- the disclosure meets either the subjective or objective test set out in the *Public Interest Disclosure Act 2010*
- the disclosure has been made to an individual or entity who may receive a PID, and
- the disclosure has been made in accordance with Council's procedure or to a person listed in the *Public Interest Disclosure Act 2010*.

Once the matter has been assessed as a PID, Council will advise the discloser:

- that their information has been received and assessed as a PID
- the action to be taken by Council in relation to the disclosure, which could include referring the matter to an external agency, or investigating

- the likely timeframe involved
- the name and contact details of the Council support officer they can contact for updates or advice
- of the discloser's obligations regarding confidentiality
- the protections the discloser has under the PID Act
- the commitment of Council to keep appropriate records and maintain confidentiality except where permitted under the PID Act
- how updates regarding intended actions and outcomes will be provided to the discloser
- contact details for Council's Employee Assistance Program.

If the PID has been made anonymously and the discloser has not provided any contact details, Council will not be able to acknowledge the PID or provide any updates.

12. Referring a PID

If Council decides there is another proper authority that is better able to deal with the PID, the PID may be referred to that agency. This may be because:

- the PID concerns wrongdoing by that agency or an employee of that agency
- that agency has the power to investigate or remedy the matter.

Before referring the PID to another agency, Council will conduct a risk assessment, and will not proceed with the referral if there is an unacceptable risk of reprisal. In considering whether there would be an unacceptable risk, Council will, if appropriate, consult with the discloser.

It may also be necessary to refer the PID to another agency because of a legislative obligation, for example, refer a matter to the Crime and Corruption Commission where there is a reasonable suspicion that the matter involves or may involve corrupt conduct (as required by section 38 of the *Crime and Corruption Act 2001*).

The confidentiality obligations of the PID Act permit appropriate officers of Council to communicate with another agency about the referral of a PID. Officers will exercise discretion in their contacts with any other agency.

The discloser will be advised of the action taken by Council.

13. Risk assessment and protection from reprisal

Disclosers should not suffer any form of detriment as a result of making a PID. Upon receiving a PID, Council will conduct a risk assessment to assess the likelihood of the discloser (or witnesses or affected third parties) suffering reprisal action as a result of having made the disclosure. This assessment will take into account the actual and reasonably perceived risk of the discloser (or witnesses or affected third parties) suffering detriment, and will include consultation with the discloser.

A risk assessment will be undertaken if the discloser is anonymous on the basis of information available in the PID. The risk assessment will also take into account the risk to persons who may be suspected of making the PID.

Consistent with the assessed level of risk, Council will develop and implement a risk management plan and arrange any reasonably necessary support or protection for the discloser (or witnesses or affected third parties).

Council will regularly reassess the risk of reprisal while the PID is being managed, in consultation with the discloser, and review the risk management plan if required.

In the event of reprisal action being alleged or suspected, Council will:

- attend to the safety of the discloser (or witnesses or affected third parties) as a matter of priority
- review its risk assessment, risk management plan and any protective measures needed to mitigate any further risk of reprisal
- manage any allegation of a reprisal as a PID in its own right.

14. Declining to take action on a PID

Under the PID Act, Council may decide not to investigate or deal with a PID in various circumstances, including if:

- the substance of the disclosure has already been investigated or dealt with by another appropriate process
- the disclosure should be dealt with by another appropriate process
- the age of the information the subject of the disclosure makes it impracticable to investigate
- the disclosure is too trivial to warrant investigation and that dealing with the disclosure would substantially and unreasonably divert the resources of Council from the performance of its functions, or
- another entity that has the jurisdiction to investigate the disclosure has notified Council that investigation of the disclosure is not warranted.

If Council decides not to investigate or deal with a PID, written reasons for this decision will be given to the discloser. If the discloser is dissatisfied with the decision, they can request a review by writing to the Chief Executive Officer of Council within 28 days of receiving the written reasons for the decision.

15. Communication with disclosers

Under the PID Act, Council must give reasonable information to a discloser.

Council will acknowledge receipt of the PID in writing as soon as practicable. The discloser will be provided with information that meets the requirements of the PID Act and the standards issued by the Queensland Ombudsman, including:

- the action proposed to be taken by Council in response to the PID
- the likely timeframes (if possible)
- the obligations of the discloser in relation to the investigation process and maintaining confidentiality
- the protections under the PID Act
- that Council will keep the information disclosed, including the discloser's identity, confidential, except as allowed under the PID Act
- how they will be advised of progress and outcomes;
- support arrangements; and
- who to contact if they want further information or are concerned about reprisals.

Council will maintain contact with the discloser and provide regular updates during the management of the PID.

In accordance with the PID Act, after finalising action in response to the PID, Council will advise the discloser in writing of the action taken and the results of the action.

16. Confidentiality

While Council will make every attempt to protect confidentiality, a discloser's identity may need to be disclosed to:

- provide natural justice to subject officers
- respond to a court order, legal directive or court proceedings.

Council will ensure that communication with all parties involved will be arranged discreetly to avoid identifying the discloser wherever possible.

Disclosers should be aware that while Council will make every attempt to keep their details confidential, it cannot guarantee that others will not try to deduce their identity.

An employee who gains confidential information because he or she receives a PID or is involved in dealing with a PID must not make a record of the information, or intentionally or recklessly disclose the information to anyone, other than:

- for the PID Act
- to discharge a function under another Act including, for example, to investigate something disclosed by a PID
- for a proceeding in a court or tribunal
- if the person to whom the confidential information relates consents in writing to the making of the record or disclosure of the information
- if the employee cannot reasonably obtain consent from the person to whom the confidential information relates and making the record or disclosing the information is unlikely to harm the interests of the person to whom the confidential information relates and is reasonable in all the circumstances
- if the person reasonably believes that making the record or disclosing the information is necessary to provide for the safety or welfare of a person, or
- if authorised under a regulation or another Act.

Making a record of confidential information or disclosing information to anyone (other than for the reasons noted above) is an offence under the *Public Interest Disclosure Act 2010*.

17. Discloser support and protection

Council recognises that providing appropriate support and protection to a discloser is an important feature of effective PID management.

As soon as possible after receiving a PID, an assessment will be undertaken to determine the level of protection and support appropriate for a discloser by conducting a risk assessment of a reprisal to the discloser and others associated with the discloser (including those who may wrongly be suspected of being a discloser). Council will also take into account any consequences if reprisals do occur.

The Chief Executive Officer will ensure protective measures are in place which are appropriate to the risk of reprisal, and the potential consequences of a reprisal. If the risk is assessed as sufficiently high, Council will prepare a protection plan to protect the discloser. Where feasible, this will be developed in consultation with the discloser and other relevant stakeholders.

Where appropriate, a PID Support Officer will be assigned to the discloser. The PID Support Officer will assist the discloser to access information about PIDs, protections available under the PID Act and the PID management process. The PID Support Officer will proactively contact the discloser to offer support.

Information and support will be provided to the discloser until the matter is finalised.

18. Managing reprisals

Reprisals are not condoned or tolerated by Council.

The Chief Executive Officer will ensure effective systems and procedures are in place to monitor a discloser's workplace for any signs of reprisal action. In the event of a reprisal being alleged or suspected, Council will act in the interest of the discloser by:

- attending to the safety of the discloser or affected third parties as a matter of priority
- reviewing the risk assessment of reprisal, the protection plan (if any) and any protective measures needed; and
- managing any allegation of a reprisal as a PID in its own right.

Any employees found to have engaged in reprisals will be the subject of disciplinary action up to dismissal. Criminal action may be taken with respect to reprisal and penalties under the PID Act may apply.

Council may be vicariously liable for reprisal actions taken by employees, but may be able to raise as a defence, on the balance of probabilities, that reasonable steps were taken to prevent the employee taking reprisal action.

Making a PID does not prevent reasonable management action. That means that the discloser will continue to be managed in accordance with normal, fair and reasonable management practices during and after the handling of the PID. The manager's or supervisor's reasons for taking the action should be documented.

19. Investigating a PID

If a decision is made to investigate a PID, this will be done with consideration for the:

- principles of natural justice
- obligation under the PID Act to protect confidential information
- obligation under the PID Act to protect officers from reprisal
- interests of subject officers.

Where appropriate, an investigator will be engaged to investigate the PID. In all cases the investigator must:

- have the necessary skills or training to perform that task in a professional manner
- not be under the direction of a person being investigated

- be sufficiently removed from the issue as to not have a conflict of interest or perceived conflict of interest when undertaking the investigation, and
- when assessing (and where necessary, investigating and taking action on) a PID, take account of Council's obligations to the subject officer.

The fact that Council is relying on information obtained through a PID for any subsequent disciplinary process does not exempt Council from its obligations to the subject officer.

On conclusion of the investigation, the investigator will provide the Chief Executive Officer with a written report detailing the process followed and their findings.

If as a result of investigation, the information about wrongdoing provided in the PID is substantiated, appropriate action will be taken.

Where the investigation does not substantiate wrongdoing, Council will review systems, policies and procedures to identify whether there are improvements that can be made and consider if staff training is required.

A person dissatisfied with Council's handling of their PID has an internal right of review to the Chief Executive Officer. Disclosers are also entitled to raise the matter with other entities, such as the Queensland Ombudsman in cases of maladministration.

20. Rights of subject officers

Council acknowledges that for officers who are the subject of a PID the experience may be stressful. Council will protect their rights by:

- assuring them that the PID will be dealt with impartially, fairly and reasonably in accordance with the principles of natural justice
- confirming that the PID is an allegation only until information or evidence obtained through an investigation substantiates the allegation
- providing them with information about their rights and the progress and outcome of any investigation
- referring them to the Employee Assistance Program for support.

Information and support will be provided to a subject officer until the matter is finalised.

21. Record keeping and reporting

In accordance with its obligations under the PID Act and the *Public Records Act 2002,* Council will ensure that:

- accurate data is collected about the receipt and management of PIDs
- anonymised data is reported to the Office of the Queensland Ombudsman in their role as the oversight agency, through the PID reporting database.

Council will maintain a confidential file pertaining to each potential PID, with the following minimum requirements:

- the name of the person making the disclosure (if known)
- details of the disclosure

- the determination made in respect of the disclosure; and
- action taken on the disclosure (including review, investigation or other form of managerial response).

All records about PIDs, investigations and related decisions will be kept secure and accessible only to appropriately authorised people involved in the management of the PID. Responsibility for creating records and for fulfilling Council's reporting obligations rests with Council's PID Coordinator who is part of Council's Governance and Property Team.

Council's PID Coordinator will provide reports to the Chief Executive Officer on the implementation and oversight of the PID management program and this Procedure.

Council's PID Coordinator will also provide the Queensland Ombudsman with the required information via the RaPID database in compliance with Public Interest Disclosure Standard No. 3/2019.

22. Relevant Legislation

Crime and Corruption Act 2001
Local Government Act 2009
Public Interest Disclosure Act 2010
Public Records Act 2002
Public Sector Ethics Act 1994

23. Related Documents

Public Interest Disclosure Policy
Employee Code of Conduct
Councillor Code of Conduct
Risk Management Policy
Risk Management Framework Guideline
Complaints Management Policy
Complaints Management Procedure
Complaints of Corrupt Conduct by Chief Executive Officer Policy
Fraud & Corruption Control Policy
Fraud & Corruption Control Plan
Conflict of Interest Policy
Conflict of Interest Framework Guideline

24. Supporting Information

Public Interest Disclosure Standard No. 1/2019
Public Interest Disclosure Standard No. 2/2019
Public Interest Disclosure Standard No. 3/2019
Disclosure Fact sheet 1: What is a disclosure
Disclosure Face sheet 2: Checklist for making a disclosure
Disclosure Fact sheet 3: Discloser information and support

12. COMMUNITY & REGIONAL PROSPERITY REPORTS

12.1 MC2019/0029 Development Application for Material Change of Use for Extractive Industry (up to 300,000 tonnes per annum) at 613 and 621 Seventeen Mile Road, Helidon

Author: Tammee Van Bael, Planning Officer
Responsible Officer: Amanda Pugh, Group Manager Community & Regional Prosperity

Purpose:

The purpose of this report is to consider an application (MC2019/0029) for a Development Permit for a Material Change of Use for Extractive Industry (up to 300,000 tonnes per annum) and Environmentally Relevant Activities 16(2)(b), 16(3)(b) and 53(a) on Lot 154 CA311380, Lot 95 CSH352 and Lot 141 CA311273 at 613 and 621 Seventeen Mile Road, Helidon.

The application has been assessed in accordance with the requirements of the *Planning Act 2016* and it is recommended that the application be approved in accordance with the Officer's Recommendation.

Officer's Recommendation:
THAT the application (MC2019/0029) for a Development Permit for Material Change of Use for Extractive Industry (up to 300,000 tonnes per annum) and Environmentally Relevant Activities 16(2)(b), 16(3)(b) and 53(a) on Lot 154 CA311380, Lot 95 CSH352 and Lot 141 CA311273 at 613 and 621 Seventeen Mile Road, Helidon be approved subject to the following conditions:

APPROVED PLANS

The following plans are Approved Plans for the development:

Approved Plans

Plan No.	Rev.	Plan Name	Date
Project No. 19-0175 Drawing No. D01	A	*Stormwater Management Plan Site Plan - Proposed*, prepared by TOPO Group Pty Ltd (as amended in red by Council)	26/03/20

APPROVED DOCUMENTS

The following documents are Approved Documents for the development:

Approved Documents

Document No.	Rev.	Document Name	Date
R1094	A	*Helidon Quarry Stormwater Management Plan Seventeen Mile Road, Helidon*, prepared by TOPO Group Pty Ltd	30/03/2020
-	2	*Plan of Operations for Mining Lease 50218 – Located at Seventeen Mile Road, Helidon, Queensland*, prepared by The LZ Environmental Company Pty Ltd	28.02.13

-	-	*Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon Qld, Australia on ML51085*, prepared by The LZ Environmental Company Pty Ltd	Received by Council 3 May 2019
-	-	*Part D Site Based Management Plan (SBMP) for ERA 16 2(b) and 16 3(a) Extraction and Screening Conducted by Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon Qld, Australia*, prepared by The LZ Environmental Company Pty Ltd	Received by Council 3 May 2019

PROPERTY NOTES

Not Applicable

VARIATION APPROVAL

Not Applicable.

FURTHER PERMITS REQUIRED

- Development Permit for Operational Work

CURRENCY PERIOD OF APPROVAL

The currency period for this development approval is six (6) years starting the day that this development approval takes effect. (Refer to Section 85 "Lapsing of approval at end of currency period" of the *Planning Act 2016*.)

ASSESSMENT MANAGER CONDITIONS

NO.	CONDITION	TIMING
1.	The development is to be carried out generally in accordance with the approved plans and documents referred to in this notice. These plans form part of the approval, unless otherwise amended by conditions of this approval.	At all times.
2.	The development (including landscaping, crossover, access driveway, parking and other external spaces) is to be maintained in accordance with the approved drawing(s) and/or documents, and any relevant Council or other approval required by conditions.	At all times.
3.	All conditions of this approval must be complied with.	Prior to commencement of use.
Use Approval		
4.	Material extracted from the site must not exceed an output of 300,000 tonnes per financial year (1 July to 30 June). A record of each year's output must be kept on site and must be provided to Council within one (1) month of the end of financial year (by 31 July), or at any time upon request. Any intensification or changes to the above will be subject to a further development approval from Council.	At all times.

5.	No retail sale of goods must be undertaken from the site, including the sale of goods extracted on site.	At all times.
6.	No soil conditioning or composting of organic materials is to occur until a Development Permit for a Material Change of Use for Industry (High impact industry) is obtained for this land use.	At all times.
Site Management		
7.	Extraction activities must not extend outside the defined extraction and processing areas as identified on the Approved Plans.	At all times.
8.	All management plans (refer to list of Approved Documents) must be complied with for the life of the operation. To remove any doubt, non-compliance with a management plan (or any component within the management plan) is considered to be non-compliance with the conditions of approval.	At all times.
9.	Hours of operation are restricted to the following: a. Monday to Saturday 6am to 6pm; and b. No operations (other than office work) are to occur on Sundays or Public Holidays. Blasting operations undertaken on site are limited to the following hours: Monday to Friday 9am to 5pm. No blasting operations are to be conducted on Saturdays, Sundays or Public Holidays.	At all times.
10.	No extraction and processing activities shall be carried out within 10m of any site boundary or 100m from an existing dwelling on surrounding land.	At all times.
11.	No blasts or explosions are to be conducted that could potentially result in stone, rock or other materials escaping or being ejected from the site.	At all times.
Alterations and/or Relocations		
12.	Any alteration or relocation in connection with or arising from the development to any service, installation, plant, equipment or other item belonging to or under the control of the telecommunications authority, electricity authority or Council or other person engaged in the provision of public utility services is to be carried out with the development and at no cost to Council.	At all times.
13.	Replace existing Council infrastructure (including but not limited to any street trees or footpaths) to a standard which is consistent with Council's standards should this infrastructure be damaged as part of construction works.	At all times.
Damages to Services and Assets		
14.	Any damage caused to existing services and assets as a result of the development works must be repaired at no cost to the asset owner at the following times: a. where the damage would cause a hazard to pedestrian or vehicle safety, immediately; or b. where otherwise, upon completion of works associated with the development. Any repair work which proposes to alter the alignment or level of existing services and assets must first be referred to the relevant service authority for approval.	At all times.

Buildings		
15.	No additional buildings (beyond those currently existing on site) are approved under this Development Permit. Any additional buildings/structures associated with the Extractive Industry may require a further development approval for Material Change of Use from Council.	At all times.
Environmental Health		
16.	All flammable or combustible liquids shall be stored in accordance with AS1940-2004 and AS1692-1989.	At all times.
17.	Refrigeration and air-conditioning plant and motors and other noise generating machinery shall be designed, located and housed so as not to cause disturbance beyond the subject land.	At all times.
Vegetated Buffer		
18.	Maintain a 10m wide vegetated buffer strip along all property boundaries.	At all times.
Car Parking, Vehicular Access and Driveways		
19.	The Designated Haul Route for transporting material extracted from the subject site to the Warrego Highway is Seventeen Mile Road, Laidley Street, Station Street, Arthur Street, Mary MacKillop Street, George Street, Lawlers Road and Turner Street.	At all times.
20.	Design the internal layout to provide designated on-site parking spaces for employees, public and service vehicles together with manoeuvring for a minimum of a 20m long truck & dog.	In conjunction with the lodgement of a development permit for operational works.
21.	Provide loading areas for the design vehicle in the locations generally shown on the approved plans of development.	At all times.
22.	Ensure access to car parking spaces, vehicle loading and manoeuvring areas and driveways remain unobstructed and available for their intended purpose during the hours of operation.	At all times.
23.	Design the site access to align with Seventeen Mile Road at an angle between 90 degrees and 70 degrees to improve sight distance.	In conjunction with the lodgement of a development permit for operational works.
24.	Design a sealed two-way vehicular entry and exit crossover at the location indicated on the approved plans generally in accordance with the Institute of Public Works Engineering Australasia's standard drawing number RS-051 *Vehicle Crossings Heavy Duty* (general wide configuration) and *AS2890.2 Parking facilities Part 2: Off-street commercial vehicle facilities.* Ensure that the crossover splay is designed to accommodate turning movements of a 20m long truck & dog.	In conjunction with the lodgement of a development permit for operational works.
25.	Design any new crossovers such that the edge of the crossover is no closer than 1 metre to any existing or proposed infrastructure, including any service infrastructure (e.g. power pole, telecommunications pit), road infrastructure (e.g. street sign, etc).	In conjunction with the lodgement of a development permit for operational works.
26.	Design the first 50m of the site access road into the development site from the front property boundary to provide a sealed driveway with adequate width to allow two (2) 20m truck and dogs to pass on the sealed section.	In conjunction with the lodgement of a development permit for operational works.

27.	Provide an all-weather gravel access road from the end of the 50m sealed section of the site access to all parking and manoeuvring areas of the development.	In conjunction with the lodgement of a development permit for operational works.
28.	Provide car parking on site in accordance with the following: • Fifty (50) car parking spaces including one (1) space for people with disabilities; and • Five (5) 20m long truck and dog parking spaces.	In conjunction with the lodgement of a development permit for operational works.
29.	Provide car parking including parking for people with disabilities, light vehicles, and heavy vehicle and circulation layout in accordance with relevant sections of AS 2890 – Parking Facilities.	In conjunction with the lodgement of a development permit for operational works.
30.	Provide directional signage to enable all vehicles to enter and leave the development in a forward gear and to direct vehicles to relevant designated parking and loading areas.	In conjunction with the lodgement of a development permit for operational works.
31.	Provide signage to identify designated car parking areas, people with disabilities parking, designated heavy vehicle parking areas, loading areas within the development.	In conjunction with the lodgement of a development permit for operational works.
32.	Provide giveway signage to egress from the site to enforce through movement priority on Seventeen Mile Road.	In conjunction with the lodgement of a development permit for operational works.
33.	Signage must be provided in accordance with the Manual of Uniform Traffic Control Device (MUTCD).	Prior to commencement of use, and to be maintained thereafter.
34.	Construct the access crossover, sealed driveway section, signage in accordance with the development permit for operational works.	Within six (6) months of the date of this approval and to be maintained thereafter.
Road Upgrades		
35.	Undertake the upgrades to identified sections of the haul route (from the subject site to the Warrego Highway) to increase the safety of all road users in accordance with the following: a. Provide signage to provide priority for the haulage route at the intersection of Turner Street and Mary MacKillop Street; b. Install giveway sign and line marking on Turner Street west approach; c. Provide continuity line marking from Turner Street east approach of Turner Street through to Mary MacKillop Street; and d. Provide road widening to: i. Lawlers Road between chainage 20 and chainage 110 to provide a minimum width to cater for truck and dog movements and to the standard immediately adjacent to the above chainages; and ii. Turner Street between chainage 910 and chainage 990 to provide a minimum width to cater for truck and dog	In conjunction with the lodgement of a development permit for operational works.

	movements and to the standard immediately adjacent to the above chainages.	
36.	Submit to Council an AutoTurn (or an equivalent software) plot that demonstrates that the appropriate design vehicle can manoeuvre through the intersections and sections of the roads identified in condition 35 and at the intersection of access to the site and Seventeen Mile Road. The minimum design vehicle to be used is the 20m truck and dog. Clearly indicate road/street centre lines on drawings.	In conjunction with the lodgement of a development permit for operational works.
37.	Construct road works in accordance with the development permit for operational works.	Prior to commencement of use.
Pavement Design – External Works		
38.	Engage a suitably experienced Registered Professional Engineer Queensland (RPEQ) to prepare and submit a pavement design for external roadworks. Pavement design must be undertaken in accordance with Austroads Guide to Pavement Technology Part 2 *Pavement Structural Design*.	Prior to commencement of road works.
Water Supply and On-Site Effluent Disposal		
39.	A potable water supply is to be provided on site with a minimum capacity of 45,000L sufficient to cater for the Extractive Industry.	At all times.
40.	Any new systems or modifications to an existing effluent disposal system will require a Plumbing and Drainage Permit prior to works being undertaken.	At all times.
Stormwater		
41.	All works associated with this development must be undertaken without resulting in stormwater damage, ponding or actionable nuisance to surrounding and/or downstream properties or infrastructure.	At all times.
42.	Provide stormwater management generally in accordance with the approved Document No. R1094, version A, *Helidon Quarry Stormwater Management Plan,* prepared by Topo and dated 30 March 2020 subject to detailed design and except as altered by conditions of this development approval.	Within six (6) months of the date of this approval.
43.	Do not alter the characteristics of existing overland flows.	At all times.
44.	Ensure that treatment of stormwater run-off from the site achieves a water quality that addresses SEQ Water Development Guidelines for Water Quality Management in Drinking Water Catchments.	At all times.
45.	Construct stormwater drainage works in accordance with a development permit for operational works.	Within six (6) months of the date of this approval.
Earthworks and Retaining Walls		
46.	Unless otherwise required by conditions of this approval, earthworks associated with this development must be designed in accordance with: a. Gatton Shire Planning Scheme 2007; b. Australian Standard AS3798 *Guidelines for Earthworks for Commercial and Residential Developments* (Level 1 Supervision); c. Australian/New Zealand Standard AS/NZS1170 *Structure design actions*; and	In conjunction with the lodgement of a development permit for operational works.

	d. Australian Standard AS4678 *Earth-retaining structures* and include relevant drainage.	
47.	Any earthworks undertaken require a further development permit for operational works in accordance with the Planning Scheme. This does not include works undertaken for the extracted material.	Prior to commencement of works.
Engineering Certificates		
48.	Submit to Council a RPEQ design certification stating that approved development works have been designed under the direct supervision of a suitably qualified Registered Professional Engineer Queensland (RPEQ), in accordance with the conditions of approval and in accordance with the approved engineering design and specifications.	In conjunction with a development application for operational works.
49.	Submit to Council a RPEQ Certificate of Supervision stating that approved development works have been constructed under the direct supervision of a suitably qualified Registered Professional Engineer Queensland (RPEQ), in accordance with the conditions of approval and in accordance with the approved engineering design and specifications.	Prior to commencement of use.
Requirements for Operational Works Application		
50.	Submit and obtain approval for a development application for Operational Works for External Roadworks, Earthworks associated with internal drainage works, Access crossover and sealed driveway section, Parking, Stormwater Drainage (internal/ management of external catchment flows and external road drainage), Vehicle Manoeuvring, Signage, Erosion and Sediment Control, and Rehabilitation/Landscaping addressing the requirements of this development approval. The application must include as a minimum the following: a. Development application form/s; b. Application fees (design checking as well as inspection) in accordance with Council's Fees and Charges schedule current during the time of lodgement; c. Detailed design drawings addressing the requirements of this development approval that have been prepared and signed by a suitably experienced and current Registered Professional Engineer Queensland (RPEQ) with their name and registration number; d. Roadworks drawings must detail existing infrastructure, proposed new infrastructure as well as any rectification/tie in works; e. Stormwater drainage design must include (but not limited to): • Location and details, including hydraulic design, of all proposed drainage; • Stormwater catchment plan/s; • Stormwater calculation table/s; and • Details of any diversion banks or drains; f. Erosion and sediment control measures in accordance with "Best Practice Erosion and Sediment Control" published by the International Erosion Control Association (Australia) for both the construction (including vegetation clearing) and operational	Prior to commencement of works.

	(maintenance) phases of the development. Due consideration must be given to dispersive soil types within this region; and g. Engineering Certification by the RPEQ that the design complies with the conditions of this approval as well as relevant engineering standards and best practice.	
51.	Engage a suitably experienced and current Registered Professional Engineer Queensland (RPEQ) to prepare and submit Engineering Certification that includes the following: a. the development application number, type of works, location, name/stage(s) of development (where applicable); b. date of certification; c. name of certifying individual, the name of engineering consultancy that the certifying individual works for, and the name of developer; d. a full schedule of the latest set of detailed design drawings; e. state applicable Planning Scheme that design is compliant with, including the relevant Codes/Schedules/Specifications; f. state applicable design standards/guides that it has been designed and checked to be compliant with; g. state that the design is compliant with the development permit – include relevant preceding development permit number; h. state that there are appropriate procedures for supervising, inspection, testing in place to deliver the infrastructure to assure the quality of works and will actively ensure that these procedures will be followed during the construction of the works; and i. signature, name and RPEQ number of certifying individual.	In conjunction with a development application for operational works.
Erosion and Sediment Control		
52.	Submit Erosion and Sediment Control Plans for the construction period. These Plans must be designed in accordance with the International Erosion Control Association (Australasia) Best Practice Erosion and Sediment Control Guidelines. Considerations that require addressing in the E&SC Program include, but are not necessarily limited to the following: a. construction of sediment fences, earth berms, temporary drainage, temporary sediment basins and stormwater filtering devices designed to prevent sediment or sediment laden water from being transported to adjoining properties, roads and/or stormwater drainage systems; b. identification of high and extreme erosion risk areas and treatments to be employed to manage these areas during construction and re-establishment of the areas post construction and during any relevant on-maintenance period; c. measures to prevent site vehicles tracking sediment and other pollutants onto adjoining streets during the construction period; d. identification of areas to be utilised on the site for stockpiling of materials capable of being moved by the action of wind or running water;	In conjunction with a development application for operational works.

	e. the materials shall be stored clear of drainage paths, and appropriate measures implemented to prevent entry of such materials into either the road or drainage system; f. inspection regime of the sediment and erosion controls; and g. response times to events where controls have been damaged or are inadequate and erosion or the release of sediment or sediment laden stormwater has occurred from the site or associated works.	
53.	Erosion and sediment control measures must be implemented and maintained to prevent the tracking of sediment to and from the site onto the adjoining street network for the duration of the construction period.	During the period of construction and at all times.
Environment		
54.	No additional vegetation clearing is to be undertaken. The extraction activities must be wholly undertaken within the existing cleared footprint. Any further vegetation clearing will be subject to a further development approval for operational works from Council.	At all times.
55.	Ensure all restricted and prohibited matter within the development footprint under the *Biosecurity Act 2014* are removed from site prior to conducting any earthworks on the site.	At all times.
Rehabilitation		
56.	Submit to Council a Development Application for Operational Works for Landscaping of the Rehabilitation and Visual Amenity Area, including submission of a rehabilitation plan. The rehabilitation plan is to provide a strategy for the rehabilitation and maintenance of the Rehabilitation and Visual Amenity Area, must comply with all other conditions of approval and must include the following information (but not limited to): a. site characteristics; b. revegetation locations (including maps); c. species selection; d. planting densities; e. planting methodology; f. maintenance methodology (including watering, weeding, mulching, soil management, herbivory mitigation, plant replacement); g. maintenance schedules for the area for a minimum period to time to enable establishment of plants until they are self-sustaining (at least a minimum of five (5) years); h. provide a Bill of Quantities detailing the costing for undertaking the rehabilitation and maintenance (itemised per year); i. satisfaction of the following objectives: i. species selection will be based on the regional ecosystems which naturally occur on the subject site (including canopy species); ii. plants used are to be made up of locally derived see stock;	Prior to commencement of use.

	iii. ensure that trees are planted as part of rehabilitation of the site are planted in a manner and in locations, which will ensure their long-term survival. In considering the precise planting locations, consider matters such as the potential height of the trees on maturity, the locations of actual and future structures, works and the usage areas; iv. maintenance of the completed revegetation must be undertaken that will include the removal of weeds, mowing and slashing, watering, replacement of dead or damaged trees which have been planted, as well as ongoing sediment and erosion control methods for a period of at least five (5) years after planting; v. the plants within the rehabilitation area are to be kept in perpetuity and any plants, ground cover or tree species are to be replaced in the event of death. The Rehabilitation Plan is to be written in accordance with the South East Queensland Restoration Framework Manual 2012. Ensure the Rehabilitation Plan is prepared and signed by a suitably qualified environmental consultant (or an alternative person determined by Council as being suitably qualified) as being in accordance with this development approval. The 1.5m sandstone wall adjacent to the bund and road as shown in Figure 1 of the report *Part A Rehabilitation Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia on ML51085*, prepared by The LZ Environmental Company Pty Ltd and received by Council 3 May 2019 is not acceptable as it prohibits fauna movement. Provide an alternative treatment which allows for safe fauna passage such as a sloping batter. *Note: Callitris baileyi* is not an appropriate species and must be removed from the planting schedule.	
57.	Undertake the landscaping and associated works within the Rehabilitation and Visual Amenity Area in accordance with an Operational Works approval.	Prior to commencement of use and to be maintained thereafter.
58.	Submit to Council an amended Weed Management Plan to minimise the risk of significant residual impacts to adjacent lands and avoid indirect significant residual impacts to adjacent regulated vegetation, MSES, koala habitat and species habitats as a result of increased edge effects and increased dust, including (but not limited to): a. an assessment of the current level of weed occurrence near the boundaries of the existing cleared/disturbed areas and adjacent MSES and species habitats; b. outline a weed monitoring program and corrective actions for weeds that are found; and	Prior to commencement of use.

	c. outline a native plant monitoring program and corrective actions/treatment if native plants are found to be suffering from dust cover or changed hydrology.	
59.	Implement the approved Weed Management Plan.	Prior to commencement of use and to be maintained thereafter.
60.	Within twelve (12) months of the date of this approval taking effect, submit to Council for approval a Rehabilitation Plan for the whole of site. The Rehabilitation Plan: a. is to provide the strategy for rehabilitation and maintenance for the entire site; b. is to restore the site to predevelopment conditions; c. must comply with all other conditions of this approval; and d. must include the following information (but not limited to): i. site characteristics; ii. revegetation locations (including maps), divide the rehabilitation into three (3) zones: bund walls, rehabilitation of M7399 and the Site Environmental Management Plan for the composting process; iii. species selection; iv. planting densities; v. planting methodology; vi. maintenance methodology (including watering, weeding, mulching, soil management, herbivory mitigation, plant replacement); vii. maintenance schedules for the area for a minimum period of time to enable establishment of the plants until they are self-sustaining (at least a minimum of five (5) years); viii. provide a Bill of Quantities detailing the costing for undertaking the rehabilitation and maintenance (itemised per year); and ix. satisfaction of the following objectives: • species selection will be based on the regional ecosystems which naturally occur on the subject site (including canopy species); • plants used are to be made up of locally derived seed stock; • ensure that trees are planted as part of the rehabilitation of the site are planted in a manner and in locations, which will ensure their long-term survival. In considering the precise planting locations, consider matters such as the potential height of the trees on maturity, the locations of actual and future structures, works and the usage areas; • maintenance of the completed revegetation must be undertaken that will include the removal of weeds, mowing and slashing, watering, replacement of dead or damaged trees which have been planted, as well as ongoing sediment and erosion control methods for a period of at least five (5) years after planting; and	Within twelve (12) months of the date of this approval taking effect.

	• the plants within the rehabilitation area are to be kept in perpetuity and any plants, ground cover or tree species are to be replaced in the event of death. The Rehabilitation Plan is to be written in accordance with the South East Queensland Restoration Framework Manual 2012 (or as subsequently updated). Ensure the Rehabilitation Plan is prepared and signed by a suitably qualified environmental consultant (or alternative person determined by Council as being suitably qualified to prepare such a plan) as being in accordance with this development approval.	
61.	Implement the approved Rehabilitation Plan. Rehabilitation is to be undertaken progressively with any areas of extraction that are finished are to be rehabilitated within six (6) months of cessation of extractive activities.	At all times.
Bushfire Management		
62.	Submit to Council an updated Bushfire Hazard Assessment and Management Plan, prepared by a suitably qualified person (demonstrated experience in the assessment of bushfire hazard and risks and technical qualifications in environmental science, environmental management or an equivalent discipline) generally in accordance with the requirements of the Bushfire Resilient Communities - Technical Reference Guide for the State Planning Policy State Interest. The plan must at a minimum demonstrate that the risk to bushfire to persons and property is mitigate to a tolerable level. This must include management/mitigation measures.	Prior to commencement of use.
63.	Implement the approved Bushfire Hazard Assessment and Management Plan.	Prior to commencement of use and to be maintained thereafter.
Outdoor Lighting		
64.	Lighting for the development must be designed, installed and maintained in accordance with the requirements of Australian Standard AS1158:2005 – Road lighting and Australian Standard AS4282 Control of the obtrusive effects of outdoor lighting.	Prior to commencement of use and to be maintained thereafter.

ADVISORY NOTES

(i) Council will issue an Infrastructure Charges Notice. These charges are required to be paid prior to the commencement of the use.

(ii) All works associated with this approval may not start until all subsequent approvals have been obtained, and its conditions complied with.

(iii) Any additions or modifications to the approved use (not covered in this approval) may be subject to further application for development approval.

(iv) **Fire ants**

Biosecurity Queensland should be notified on 13 25 23 of proposed development(s) occurring in the fire ant biosecurity zone before operational works commence. It should be noted that works involving fire ant carrier materials may be subject to movement controls and failure to obtain necessary approvals from Biosecurity Queensland is an offence.

It is a legal obligation to report any sighting or suspicion of fire ants within 24 hours to Biosecurity Queensland on 13 25 23.

The Fire Ant Restricted Area as well as general information can be viewed on the DAF website.

(v) **Biosecurity**

Ensure all invasive pest weed species under the *Biosecurity Act 2014* are removed appropriately prior to removing trees on site.

Everyone is obligated under the *Biosecurity Act 2014* to take all reasonable and practical steps to minimise the risks associated with invasive plants under their control. More information on restricted and invasive plants as well as your general biosecurity obligation (GBO) can be viewed on the Business Queensland website.

(vi) **Cultural heritage**

The *Aboriginal Cultural Heritage Act 2003* requires anyone who carries out a land use activity to exercise a duty of care. Further information on cultural heritage duty of care is available on the Department of Seniors, Disability Services and Aboriginal and Torres Strait Islander Partnerships (DSDSATSIP) website.

The DSDSATSIP has established a register and database of recorded cultural heritage matters, which is also available on the Department's website:

Should any aboriginal, archaeological or historic sites, items or places be identified, located or exposed during construction or operation of the development, the *Aboriginal Cultural Heritage Act 2003* requires all activities to cease. Please contact DSDSATSIP for further information.

Advice for Queensland Urban Utilities

On 1 July 2014, Queensland Urban Utilities became the assessment manager for the water and wastewater aspects of development applications. An application will need to be made directly to Queensland Urban Utilities for water supply connections for the proposed development.

Executive Summary

This report considers a development application (MC2019/0029) for a Development Permit for a Material Change of Use for Extractive Industry (up to 300,000 tonnes per annum) and Environmentally Relevant Activities 16(2)(b), 16(3)(b) and 53(a) on Lot 154 CA311380, Lot 95 CSH352 and Lot 141 CA311273 at 613 and 621 Seventeen Mile Road, Helidon. The following table summarises the application details.

APPLICATION SUMMARY	
Applicant:	Scotbar Pty Ltd
Proposal:	Development Permit for a Material Change of Use for Extractive Industry (up to300,000 tonnes per annum) Environmentally Relevant Activities:

	• ERA 16 Extraction and screening 2(b) – extracting, other than by dredging, in a year, more than 100,000t but not more than 1,000,000t; • ERA 16 Extracting and screening 3(b) – screening, in a year, more than 100,000t but not more than 1,000,000t; and • ERA 53 Organic material processing (a) – processing more than 200t of organic material in a year by composting the organic material.
Properly Made Date:	9 May 2019
Street Address:	613 & 621 Seventeen Mile Road, Helidon Goldmine Road, Helidon
RP Description:	Lot 154 CA311380 Lot 95 CSH352 Lot 141 CA311273
Assessment Type:	Impact assessable – Part 4, Division 1, Table 1 and Part 4, Division 3, Table 1 of *Gatton Shire Planning Scheme 2007*
Number of Submissions:	1 properly made submission
State Referral Agencies:	State Assessment and Referral Agency (SARA) – Environmentally Relevant Activity and State Transport Infrastructure (thresholds)
Referred Internal Specialists:	• Development Engineer • Environmental Planner • Plumbing Inspector • Building Certifier
Prelodgement Meeting:	Not Applicable
Information Request:	Yes 23 May 2019 – Response received 31 March 2020
Further Advice:	Yes 16 June 2020 – Response received 2 July 2020
Decision Due Date:	18 November 2022

The application has been assessed in accordance with the requirements of the *Planning Act 2016*. The development complies with the applicable assessment benchmarks, subject to reasonable and relevant conditions.

Background / Site History

APPLICATION NO.	***DECISION AND DATE***
CMB0547 (DA3323)	Development Permit for Material Change of Use for Extractive Industry and Environmentally Relevant Activity Approved subject to conditions on 18 July 2007 Change to Existing Approval refused 21 June 2011 This approval was for up to 100,000 tonnes per year and was conditioned to lapse in July 2017.
MC2020/0027	Development Permit for Material Change of Use for Undefined Use (Motor Testing Facility (Stage 1)) Approved subject to conditions on 22 July 2020

	Negotiated Decision Notice approved 30 September 2020
MC2021/0073	Development Permit for Material Change of Use for Undefined Use (Motor Testing Facility including Rocket Motors (Stage 2)) – Currently under assessment

A sandstone mine has operated on this site since the 1880s. There are two (2) current mining leases (ML50185 and ML50185) over the subject site that allow for the mining of building sandstone. It is noted that the mining leases are issued under the *Mineral Resources Act 1989*. Any works under the mining leases do not require development approval under the *Planning Act 2016*.

Figure 1: Map of Mining Leases

Mining activities and Extractive industries are dealt with separately under Queensland legislation:

- Mining activities are regulated by the State (the Department of Resources) under the *Mineral Resources Act 1989*; and
- Extractive industries (quarries) are dealt with by local governments under their planning schemes and the *Planning Act 2016*.

Whether the extraction of resources is considered a 'Mining activity' or an 'Extractive industry' depends on how the material is being used. If it is being used as a 'mineral' as defined by the *Mineral Resources Act 1989* it is dealt with as a Mining activity. If the material is being used otherwise (e.g. for construction, road base,

landscaping) it is considered an Extractive industry. Often both approvals are obtained over a site so extracted material can be sold and used for a number of different purposes.

Site Details

SITE AND LOCALITY DESCRIPTION	
Land Area:	121ha
Existing Use of Land:	Sandstone mine, Motor Testing Facility
Road Frontage:	Seventeen Mile Road: 976m (sealed)
Significant Site Features:	Heavily vegetated in undeveloped areas, Sheep Station Creek runs through rear of property
Topography:	Varying slopes
Surrounding Land Uses:	State / National Park, Mines and Extractive industries, vacant land

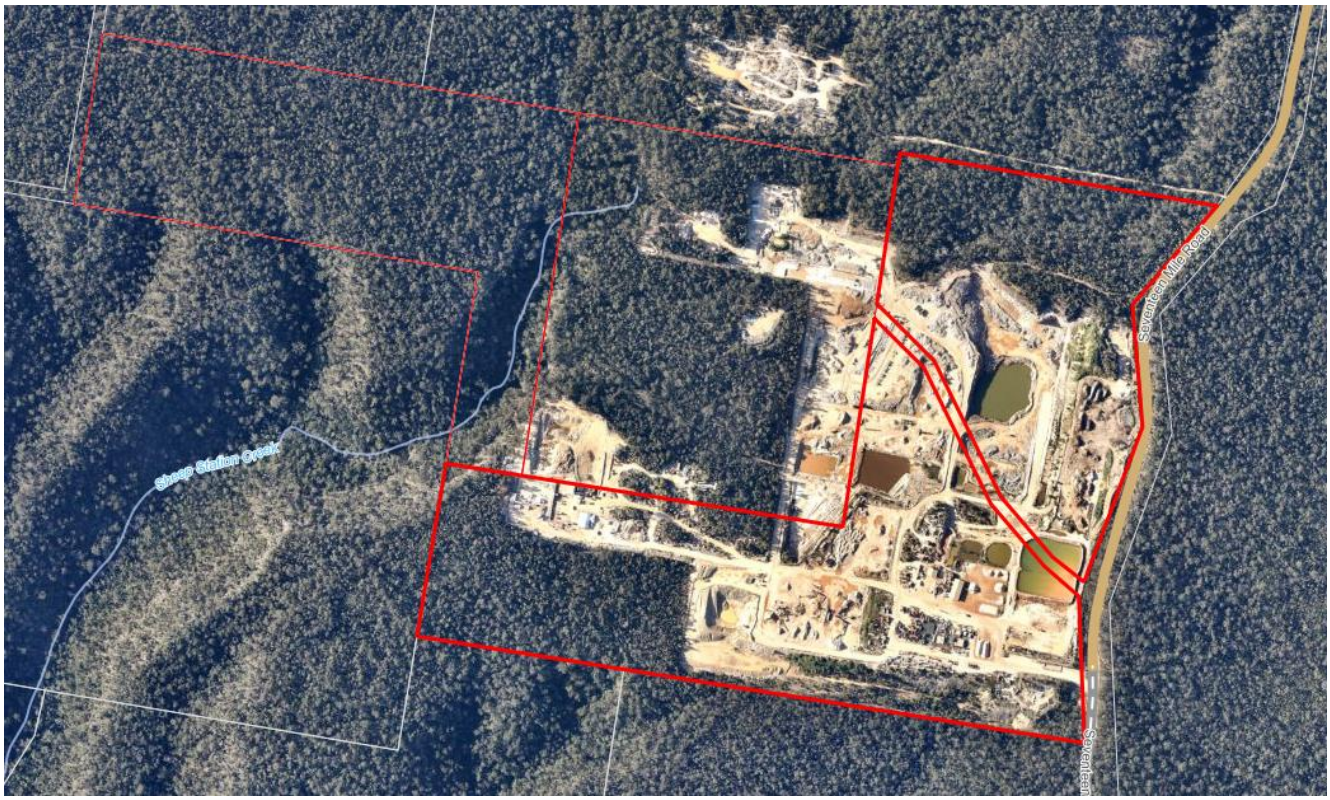


Figure 2: Aerial Image

Proposal

The applicant seeks a Development Permit for a Material Change of Use for Extractive Industry (up to 300,000 tonnes per annum) and Environmentally Relevant Activities 16(2)(b), 16(3)(b) and 53(a). The proposed use involves blasting, extracting, screening and processing sandstone, and soil conditioning. The applicant has applied for an Environmental Authority to extract up to 1,000,000 tonnes per annum in accordance with the thresholds of ERA16(2)(b) and 16(3)(b). However, the applicant intends extracting a maximum of 300,000 tonnes per annum and has submitted reports for extracting up to 300,000 tonnes per annum.

The development involves a rehabilitation area and landscaping is proposed along the Seventeen Mile Road frontage. This area will provide for buffering and screening of the development to Seventeen Mile Road.

Access to the site will be via Seventeen Mile Road. The haul route from the Warrego Highway to the site is through Helidon via Turner Street, Lawlers Road, George Street, Mary MacKillop Street, Arthur Street, Station Street, Laidley Street and Seventeen Mile Road (refer to Figures 4 and 5).

The applicant sought an Environmental Authority for ERA 53(a) for organic material composting, i.e. soil conditioning. The applicant argued that the soil conditioning is an ancillary use to the extractive industry on the basis that the majority of input product is from materials extracted on site, limited traffic movements generated by the soil conditioning, and the soil production supports sale of quarry products.

Council officers reviewed the proposed soil conditioning operation and determined it is not ancillary on the basis of:

- The use could operate independently from the Extractive industry and could continue to operate if the Extractive industry ceased operating – soil conditioning is not incidental to and necessarily associated with the Extractive industry;
- Soil conditioning relies on material being brought onto the site; and
- The *Environmental Protection Act 1994* prescribes separate Environmentally Relevant Activities for these uses – ERA No. 16 Extractive and screening activities and ERA No. 53 Organic material processing (soil conditioning).

Under the *Gatton Shire Planning Scheme 2007*, organic material composting or soil conditioning is defined as Industry (High Impact Industry). The application as lodged to Council does not include an Industry (High Impact Industry) use, therefore the organic material composting or soil conditioning has not been assessed as part of this application. The applicant is required to seek a further Development Permit for Material Change of Use for Industry (High Impact Industry) from Council prior to this use of the land commencing. A condition is recommended to ensure composting activities do not occur on site until the relevant development permit is obtained.

Figure 3: Proposed Site Plan

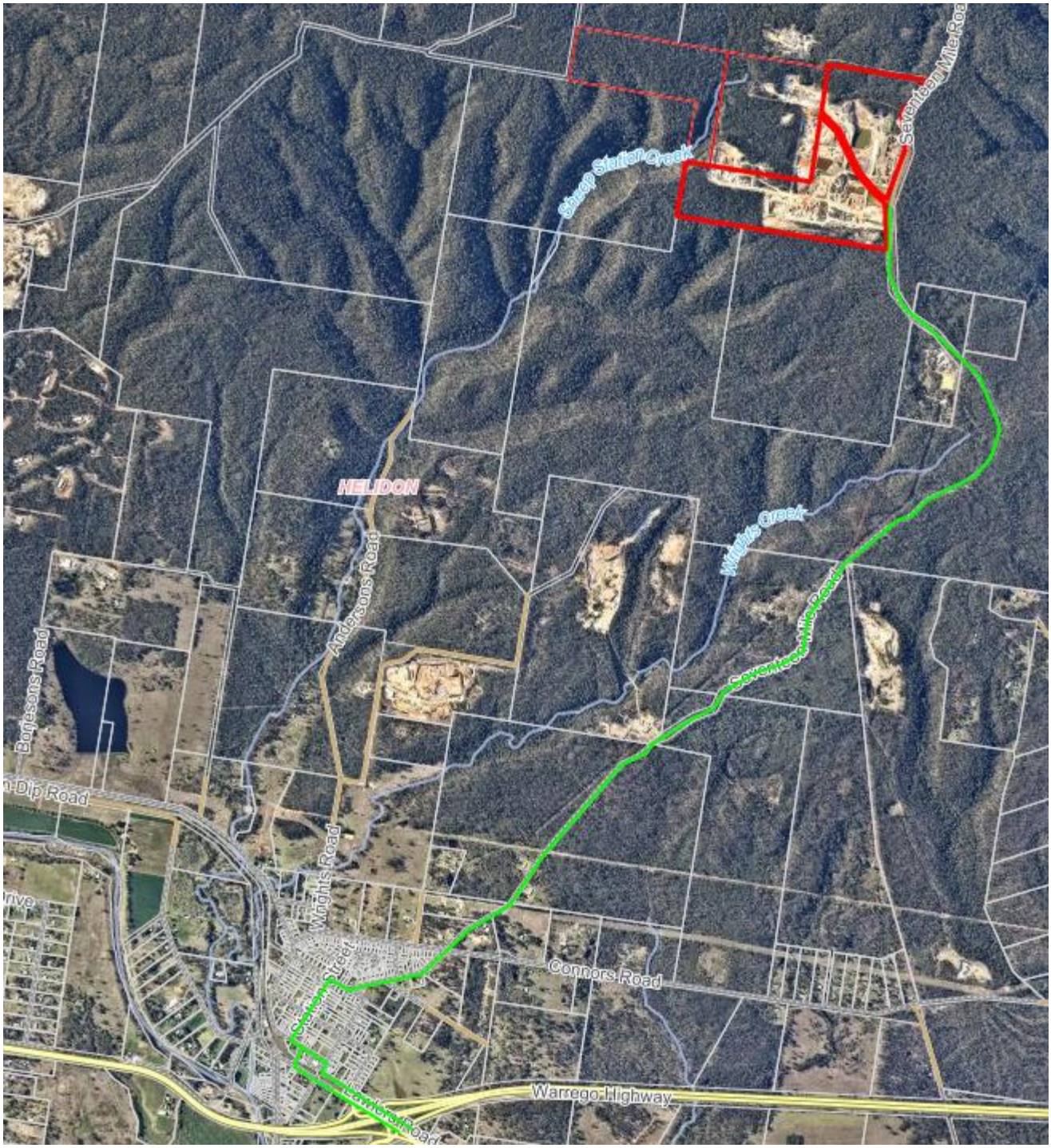


Figure 4: Nominated Haul Route identified with green line

Figure 5: Nominated Haul Route identified with green line – Helidon Township

ASSESSMENT:

Framework for Assessment

Categorising Instruments for Statutory Assessment

For the *Planning Act 2016*, the following Categorising Instruments may contain Assessment Benchmarks applicable to development applications:

- the *Planning Regulation 2017;*
- the Planning Scheme for the local government area;
- any Temporary Local Planning Instrument; and
- any Variation Approval.

Of these, the planning instruments relevant to this application are discussed in this report.

Assessment Benchmarks Pertaining to the *Planning Regulation 2017*

The following Assessment Benchmarks from the *Planning Regulation 2017* are applicable to this application:

PLANNING REGULATION 2017 DETAILS	
Assessment Benchmarks:	State Planning Policy (Biodiversity, Water Quality, and Natural Hazards, Risk & Resilience)
ShapingSEQ Regional Plan Designation:	Regional Landscape and Rural Production Area

State Planning Policy

Biodiversity

The subject site is located within the:

- MSES - Wildlife habitat (endangered or vulnerable)
- MSES - Wildlife habitat (special least concern animal)
- MSES - Wildlife habitat (koala habitat areas - core)
- MSES - Regulated vegetation (category B)
- MSES - Regulated vegetation (essential habitat)
- MSES - Regulated vegetation (intersecting a watercourse)
- MSES - High ecological significance wetlands
- MSES - High ecological value waters (wetland)
- MSES - High ecological value waters (watercourse)

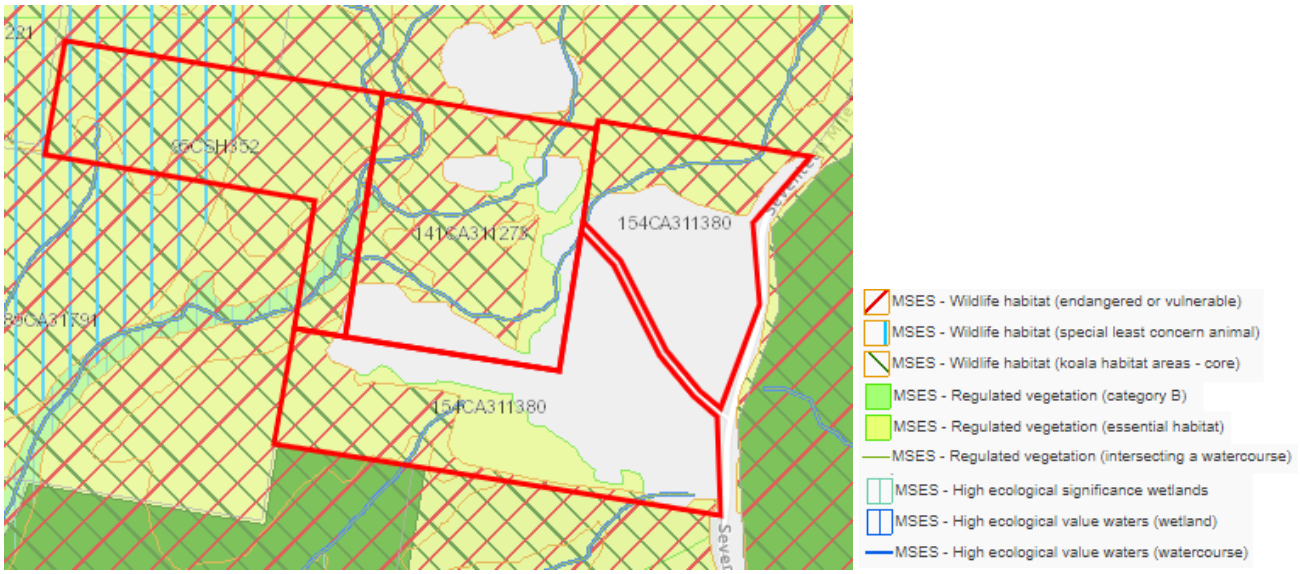


Figure 6: State Planning Policy – State Interest Biodiversity Mapping

The proposed development will be undertaken within existing cleared areas and there will be no works occurring within the MSES areas. There is no additional vegetation clearing required to facilitate the development. The existing MSES areas will be protected from development and maintain existing connectivity between the site and surrounding areas. This ensures that the development is located so as to avoid adverse impacts to MSES.

Rehabilitation of the site will be undertaken progressively upon cessation of the extraction activities. A condition has been recommended requiring a Rehabilitation Plan to be submitted within 12 months of this approval taking effect. This Plan is to address rehabilitation of site and allow reestablishment of the regional ecosystem on site.

It is noted that the legislative framework relating to Koala Habitat within South East Queensland (SEQ) including Koala Priority Areas and Koala Habitat Areas came into effect after this application was lodged.

It is therefore considered the development complies with this State Interest.

Water Quality

The subject site is located within the water resource catchments and high ecological value water areas. A Stormwater Management Plan (SWMP) was submitted with the application which included addressing stormwater quality. A number of existing and proposed sediment basins are identified on site to ensure that there are no offsite impacts in relation to water quality. The SWMP includes a number of recommendations including ongoing inspections and removing accumulated sediment to ensure water quality is maintained. Conditions have been recommended to ensure compliance with the recommendations in the SWMP. It is therefore considered the development complies with this State Interest.

Natural Hazards, Risk & Resilience

The subject site is located within a flood hazard area – Local Government flood mapping area and bushfire prone area, with the heavily vegetated areas identified as Very High Potential Bushfire Intensity. The subject site contains Overland Flow Paths under Council's *Temporary Local Planning Instrument 01/2019 Flood Regulation* (TLPI). An assessment is provided below against the TLPI.

A Fire Management Plan (FMP) which was prepared in 2010 was submitted with the current development application. Due to the time that has elapsed it is recommended that a new bushfire management plan be submitted that reflects current conditions on site. The FMP included a number of mitigation measures to reduce the bushfire risk including maintaining of vegetation and fire management lines, provision of sufficient water storage on site, and undertaking training and evacuation preparations with employees and the Rural Fire Brigade. The bushfire management plan is required to demonstrate that the bushfire risk can be managed on site and reduced to a tolerable level. It is therefore considered the development can comply with this State Interest.

ShapingSEQ: South-East Queensland Regional Plan 2017

The subject site is located within the Regional Landscape and Rural Production Area. The proposed development for an Extractive Industry is not in conflict with the SEQ Regional Plan. The Extractive Industry is required to be located on this site as the resource is located within this area.

Assessment Benchmarks Pertaining to the Planning Scheme

The applicable planning scheme for the application is *Gatton Shire Planning Scheme 2007*. The following sections relate to the provisions of the Planning Scheme.

Planning Scheme:	*Gatton Shire Planning Scheme 2007*
Zone:	Rural General and Rural Uplands
Consistent/Inconsistent Use:	Consistent
Assessment Benchmarks:	Planning Scheme in its entirety

Desired Environmental Outcomes

The Desired Environmental Outcomes (DEOs) are:

- Environment
- Character and Landscape Quality
- Settlement Pattern, Amenity and Safety
- Access to Services, Facilities and Employment Opportunities
- Cultural Heritage
- Economic Development and Natural Resource Management

The proposed development is for the expansion of an existing extractive industry in a rural area. The development will continue to provide for employment opportunities within region utilising a natural resource. Further the development will continue to utilise existing haul routes on local roads. The development is designed and located within existing cleared areas to minimise further vegetation clearing which will minimise impacts on biodiversity areas. The biodiversity areas will further be enhanced through proposed landscaping and rehabilitation.

The application has been assessed against each of the matters above and found to be generally consistent with each DEO.

Assessment Benchmarks – Planning Scheme Codes

The application requires Impact Assessment and must be assessed against the Planning Scheme as a whole. The following codes are most relevant to the assessment of the application:

- Rural General Zone Code;
- Rural Uplands Zone Code;
- Biodiversity Overlay;
- Potential Bushfire Risk Area Overlay Code;
- Extractive/Mineral Resources Transportation Routes Overlay Code;
- Build Work Code
- Landscaping Code;
- Lighting Code;
- Services and Infrastructure Code;
- Vehicle Access, Parking and On-Site Movement Code;
- Rural Development Code;
- Extractive Industry Code; and
- *Temporary Local Planning Instrument 01/2019 Flood Regulation* (TLPI) Flood Hazard Overlay Code.

The application has been assessed against each of the applicable codes and found to be compliant or can be conditioned to comply. The pertinent issues arising out of assessment against the codes are discussed below.

Overlay Codes

Biodiversity Overlay Code

The code seeks to ensure that the biodiversity areas are protected and enhanced, and species supported for long-term viability.

The proposed development will be carried out within existing cleared areas and no vegetation clearing is required to facilitate the development. A condition has been recommended limiting the extent of the development to existing cleared areas. To mitigate any adverse impacts on Sheep Station Creek, which is a

waterway running through the site, a number of sediment basins will be constructed in accordance with the Stormwater Management Plan.

Rehabilitation of the site will be undertaken progressively upon cessation of the extraction activities. A condition has been recommended requiring a Rehabilitation Plan to be submitted within 12 months of the date of this approval. This Plan is to address rehabilitation of site and allow reestablishment of the regional ecosystem on site.

In addition to rehabilitation at cessation of extractive activities, the applicant has proposed a Rehabilitation and Visual Amenity Area along Seventeen Mile Road. As part of the application no detail was provided on the rehabilitation of this area. As such a condition has been recommended requiring a Rehabilitation Plan of the Rehabilitation and Visual Amenity Area to be provided to Council as part of an Operational Works application. This Plan must include detail on the revegetation to be undertaken and maintenance of this area. The area is to be revegetated using species which naturally occur within the regional ecosystem.

The proposed development therefore protects the areas of biodiversity, including their habitat, and ensures long-term viability of the habitats. It is therefore considered the development can comply with this Code.

Potential Bushfire Risk Area Overlay Code

The code seeks to ensure that development is appropriately designed to minimise the bushfire risk to persons and property.

A Fire Management Plan (FMP) prepared in 2010 was provided with the development application. The bushfire risk is due to the dense vegetation located on subject site and surrounding area. There is limited bushfire risk where the extractive industry use is being carried out due to these areas being disturbed and void of vegetation. The FMP includes a number of recommendations to reduce the bushfire risk including vegetation and fire management line maintenance, provision of on-site water storage, emergency preparedness and training. These measures cumulatively reduce the bushfire risk to a tolerable level. A condition has been recommended requiring an updated Bushfire Management Plan to be provided to Council due to the time that has elapsed since the submitted plan was prepared.

No new buildings, structures or roads are proposed as part of the development. The site has a number of sediment basins that permanently contain water which will provide a constant source of water supply for firefighting purposes. The proposed development has access to Seventeen Mile Road, whilst avoiding the dense vegetation on site, therefore allowing for evacuation in the event of a bushfire.

It is therefore considered the development can comply with this Code.

Extractive/Mineral Resources Transportation Routes Overlay Code

The code seeks to ensure that development and use of premises does not compromise future extractive industry uses and transportation of these resources.

The proposed development is for an Extractive Industry, which will continue to use existing haulage routes. The proposed development will be limited to those areas already disturbed. There will be no expansion of the extractive industry in the currently undeveloped areas. Further landscaping and rehabilitation are proposed to be undertaken. The subject site is not located in close proximity to any sensitive receptors therefore operations can be undertaken on site with minimal offsite impacts to surrounding areas as it is largely undeveloped.

It is therefore considered the development can comply with this Code.

Zone Code

Rural General Zone Code

Downstream water quality will be protected through several existing and proposed sediment basins located on site. The proposed development will be carried out on existing disturbed areas thus reducing the impacts to existing vegetation on site.

The development will utilise the existing access on Seventeen Mile Road. Conditions have been recommended requiring upgrades to this access to reduce sediment being tracked onto Seventeen Mile Road. In addition, road upgrades are proposed along the haul route to ensure the road is sufficient to cater for the heavy vehicles.

The subject site is surrounded by other extractive industries and conservation areas and is located approximately 1.2 kilometres from the nearest sensitive receptor (residential dwelling) ensuring effective buffering and separation from incompatible uses. Due to the heavy vegetation surrounding the area, it is unlikely that sensitive land uses will be established on site.

The information submitted with the application indicates sufficient sandstone resource being available for continued extraction. The depth of sandstone is such that there is sufficient resource for several decades of extraction and the full extent of sandstone available is unknown.

The Extractive industry will be undertaken within existing disturbed areas to ensure that there are no adverse impacts to the surrounding environment. The use will generate noise and dust impacts, however due to the size of the site and setback from sensitive receptors (minimum 1.2km), the noise and dust will not cause adverse impacts in particular to sensitive receptors. The site is predominantly surrounded by other extractive industries and national park. It is noted that the Environmental authority includes standardised conditions relating to noise and dust management.

It is therefore considered the development can comply with this Code.

Rural Uplands Zone Code

The proposed development will not impact upon any areas zoned as rural uplands; no further assessment is required.

Development Codes

Building Work Code

No building work is proposed as part of the development. The application information submitted indicated plans that a building will be constructed in the future to contain extracting, screening and processing activities. No detail has been provided in relation to this building, therefore a condition has been recommended requiring further approval from Council for any additional buildings or structures.

It is therefore considered the development can comply with this Code.

Landscaping Code

Landscaping is proposed to the Rehabilitation and Visual Amenity Area along the frontage of Seventeen Mile Road. No additional landscaping is proposed which is acceptable given the undisturbed areas are heavily vegetated and this vegetation will be retained.

The applicant is required to submit further detailed information on the landscaping to be undertaken in the Rehabilitation and Visual Amenity Area as part of a further Operational Works application.

In addition, upon cessation of use rehabilitation of the site needs to be undertaken which is in accordance with a Rehabilitation Plan submitted to Council prior to cessation of the use.

It is therefore considered the development complies with this Code.

Lighting Code

The applicant has not identified any lighting as part of the development; however, it is expected security lighting or similar will be provided. Due to the site being in a rural area and not in proximity to any sensitive land receivers, it is unlikely there will be lighting impacts to sensitive receptors. A condition has been recommended ensuring any lighting is accordance with the relevant Australian Standard to ensure no impacts to road users on Seventeen Mile Road.

It is therefore considered the development can comply with this Code.

Services and Infrastructure Code

The site is not serviced by Urban Utilities reticulated water supply system or sewerage system. The site has adequate water supply on site to service the use including several 5000L potable water tanks which meets current demand and anticipated future demand. The site has an existing 5000L effluent storage tank which is pumped out when required, generally monthly. No changes are proposed to the effluent disposal system.

The existing electricity supply arrangements will be maintained.

Stormwater will be captured in a number of existing and proposed basins and discharged to Sheep Station Creek. Prior to being discharged to Sheep Station Creek, stormwater will be captured in a number of sediment basins, drains and diversion bunds and treated in a Type 1 treatment system. This treatment will ensure any stormwater is treated to achieve the required release criteria prior to being discharged to Sheep Station Creek. A Stormwater Management Plan (SWMP) submitted with the application details the stormwater management. No issues with stormwater have been raised by Council's Development Engineering section.

Access to the site is via Seventeen Mile Road using an existing vehicular access. Upgrades are required to bitumen seal the entrance to reduce the amount of sediment tracked onto Council's local roads. No pedestrian or footpath exists along the road frontage given the rural nature of the site. It is also not expected that the use will generate pedestrian traffic, therefore footpath/pedestrian access is not required in this instance.

It is therefore considered the development can comply with this Code.

Vehicle Access, Parking and On-Site Movement Code

The site is accessed via Seventeen Mile Road which is a bitumen sealed road. The site access is currently constructed using a gravel sealed road. This results in significant sediment tracking onto Seventeen Mile Road.

To reduce this, a condition has been recommended requiring the site entrance to be bitumen sealed from the property boundary for 50 metres into the site.

Further, conditions have been recommended requiring road upgrades to widen the roads and intersections along the haul route to ensure they are of sufficient size and capacity to cater for the heavy vehicles as proposed.

There is no rate specified in the Code for number of car parking spaces. Currently there are informal car parking areas in proximity to the site entrance. Due to the size of the site and existing internal manoeuvring areas, it is considered there is sufficient area on site to cater for car parking. A condition has been recommended ensuring a minimum of 50 car parking spaces is provided on site to cater for the number of employees (maximum of 50 at peak of operations) and visitors to the site.

It is therefore considered the development can comply with this Code.

Rural Development Code

The proposed development is located within existing disturbed areas thus ensuring existing vegetation is retained. Screening is proposed along the Seventeen Mile Road property boundary through a Rehabilitation and Visual Amenity Area.

It is therefore considered the development can comply with this Code.

Extractive Industry Code

The site is developed such that all works associated with the development are carried out in cleared areas to retain existing vegetation. The applicant proposes to extract resources in a sustainable and optimum manner through total resource recovery. The site will continue an existing extractive industry operation that has existed since the 1800s.

No extraction or processing is proposed to be undertaken within 10m of the property boundary or within 100m of any existing or approved dwellings on surrounding properties. The Extractive industry will not generate any noise nuisance over and above the existing mining operations to any sensitive receivers due to the significant separation distance (approximately 1.2km). A Noise Impact Assessment which included an assessment of the vibration impacts was submitted with the application which demonstrates that the development complies with the required acoustic quality objectives.

A Rehabilitation and Visual Amenity Area is proposed to visually screen the development from Seventeen Mile Road. This Area will be landscaped such that it reflects the natural ecosystem of the surrounding area.

As part of the application a number of management plans, including Stormwater Management Plan, Plan of Operations, Site Environmental Management Plan and Site Based Management Plan, were submitted with the application. These plans include measures to ensure the development does not cause environmental harm. A condition has been recommended requiring compliance with these management plans for the life of the development.

The applicant has proposed several sediment basins and includes stormwater channels to divert stormwater on site. Stormwater is ultimately discharged to Sheep Station Creek which traverses the subject site. Stormwater will be captured in a number of existing and proposed basins and discharged to Sheep Station Creek. Prior to being discharged to Sheep Station Creek, stormwater will be captured in a number of sediment

basins, drains and diversion bunds and treated in a Type 1 treatment system. This treatment will ensure any stormwater is treated to achieve the required release criteria prior to being discharged to Sheep Station Creek.

A condition has been imposed limiting hours of operation to Monday to Saturday 6am to 6pm. No operation is permitted on Sundays or public holidays with the exception of office work. In addition, the applicant proposes to undertake blasting which will be limited to hours of operation between 9am to 5pm Monday to Friday, in accordance with Probable Solution A11.2.

Access to the site from the Warrego Highway is via Seventeen Mile Road, Turner Street, Lawlers Road, George Street, Mary MacKillop Street, Arthur Street, Station Street and Laidley Street. These roads are bitumen sealed. Road upgrades to some intersections and roads are required to ensure the road widths are sufficient to cater for the expected heavy vehicle movements. Access to the site is via an existing driveway on Seventeen Mile Road with a minimum width of 9m.

It is therefore considered the development complies with this Code.

Assessment Benchmarks Pertaining to a Temporary Local Planning Instrument

The subject site contains a number of overland flow paths under Council's *Temporary Local Planning Instrument 01/2019 – Flood Regulation* (TLPI). The development will involve works that will change ground levels, as is required to extract sandstone. The stormwater/flooding on the site will be captured/directed to existing and proposed sediment basins on the site. This will ultimately discharge to Sheep Station Creek. There are no impervious areas proposed as part of the development. This ensures that the adverse effects of flood inundation are minimised.

It is therefore considered the development can comply with the TLPI.

Adopted Infrastructure Charges Resolution

The charge rate under the *Lockyer Valley Adopted Infrastructure Charges Resolution (No.6) 2022* for an Extractive Industry is as per an Other Use which is 'individual' or determined on a case by case basis. As per Schedule 16, Table 1 of the *Planning Regulation 2017*, the rate for infrastructure charges for an Other Use is to be the rate of a similar use. In this instance the most similar use category to an Extractive Industry would be Other Industry which includes Low impact industry, Medium impact industry, Warehouse, Service trade and Transport depot, i.e. $22.34 per m^2 of gross floor area (GFA0.

The gross floor area rate has been calculated based on the number of existing buildings used in association with the Extractive Industry based on aerial imagery (refer to Attachment 6). Any new buildings will require a Change application.

It is noted that the previous approval for Extractive industry was issued prior to the infrastructure charging regime coming into effect in July 2011.

Infrastructure charges are payable in accordance with the following table:

LOCKYER VALLEY REGIONAL COUNCIL				
Charge Type	Description	Demand Units	Rate	TOTAL
PROPOSED DEMAND				

Charge	Other industry – Other	1,748.93m^2	$22.34/m^2 GFA	$39,068.86
			TOTAL PROPOSED DEMAND	$39,068.86
EXISTING DEMAND				
Credit	Existing Allotment	1	-$13,297.13	-$13,297.13
			TOTAL EXISTING DEMAND CREDIT	-$13,297.13
			TOTAL PAYABLE	**$25,771.73**

Options
1. Council approves the development application in accordance with the Officer's recommendation.
2. Council approves the development application in part subject to reasonable and relevant conditions.
3. Council refuses the development application.

Critical Dates
A decision on the application must be made by Council by 18 November 2022.

Strategic Implications

Corporate Plan
Lockyer Planned – A development assessment process that delivers quality development that is consistent with legislation, best practice and community expectations.

Finance and Resource
Should the decision be contested in the Planning and Environment Court financial implications may occur.

Legislation and Policy
The application has been assessed in accordance with the requirements of the *Planning Act 2016*. Legal implications arising from the recommendation provided in this report are that the applicant and/or submitter may appeal the decision to the Planning and Environment Court.

Risk Management
The application has been assessed in accordance with the *Planning Act 2016*. Any risks have been mitigated through the assessment of the application in accordance with legislative requirements and the recommendation of reasonable and relevant conditions.

Consultation

Internal Consultation
The application was internally referred to Council's Building, Plumbing, Environment and Development Engineering sections. No issues were raised by the Building or Plumbing sections, other than the standard approval requirements, if necessary.

The Environment section did not raise any issues that cannot be addressed through conditions of approval. This includes managing the development to ensure there are no impacts to the environment, in particular the areas located within the Biodiversity overlay, as well as undertaking rehabilitation of the site at the end of use.

The Development Engineering section recommended conditions of approval relating to car parking, vehicular access and driveways, road upgrades, stormwater, earthworks and retaining walls, and erosion and sediment control.

External Consultation

Referral Agencies

The application was referred to the following Referral Agencies in accordance with the *Planning Act 2016* and the *Planning Regulation 2017*:

Referral Status	Referral Agency and Address	Referral Trigger	Response
Concurrence	State Assessment and Referral Agency (SARA)	Schedule 10, Part 5, Division 3 of *Planning Regulation 2017* – Environmentally Relevant Activity Schedule 10, Part 9, Division 4, Subdivision 1, Table 1 of *Planning Regulation* – State Transport Infrastructure	14 October 2020 (Reference No. 1905-11141 SRA).

Department of State Development, Infrastructure, Local Government and Planning (SARA)

SARA provided their response on 14 October 2020 and advised that there were no requirements for the development. The referral included approval for an Environmental Authority (EA0002540) under the *Environmental Protection Act 1994* for ERA 16 Extraction and screening 2(b) – extracting, other than by dredging, in a year, more than 100,000t but not more than 1,000,000t; ERA 16 Extracting and screening 3(b) – screening, in a year, more than 100,000t but not more than 1,000,000t and ERA 53 Organic material processing (a) – processing more than 200t of organic material in a year by composting the organic material. It is noted that ERA 53 will not be valid until a Material Change of Use for Industry (High impact industry) is issued by Council.

Community Engagement

The application was publicly notified for 17 business days from 9 April 2020 to 6 May 2020 in accordance with the requirements of the *Planning Act 2016*. One (1) properly made submission was received. In terms of the submission received, there are three matters to note:

1. The submission was received at 10:48pm via email on 6 May 2020 being the last day a submission could be made. A submission must be made during the public notification period. A business day is not defined to include a certain portion of the day (i.e. 9:00am to 5:00pm). The submission was received by Council on the 6 May 2020 as Council could retrieve the submission on the 6 May which ended at midnight, despite Council closing at 5:00pm, as per section 24(1)(a) of the *Electronic Transactions (Queensland) Act 2001.* Further, the public notification information specifically nominated Council's email address to submit submissions.
2. The submission was made to Council and Council did not retrieve the submission until 7 May 2020 due to it being sent to an incorrect email address. It is considered that the submission be accepted as properly made as the submission was made within time, but to the wrong address; practically, Council would not have processed/reviewed the submission until 7 May in any event; and the email address used was a general email address used by Council.
3. The submission does not state a residential or business address. However, does include an email address to enable communication with the submitter without extra burden on Council to communicate with the submitter.

Despite these issues, it is considered that Council can accept the submission as being properly made, in accordance with Section 53 of the *Planning Act 2016*.

The following table provides a summary and assessment of the issues raised by submitters.

ISSUES	*COMMENTS*
The proposed development is not economically viable for the operation of an extractive industry at the proposed location.	The information provided by the applicant indicates that there is sufficient sandstone material to be extracted for several decades which indicates ongoing economic viability at the proposed location. The use is carried out in a manner that results in 100% resource recovery which further supports the economic viability of the operation.
The extractive activities will cause adverse impacts on the environment such as erosion, sinkholes, loss of biodiversity, contamination of soil and ground water and surface water if chemicals are used in extraction.	As part of the application a number of management plans were submitted, which include mitigation measures to minimise adverse impacts to the environment. Further biodiversity areas will be retained as the development is wholly located within existing disturbed areas. The biodiversity values will be further enhanced through the provision of a Rehabilitation and Visual Amenity Area proposed as part of the development. The development incorporates a number of existing and proposed sediment basins to which stormwater will be diverted before being discharged to Sheep Station Creek. This will reduce any sediment issues in stormwater on site and impacting downstream water quality. There is no indication that chemicals are to be used in extraction.

Attachments

1⇩	MC2019/0029 Site Plan	1 Page
2⇩	MC2019/0029 Stormwater Management Plan	33 Pages
3⇩	MC2019/0029 Plan of Operations	109 Pages
4⇩	MC2019/0029 Site Environmental Management Plan	99 Pages
5⇩	MC2019/0029 Site Based Management Plan	58 Pages
6⇩	MC2019/0029 Infrastructure Charges - GFA Calculation	5 Pages
7⇩	MC2019/0029 SARA Referral Agency Response	6 Pages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RESEARCH & DEVELOPMENT
BATTER & SEDIMENT TRAPS
SCREENING, CRUSHING, HARDSTAND & STOCKPILING
SEDIMENT BASIN
EXTRACTION & PROCESSING - APPROX. 15 HA
CLEAN WATER STORAGE
OFFICE, AMENITIES, & WORKSHOP
SEDIMENT BASIN
LANDFILL
SITE ENTRY
COMPOST PAD BASIN
COMPOST PAD
REHABILITATION & VISUAL AMENITY AREA
Composting of organic material/soil conditioning is not approved under this Development Permit

HELIDON QUARRY

STORMWATER MANAGEMENT PLAN
SEVENTEEN MILE ROAD, HELIDON

CLIENT: SCOTBAR PTY LTD

DOCUMENT NUMBER: R1094

VERSION: A

DATE: 30/03/2020

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TOPO.

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1 INTRODUCTION

Topo were engaged by Scotbar Pty Ltd to prepare a Stormwater Management Plan (SMP) for the Material Change of Use application (MC2019/0029) associated with the Helidon Quarry, located at 613 Seventeen Mile Road, Helidon.

The site location is illustrated in Figure 1. The site currently operates under the Environmental Authority (EA) ENRE00874709/IPCE00182505A11 (EPPR00808913) and has applied for a development permit to expand operation to include the following environmentally relative activities (ERAs):

- ERA 53 – Organic material processing
- ERA 16(2)(b) – Extracting rock or other material > 100,000 - 1 million t/yr
- ERA 16(3)(b) – Screening rock or other material > 100,000 – 1 million t/yr

1.1. GUIDELINES

This SMP has been prepared in accordance with:

- *Guideline Stormwater and environmentally relevant activities* (EHP, 2014), and
- *Best Practice Erosion and Sediment Control* (IECA, 2008),
- *Appendix B - Best Practice Erosion and Sediment Control* (IECA, 2018), *and*
- *Queensland Urban Drainage Manual* (QUDM).

1.2. REVISION

VERSION	DATE	AUTHOR	APPROVED
-	04/02/2020	RONALD KLEIJN	STEVEN CHAMBERLAIN (RPEQ 15,545)
A	30/03/2020	RONALD KLEIJN	STEVEN CHAMBERLAIN (RPEQ 15,545)

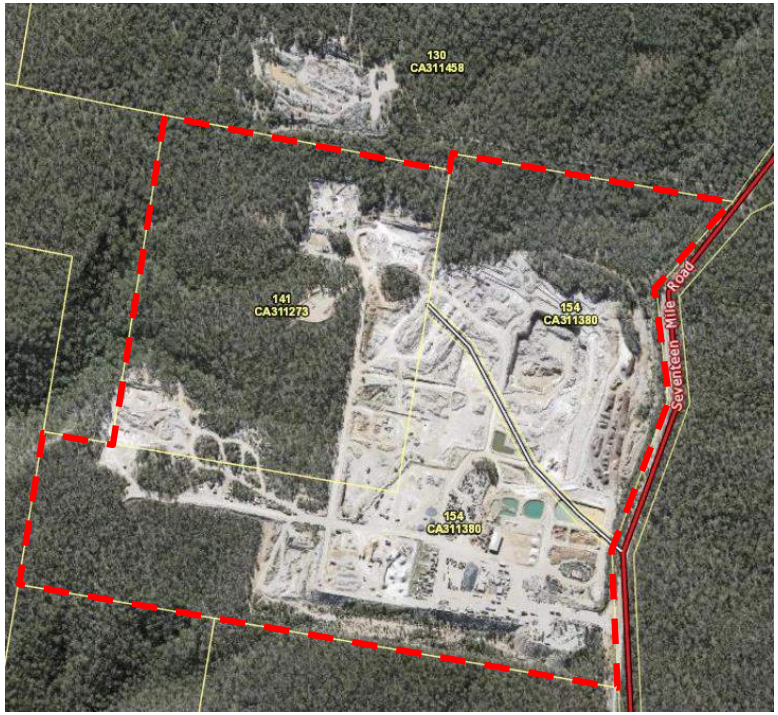


Figure 1 – Site Location (Source: Queensland Globe)

1.3. OBJECTIVES

The objective of this SMP is to:

- Review site conditions and existing drainage systems,
- Identify areas requiring upgrades to comply with the relevant design standards,
- Develop a formalised drainage strategy that complies with the requirements of the DEHP *Guideline Stormwater and environmentally relevant activities* (EHP, 2014), and
- Identify options for stabilisation of currently disturbed areas and where possible, to divert these areas from the treatment systems.

To achieve these objectives, diversion bunds will be proposed, along with sediment control measures to assist in achieving the discharge criteria for runoff exiting the site.

1.4. SCOPE

The scope of works undertaken as part of this assessment is detailed below.

- Review of the existing site stormwater infrastructure and assessment of the current drainage regime,
- Review of proposed and recently completed works,
- Provide conceptual design of surface water systems to separate clean surface water from contaminated surface waters,
- Investigate options for erosion control measures to be implemented and reduce the erosion risk for the site, and
- Provide a response to Council information request dated 23 May 2019

This report addresses surface water only and does not include the management of groundwater.

2 SITE DESCRIPTION

2.1. LOCATION AND OPERATIONS

A range of quarrying activities take place on the western side of Seventeen Mile Road across Lot 154 CA 311380, Lot 95 CSH 352 and Lot 141 CA 311273. These activities include extracting and screening of rock, with the current application being made to increase the quantities permissible under the site's permit. In addition to the quarrying operations, an area has been dedicated to composting. A site plan outlining the operations is included as Figure 2.

Figure 2 – Site Plan

2.2. TOPOGRAPHY

The topography varies considerably across the site due to historic extraction operations. The lowest elevation occurs in the western portion of the site at approximately 290m AHD, rising to a peak elevation of approximately 350m AHD at the north eastern corner along Seventeen Mile Road. Slopes vary significantly as a result of the batters associated with historic extraction of rock. The majority of the site falls to a low point on the western extent of the extraction area. Runoff from adjacent properties to the north enters the site via mapped watercourses. The current drainage plan layout has been illustrated in Figure 3 and included in Appendix A.

Figure 3 – Existing Drainage Plan

2.3. VEGETATION

Portions of the site contain semi mature vegetation. Due to the site activities, large areas were cleared to make way for the extraction operations. The land to the north of the Research and Development facility remains undisturbed, with relatively thick stands of vegetation present. Assessment of vegetation communities over the site does not form part of this report but vegetation extents as determined from aerial photography analysis has been used to determine disturbed catchment extents.

2.4. CLIMATE

The Bureau of Meteorology (BOM) provides monthly climate data for the Gatton Daff Research Station, Gauging Station 040436. Review of historic rainfall data indicates a distinct dry season between June and September with a longer wet season between December and May. Based on 46 years of data, the average annual rainfall for the area is approximately 796 mm. These rainfall statistics are illustrated in Figure 4.

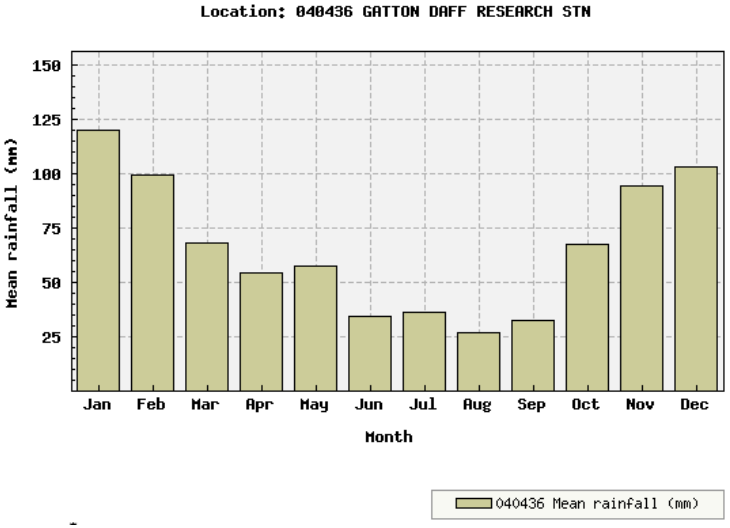


Figure 4 – Monthly Average Rainfall Statistics for Gatton Daff Research Station (1968-2014)

2.5. LEGAL REQUIREMENTS

Sites will only be considered low erosion hazard sites if they contain significant areas of hardstand or protective groundcover (i.e. greater than 95% of the site is effectively stabilised and the area that is not stabilised does not exceed 2,500m^2) and soil erosion is not expected to exceed 10tonnes/hectare/year from disturbed areas (EHP, 2014). Therefore, the site is classified as a High Erosion Hazard.

Stormwater runoff has the potential to cause water contamination and/or environmental harm and is regulated under the EP Act. Some of the key legal requirements relevant to the quarry operations include:

- Where stormwater conditions appear on an environmental authority, it is an offence under s.430 of the EP Act, to not comply with the conditions of approval. This includes anyone operating under the environmental authority e.g. contractors, consultants etc.
- Causing serious or material environmental harm is an offence under s.437 and s.438 of the EP Act respectively.
- It is an offence to cause an environmental nuisance under s.440. Environmental nuisance is unreasonable interference with an environmental value. It may also include an unhealthy, offensive or unsightly condition because of contamination.
- Under s.440ZG it is an offence to unlawfully deposit a prescribed water contaminant to waters. The most common prescribed contaminants resulting from poor stormwater management of ERA operations are:
    - chemical, or chemical waste
    - ashes, clay, gravel, sediment, stones and similar organic or inorganic matter
    - building and construction materials
    - building, construction and demolition waste
    - industrial waste
    - oil
    - putrescible waste, and
    - waste water.
- Under s.319 an obligation is placed upon all persons in Queensland who are carrying out activities which may cause environmental harm to comply with the 'general environmental duty'. This requires that all reasonable and practicable measures must be adopted to prevent and minimise environmental harm. Although not being able to demonstrate compliance against the general environmental duty is not an offence, demonstrating that all reasonable and practicable measures have been adopted is a defence for offences such as water contamination (EHP, 2014).

2.6. LICENSE CONDITIONS AND WATER QUALITY OBJECTIVES

The following conditions specified by the site permit (Permit No. IPCE00182505A11) relate to the management of stormwater. Comments are made in relation to how this SMP complies with these conditions, as summarised in Table 1.

Table 1 – License Conditions and Complying Solutions

AGENCY INTEREST	ACCEPTABLE SOLUTION
Water 1 – Diversion drains and/or contour banks must be designed, installed and maintained to minimise the potential for stormwater runoff to enter disturbed areas by the ERA	A clean water diversion is proposed at the northern extents of the operational area to divert clean water to the storage pond. Refer to Section 6, Section 7 and Appendix A for further details.
Water 2 – Effective erosion and sediment control structures must be designed, installed and maintained wherever necessary to prevent erosion of disturbed areas and the release of sediment to waterways.	Sediment basins are proposed and comply with the relevant design standard. Refer to Section 8 and Appendix A for further details.
Water 3 – The ERA must be conducted so as to prevent any release of any hazardous contaminant to any waters.	Sediment basins have been designed to capture the design storm event. Testing of runoff is undertaken prior to release from site. Bunding is provided for all chemical/hazardous material storage areas to reduce the risk of such materials being conveyed to the sediment basins. In the event that any spills do occur, procedures are in place to contain and clean up such spills.
Water 4 – Sediment laden water must not be directly or indirectly released from the site to any waters.	Sediment basins have been designed to capture the design storm event. Testing of runoff is undertaken prior to release from site to ensure the water quality objectives are being met.

In the absence of site specific discharge criteria, the water quality objectives from *Best Practice Erosion Control Appendix B – Sediment basin design and operation* (IECA 2018) have been adopted. Runoff leaving the site must comply with the criteria specified in Table 2.

Table 2 – Water Quality Release Criteria for Site Runoff

PARAMETER	RELEASE LIMITS	
	MINIMUM	MAXIMUM
pH	6.5	8.5
Suspended Solids (mg/L)	Nil	50

3 PRINCIPLES OF SURFACE WATER MANAGEMENT

Ongoing soil and water management will be required through the life of the project. The three cornerstones of the erosion and sediment control industry are drainage control, erosion control, and sediment control. The primary function of each of these principles is summarised below:

- Drainage control measures aim to prevent or reduce soil erosion caused by concentrated flow-including the management of rill and gully erosion-and to appropriately manage the movement of "clean" and "dirty" water through the site.
- Erosion control measures aim to prevent or reduce soil erosion caused by raindrop impact and sheet flow (i.e. the control of splash and sheet erosion)
- Sediment control measures aim to trap and retain sediment either moving along the land surface (bed load) or contained within flowing water (suspended sediment) (IECA, 2008).

The proper management of stormwater is critical to the implementation of effective erosion and sediment control. The effective management of stormwater lies in the appropriate control of runoff velocities and volume.

3.1. DRAINAGE CONTROL

The primary function drainage controls are to:

- minimise the risk of rill and gully erosion;
- minimise the risk of hydraulic damage to the adopted erosion and sediment control measures;
- control the velocity, volume and location of water flow through the site; and
- appropriately manage the movement of "clean" and "dirty" water through the site (IECA, 2008).

The *Guideline - Stormwater and environmentally relevant activities* (EHP, 2014) requires that high erosion hazard sites implement the following design and management measures:

- Erosion protection and sediment control measures should be installed and maintained for all stages of the activity to minimise erosion and the release of sediments.
- All areas of soil disturbed and exposed should be managed to minimise the loss of sediment through revegetation and/or use of other stabilisation techniques.

- All concentrated stormwater flows (including 'clean' stormwater and 'dirty' stormwater) should have concentrated flow paths, such as drainage lines, diversion drains, channels and batter chutes (where applicable) which have been designed, constructed, effectively armoured and maintained to convey the runoff from events up to and including the average recurrence interval (ARI) of:
    - 1 in 10 year critical duration ARI storm event without causing water contamination, sheet, rill or gully erosion, sedimentation, or damage to structures or property (for sites operated as a quarry)
- Stormwater runoff from external or undisturbed catchments should be diverted around or away from disturbed areas as much as possible.
- Sediment basin(s) should be installed and maintained to collect and treat stormwater runoff from all disturbed areas of the site(s) approved as part of the ERA application, and areas in which any earthen material is stored.
- For events up to and including a 24 hour storm event with an ARI of 1 in 5 years, the following must be achieved
    - a sediment basin must be designed, constructed and operated to retain the runoff at the site(s) approved as part of the ERA application;
    - the release stormwater from these sediment basins must achieve a total suspended solids (TSS) concentration of no more than 50mg/L for events up to and including those mentioned above.
    - The composting area requires a sediment basin designed to contain the runoff expected from a 24-hour storm with an average recurrence interval of 10 % Annual Exceedance Probability (AEP) event, equivalent to a 1 in 10 year ARI event.

For events larger than those stated above, all reasonable and practical measures must be taken to minimise the release of prescribed contaminants.

- All sediment basins should have a spillway, designed, constructed and effectively armoured to convey anticipated flows. Design for a 2 % AEP critical event is considered a minimum.
- Any sediment basin designed in accordance with this list must be operated in such a manner that within 120 hours of the most recent rainfall event, the required design capacity of the upper settling volume is available for capture and storage of stormwater runoff from the next rainfall event.
- In addition to the settling volume requirements, sediment basins should be designed with a sediment storage zone equal to 50% of the upper settling volume.

3.1.1. CLEAN WATER DIVERSION

A key component of managing surface waters is the diversion of 'clean' runoff away from disturbed portions of the site. Clean water is defined as water that either enters the property from an external catchment and has not been further contaminated by sediment within the site, or water that has originated from the site and is of such quality that it does not need to be treated in order to achieve the required water quality standard, or would not be further improved if it was to pass through a sediment trap (IECA, 2008).

In diverting clean water around the disturbed portions of the site, it will remain separated from the sediment laden runoff that requires treatment. Runoff from the external catchments to the north will be diverted to a clean water storage dam and therefore will not enter the operational area of the site. A drainage structure has been sized to convey the 2 % AEP storm event. As discussed in Section 5 and Section 6, results of the hydrologic and hydraulic modelling undertaken as part of this assessment have been used to size the clean water diversion as well as basin spillways.

3.1.2. DIRTY WATER DRAINAGE

Dirty Water Drains (DWD) and diversion bunds are typically required to convey sediment laden runoff from disturbed areas to the sediment basin and are also be designed to convey runoff associated with the 10 year ARI critical duration event (EHP, 2014).

3.2. SEDIMENT CONTROL

To achieve the required release criteria, treatment of dirty site runoff will be required in a Type 1 treatment system. As previously discussed, the site requires a sediment basin designed to contain the runoff expected from a 24-hour storm with an average recurrence interval of 0.2 Exceedance per Year (EY), equivalent to a 1 in 5 year ARI event. The composting area requires a sediment basin designed to contain the runoff expected from a 24-hour storm with an average recurrence interval of 10 % AEP event, equivalent to a 1 in 10 year ARI event.

3.3. EROSION CONTROL

Erosion control measures aim to prevent or reduce soil erosion caused by raindrop impact and sheet flow. One of the most effective forms of long term erosion control is the stabilisation of disturbed areas. Where possible, progressive stabilisation and revegetation of the non–operational areas must be undertaken. If an area is to be non–operational for only a short duration, temporary measures (such as mulch/compost blankets or jute matting) should be applied.

4 DRAINAGE REGIME

4.1. EXISTING CONDITIONS

The site has been divided into a number of sub–catchments, based on the existing topography and drainage infrastructure, as illustrated by Figure 3. A copy of the overall catchment plan and existing drainage plan is provided within Appendix A. External catchments entering the site from the north are currently directed through the site to Discharge Point 1, following the existing topography.

In the existing condition, the majority of runoff from the operational areas is directed to five (5) sediment ponds on the site, in which the sediment is allowed to settle out and the water is being re-used for site operations. Clean water from Basin 4 is usually pumped back to Basin 5 after sedimentation has occurred, but in some cases will be conveyed to Basin 1.

Diversion bunds are provided along the outer edges of the operations and aid in directing runoff to the basins and preventing it from exiting the site. Along the southern edge of the site, there are three excavated sediment traps that capture sediment runoff from the southern batter. Inspection of the site identifies this batter is predominantly covered with a thick layer of rock with very little sign of rilling or erosion.

4.2. PROPOSED DRAINAGE

Work is currently underway to increase the size of Basins 1 and 2 and continue their use as sediment basins. Basin 6 has been proposed as a clean water basin, storing runoff from external catchments and using this water on site. An assessment of the external catchments was undertaken and a drainage design undertaken to convey external (clean water) flows to the clean water basin. Installation of Basin 6 will assist with separating clean and dirty water flows. The proposed drainage plan has been shown in Figure 5 and is included within Appendix A. Further details in relation to the modelling undertaken and design of the basins, diversion bunds and spillways is included in the subsequent sections of this report.

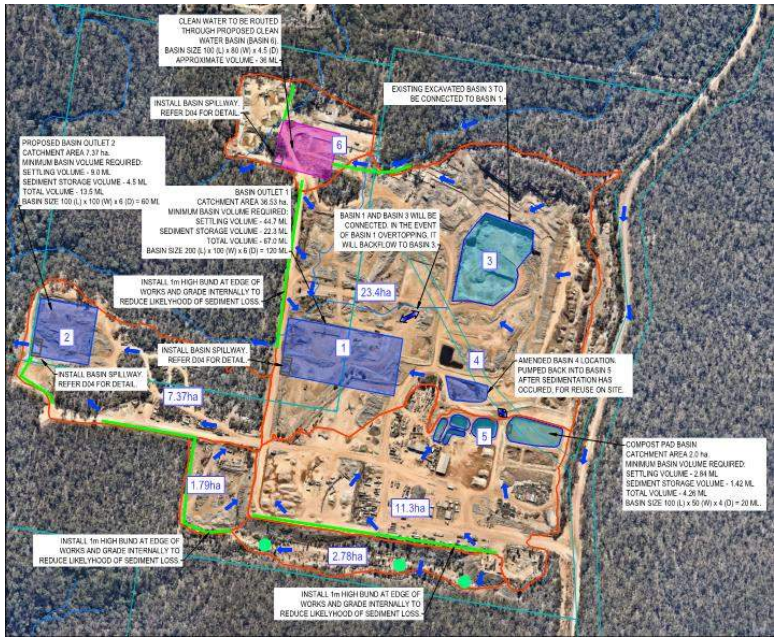


Figure 5 - Site Drainage Plan - Proposed

5 HYDROLOGIC MODELLING

The XP-Storm runoff-routing model has been used to estimate design flood discharges within the study area. The XP-Storm model was used to estimate the 10 %, 2 % and 1 % Annual Exceedance Probability (AEP) storm event for the 10 minute to 12 hour storm durations.

5.1. RAINFALL DATA

Design rainfalls are a probabilistic or statistically-based estimate of the likelihood of a specific rainfall depth being recorded at a particular location within a defined duration. This is generally classified by an AEP or Exceedances per Year (EY). Design rainfalls are therefore not real rainfall events, rather they are values that are probabilistic in nature.

The 2016 Intensity Frequency Duration (IFD) design rainfalls were applied to this assessment. The rainfall intensities generated for the site and applied to the hydrologic modelling are summarised in Table 3.

5.2. ROUTING

Hydrologic modelling has been undertaken using the Laurenson runoff routing method. The Laurenson method requires the catchment to be divided into a pervious (undeveloped) and an impervious (developed) portion.

5.2.1. ROUGHNESS COEFFICIENTS

Manning's n values have been applied to represent the catchment, and these values varied based on the degree of vegetation present. The following values have been adopted:

- Pervious areas — n = 0.045 – 0.060 for vegetated areas
  n = 0.0275 – pervious areas within operational area
- Impervious areas — n = 0.020

Table 3 – BoM IFD

DURATION (MINS)	0.2EY	10%	2%	1%
10	154.00	144.0	194.0	215.0
15	124.00	122.0	164.0	182.0
20	105.00	106.0	143.0	158.0
25	90.90	93.7	127.0	141.0
30	80.50	84.4	114.0	127.0
45	72.40	65.6	89.4	99.7
60	56.10	54.1	73.9	82.6
90	46.20	40.6	55.7	62.3
120	34.70	32.9	45.2	50.6
180	28.20	24.4	33.4	37.5
270	20.90	18.1	24.8	27.8
360	15.60	14.7	20.1	22.6
540	12.70	11.1	15.1	17.0
720	9.61	9.2	12.0	14.1
1440	5.1	5.9	8.2	9.3

5.2.2. RAINFALL LOSSES

Initial Loss (IL) and Continuing Losses (CL) have been applied to the hydrologic modelling. The following loss rates were adopted:

- Pervious Area — IL = 10 - 15 mm — CL = 2.5 mm/hr
- Impervious Area — IL = 2 mm — CL = 1 mm/hr

5.3. CATCHMENT CHARACTERISTICS

The representation of a catchment in a flood hydrograph estimation model is, by necessity, highly conceptualised and aims to represent those features and characteristics most influential in determining the overall flood response of the catchment. The distribution of storm rainfall over different parts of the catchment and the flood response to it may vary considerably, depending on the details of topography, vegetation cover, land use and drainage network characteristics. The assessment undertaken has aimed to identify the features most likely to influence the flood hydrograph estimation and flood behaviour through the site. A catchment map has been provided in Appendix A, and these catchments divided into their pervious and impervious portions for the hydrologic modelling. The fraction impervious for the quarry site has been assumed at 50 % to reflect site conditions. The catchment characteristics and parameters applied to the assessment are summarised in Table 4, while a copy of the catchment plans is included as Figure 6 and within Appendix A.

Table 4 – Catchment Details Applied to Hydrologic Assessment

CATCH ID	AREA (HA)	SLOPE (M/M)
1	10.65	20.3
2	11.87	27.8
3	6.64	18.9
4	14.13	21.0
5	8.00	7.5
6	20.92	4.2
7	3.85	12.3
8	22.93	13.0
9	15.08	21.3
10	9.39	14.9
11	5.15	16.0
12	14.56	9.9
13	25.92	11.4
14	13.03	19.1
15	9.12	15.7
16	9.20	14.3
17	14.41	16.2
18	26.39	6.2
19	22.51	10.2
20	15.92	11.2
21	17.03	21.9
22	7.86	8.0
23	6.44	10.7
24	11.31	6.9
25	5.50	6.7
26	21.29	5.9
27	11.53	10.9
28	10.96	27.0
29	9.06	14.5
30	18.73	10.8

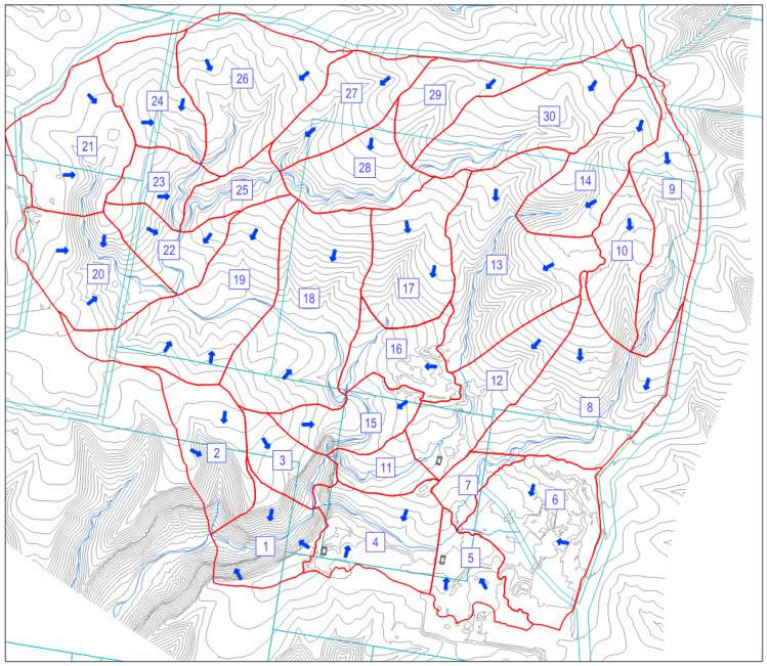


Figure 6 – Catchment Map

5.4. RATIONAL METHOD COMPARISON

Although not a formal calibration process, the results of the XP hydrologic model have been compared against the Rational Method calculations to ensure the model is providing reasonable results. The time of concentration has been assessed using the recommended procedures of QUDM. A summary of these calculations is provided in Appendix B. A comparison between the Rational Method and XP peak flow rates is provided as Table 5.

Table 5 – Summary of Peak Flow Rates

CATCH	10 % AEP			2 % AEP			1 % AEP		
	R.M.	XP	DIFF. (%)	R.M.	XP	DIFF. (%)	R.M.	XP	DIFF. (%)
8	3.6	3.7	3.0	6.0	5.8	3.1	6.8	6.7	1.9
9	3.0	2.8	8.4	4.8	4.3	10.1	5.4	5.0	8.5
10	1.8	1.7	8.0	2.8	2.6	8.4	3.3	3.0	6.8
13	3.8	3.5	6.8	6.3	5.5	12.7	7.2	6.4	11.7
14	2.6	2.3	13.3	4.1	3.5	14.0	4.7	4.1	12.7

Based on the results of the Rational Method comparison, the results of the XP model compare well with the peak flow rate calculations. Minor variations exist, however there is no justification to further modify the parameters of the hydrologic model in an attempt to achieve greater correlation with the Rational Method calculations. The results of the hydrologic model are therefore considered to be appropriate for this assessment.

6 HYDRAULIC MODELLING

The unsteady state, 1D hydraulic model XP-Storm was used to analyse the flow regime of the study area. Water levels, discharge and velocity can be extracted from the model as functions of time at required locations. Peak flow rates at the existing site discharge locations were assessed, as well as the peak flow rate from the proposed clean water basin. The XP-Storm model extent and outlet locations is illustrated as Figure 7.

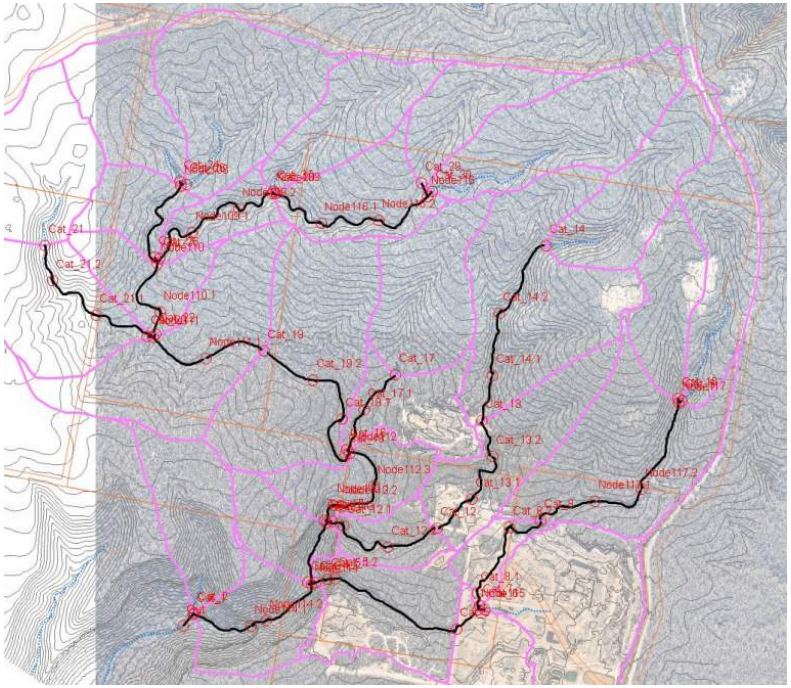


Figure 7 - Model Extents (Existing Scenario)

6.1. ROUGHNESS

Manning's n roughness values were estimated from aerial photography and applied to the 1D cross section within the model. A Manning's n = 0.080 was adopted for the vegetated flowpaths of the external catchments.

6.2. BOUNDARY CONDITIONS

Hydrographs generated by the hydrologic model are applied as inputs to the hydraulic model and form the upstream boundary conditions, as well as point flows inside the model. Normal flow conditions are assumed for the downstream boundaries.

6.3. SPILLWAY PEAK FLOW RATE ASSESSMENT

An assessment of the peak flow rates for the 2 % AEP events has been undertaken to enable sizing of the spillway and clean water diversion drain to be undertaken. The peak flow rates applied to the design of the spillways is summarised in Table 6 and plotted as Figures 9 to 12. Design calculations and typical sections for the spillways are provided in Appendix A.

Table 6 – Peak Flow Rate – 2 % AEP Storm Event

BASIN	PEAK FLOW RATE (M^3/S)	CRITICAL STORM DURATION (MIN)
1	15.2	25
2	3.4	25
6 (clean water storage)	27.0	60
Compost Pad	0.80	25

6.4. CLEAN WATER DIVERSION PEAK FLOW RATE ASSESSMENT

A diversion bund is required to convey clean runoff from the external catchments to the north of the operational area to the clean water storage dam (Basin 6). The indicative location is highlighted in Figure 8 and represents the XP-SWMM link from which the peak flow rate was extracted. The peak flow rate at this location is 13.5 m^3/s, during the 2 % AEP 60 minute storm event. Refer to Appendix A for details in relation to the design of the bund, and Figure 13 for a plot of the design hydrographs.

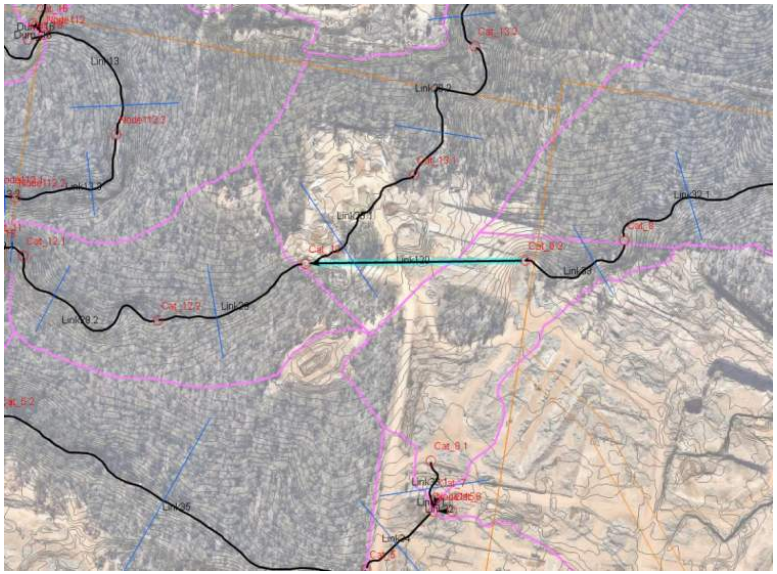


Figure 8 – Diversion Bund Flow Rate Extraction

Figure 9 – 2 % AEP Design Hydrographs for Basin 1 Spillway

Figure 10 – 2 % AEP Design Hydrographs for Basin 2 Spillway

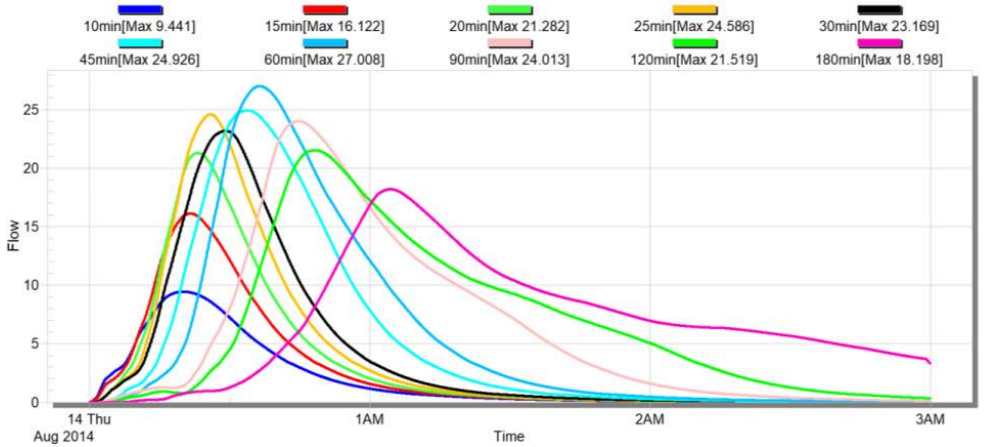


Figure 11 – 2 % AEP Design Hydrographs for Basin 6 Spillway

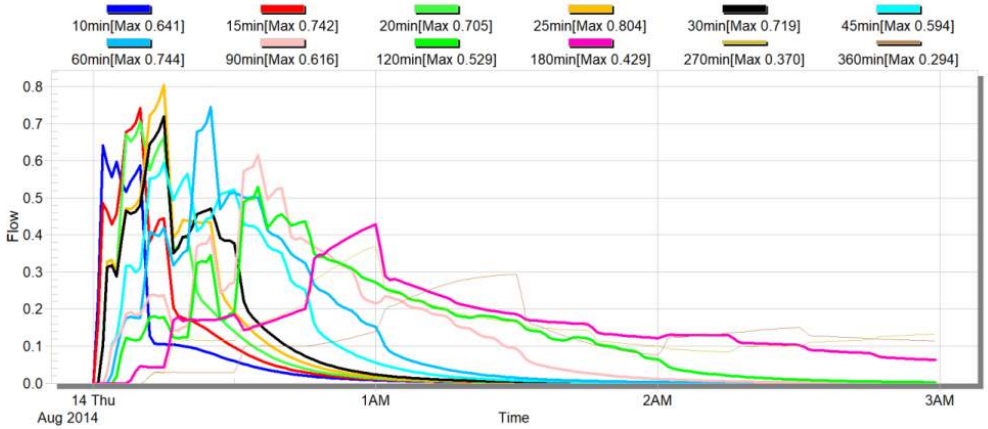


Figure 12 – 2 % AEP Design Hydrographs for Compost Pad Basin Spillway

Figure 13 – 2 % AEP Design Hydrographs for Clean Water Diversion to Basin 6

7 DRAINAGE DESIGN

The site operates under the conditions of an approval for an Environmentally Relevant Activity, thus the drainage and treatment measures for the site should comply with the *Guideline - Stormwater and environmentally relevant activities* (EHP, 2014). Therefore, the site should comply with the following design and management measures:

- All concentrated stormwater flows (including 'clean' stormwater and 'dirty' stormwater) should have concentrated flow paths, such as drainage lines, diversion drains, channels and batter chutes (where applicable) which have been designed, constructed, effectively armoured and maintained to convey the runoff from events up to and including the average recurrence interval (ARI) of:
    - 1 in 10 year critical duration ARI storm event without causing water contamination, sheet, rill or gully erosion, sedimentation, or damage to structures or property.
- Stormwater runoff from external or undisturbed catchments should be diverted around or away from disturbed areas as much as possible.

In the existing conditions, the external catchments enter the site from the north through natural drainage lines, after which this runoff was directed through the site by predominantly sheetflow. It is proposed to construct Basin 6 and capture the external runoff so that it can be used on site. Basin 6 will incorporate a spillway into the natural drainage lines to the west of the site. Spillways for Basins 1 and 2 will also be constructed so as to better define their discharge location and to ensure these are effectively armoured. Spillways have been designed for the critical duration 2 % AEP (1 in 50 year ARI) event.

Due to the heavy machinery traffic, continually changing site conditions and hard surface (rock) it would be impractical to install underground piped drainage infrastructure or permanent dirty water drains. Instead, bunds will be used to direct runoff within the site to the sediment basins and the site graded to facilitate flows to the basins. Basins 1 and 3 will be interconnected by means of an excavated drain which will allow back-ponding to occur. Pumps are also used to transfer water between sediment basins. The proposed drainage plan is included in Appendix A.

8 SEDIMENT BASIN DESIGN AND OPERATION

The size of the proposed sediment basins have been checked to confirm they have sufficient capacity to capture the required 1 in 5 year ARI 24 hour runoff volume. A summary has been provided in Table 7 which shows that the proposed volume of sediment basins, achieved by ongoing excavation, is well in access of the minimum volume required, with further storage available on site in the existing sediment ponds. Additional details in relation to the calculations are included in Appendix A.

Table 7 – Sediment Basin Sizing Summary

BASIN	CATCHMENT (HA)	MIN. VOLUME (ML) [1]	PROPOSED VOLUME (ML)
1	36.53	67.0	120
2	7.37	13.5	60
6 (clean water)	89.6	n/a	36
Compost	2.00	4.3[2]	20

NOTE: (1) Reported minimum storage volumes include the sediment storage volume which is calculated as 50 % of the sediment settling volume.
(2) Reported minimum volume for compost pad is based on 10 year 24 hour rainfall intensity

Performance reviews of the sediment basins are to undertaken following rainfall in accordance with the flowchart in Figure 14. Water quality discharge criteria for the sediment basins are as follows:

- Suspended solids - <50 mg/L for rainfall events up to the sediment basin design rainfall event
- Turbidity – project specific correlation between turbidity and TSS to be established (refer to note below)
- pH – 6.5 to 8.5

Whenever possible, water samples collected from the sediment basin must be tested in a laboratory before discharge to prove that the suspended solid content is below recommended level. It is strongly recommended that sufficient water testing is conducted in order to enable a site-specific calibration between suspended solids concentrations (mg/L) and NTU turbidity readings. This would allow utilisation of the turbidity meters to determine when water quality is likely to have reached the equivalent of 50 mg/L.

In order to develop a site-specific relationship between suspended solids concentrations (mg/L) and NTU, there should be an absolute minimum number of five water samples (ideally 9-plus), all in the range of 20 – 150 mg/L. If the samples have a wider range of suspended sediments, such as 10 – 2000 mg/L, then the resulting relationship will be less reliable.

If the basin's operation is managed through the use of a specified or determined NTU reading, then water samples must still be taken daily during de-watering operations to determine the total suspended solids (TSS) concentration. Both the TSS and NTU values must be recorded and reported as appropriate. Jar testing has been undertaken, as detailed in Section9. Due to the nature of the quarry (sandstone) it is not anticipated that flocculants or coagulants will be required to aid in the removal of sediment in the runoff.

8.1. COMPOST PAD BASIN

The compost pad basin has more than enough capacity to retain a 1 in 10 year 24 hour rainfall event. In operating this basin, the water level will be maintained at all times (with the exception of wet weather) to ensure the 1 in 10 year 24 hour storage volume is available.

Site operations require approximately 10 L/m^3 for each windrow every three days to maintain optimal composting conditions. Additional re-use will occur through the use of runoff for dust suppression within the compost area (estimated at 4 -20 L/m^2/ day, depending on season.

Based on the minimum volume required, it is estimated the proposed basin has the ability to contain in excess of a 1 in 100 year 24 hour event. (R = 24 x 9.28 = 222.7 mm, therefore basin volume equates 6.68 ML). In effect the composting operations aren't expected to release runoff to the rest of the site.

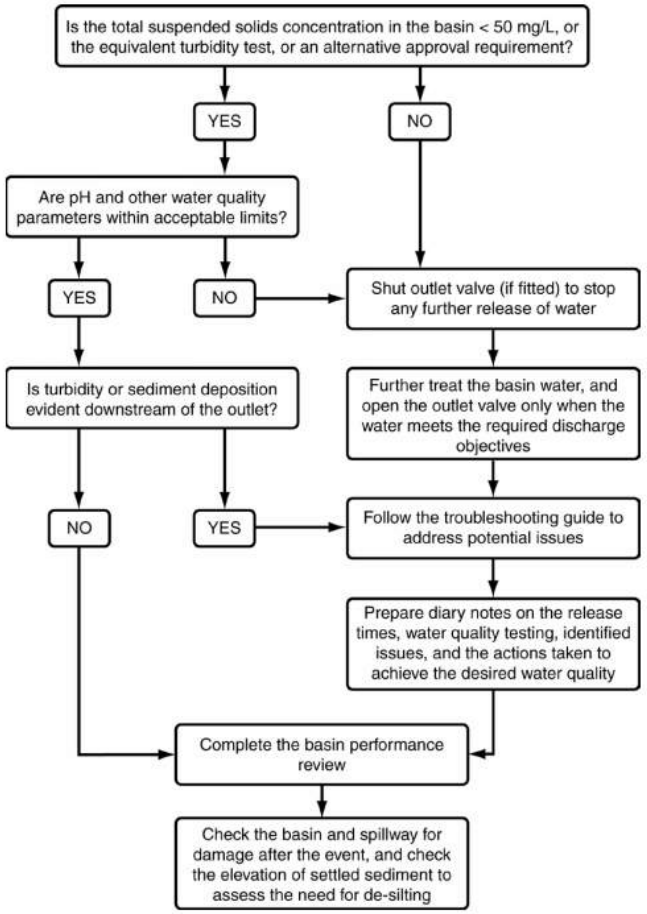


Figure 14 - Basin performance assessment process (Source: IECA 2016)

9 TURBIDITY TEST EVALUATION

During a site inspection a quantity of very fine dust was collected and suspended in water to ensure the in-situ material will settle out without the aid of flocculants or coagulants. It is noted this was the finest dust that could be found on site and it was suspended in a relatively high concentration. A such the below results are considered conservative, with sedimentation expected to occur quicker on site.

The fine dust material was added to a 1L jar filled with tap water, which was mechanically stirred to suspend the solids. A turbidity meter was used to record the NTU values every 10 minutes for the first hour and every 20 minutes thereafter. As shown in Figure 15, turbidity reduces rapidly in the first 20 minutes, gradually dropping to 51 NTU after 160 minutes. After letting the jar stand for 48 hours, turbidity was further reduced to 3 NTU. The (unexpected) increase in turbidity between the 10 and 20 minute test was due to some minor residue on the outside of the test tube, which was removed. Images of the evaluation have been included in Figure 16 to Figure 19.

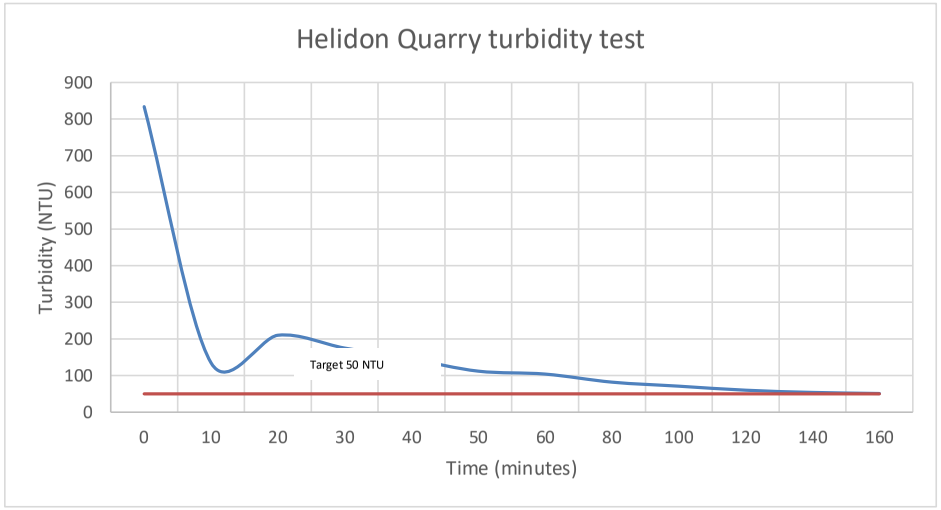


Figure 15 – Turbidity Test Results Plot

Figure 16 – Start of test – 834 NTU

Figure 17 – After 30 minutes – 175 NTU

Figure 18 – After 160 minutes – 51 NTU

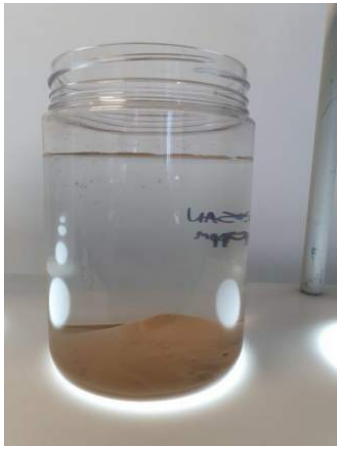


Figure 19 – After 48 hours – 3 NTU

10 SITE INSPECTION AND MONITORING

Site inspections and monitoring is to be undertaken as detailed below.

SMPs should be considered live documents that in some instances will require review and updating as site conditions change, or if the adopted measures fail to achieve the required treatment standard.

When a site inspection detects a notable failure in the adopted drainage or other ESC measures, the source of this failure must be reported, investigated and appropriate amendments made.

Best practice site management requires all ESC measures to be inspected at the following frequencies and include the following checks as a minimum:

Daily site inspections (during rainfall)

- All drainage, erosion and sediment control measures
- Occurrences of excessive sediment deposition (whether on-site or off-site)
- All site discharge points (including dewatering activities as appropriate)

Weekly site inspections (even if work is not occurring on-site)

- All drainage, erosion and sediment control measures
- Occurrences of excessive sediment deposition (whether on-site or off-site)
- Occurrences of litter or sediment placed, deposited, or washed from the site, including deposition by vehicular movements
- Oil, fuel and chemical storage facilities

Following runoff producing rainfall (within 18 hours of rainfall event)

- All drainage, erosion and sediment control measures
- Occurrences of excessive sediment deposition (whether on-site or off-site)
- Occurrences of litter or sediment placed, deposited, or washed from the site, including deposition by vehicular movements

11 REFERABLE DAM

In the Information Request issued by Lockyer Valley Regional Council dated 23 May 2019 (MC2019/0029) item 13, Council states that this SMP must include consideration of whether any dam, existing or proposed is a 'referable dam' as defined in the Water Supply Act. The dams on site have been and are being excavated by means of ongoing quarrying of sandstone and do not have a constructed wall above natural ground level which may be subject to failure. Further, the storage capacity of the dams is less than 750ML. As a result, the dams (basins) on site have a 'no failure impact rating' in accordance with section 1.9 of the 'Guideline for failure impact assessment of water dams (DNRME 2018)'.

12 SUMMARY & RECOMMENDATIONS

This Stormwater Management Plan has been undertaken to provide an assessment of the runoff characteristics and constraints on the site in relation to the management of stormwater.

Recently completed works have reduced the risk of sediment laden runoff exiting the site, and the future works will reduce this risk even further. In addition, proposed drainage and basin works will be capable of capturing runoff associated with the 5 year 24 hour critical duration storm event, with spillways designed to convey the 2 % AEP event (equivalent to the 50 year ARI) in a non-erosive manner. Therefore, the site successfully demonstrates compliance with the *Stormwater Guideline: Environmentally Relevant Activities* (EHP, 2014).

Stormwater quality is managed by the existing and proposed sediment basins which will be enlarged through ongoing quarrying and extraction of sandstone. It is therefore considered the drainage structures and water quality treatment measures proposed herein are appropriate for the site. Ongoing inspections should be undertaken post rainfall and maintenance undertaken as necessary where erosion is visible. The sediment storage zone should be clearly identified in all basins, and the accumulated sediment removed as necessary to ensure the required settling volume is provided.

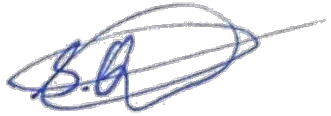
Jar testing of material taken from site indicates the particles settle out without the use of flocculants to less than 50 NTU within 48 hours. It is therefore expected the basins can continue to operate without chemical dosing and still achieve the required water quality objectives. However, it is still required that runoff is tested before pumping from site to ensure the suspended solids and pH levels are acceptable. A correlation between TSS mg/L and NTU should be obtained to facility on site testing of runoff prior to discharge (thereby reducing the frequency of laboratory testing).

As there is no increase in effective impervious surfaces across the site, there is no increase in peak flow rate at the site discharge locations. It is expected peak discharges downstream of the site will actually decrease due to the increased capture volumes of runoff on site.

It is proposed the Legal Points of Discharge (LPDs) from the site remain the outlets of Basins 1 and 2 and additionally the outlet of Basin 6 from the clean water storage basin (when full).

13 CERTIFICATION

This report and associated modelling have been prepared by Steven Chamberlain of Topo (RPEQ 15,545).

Signature: 

Date: 30-03-2020

APPENDIX A

CATCHMENT PLANS & CONCEPTUAL DRAINAGE DESIGN

TOPO.

STORMWATER MANAGEMENT PLAN
HELIDON QUARRY

DRAWING LIST:
D00 - COVER SHEET
D01 - SITE PLAN
D02 - EXISTING CATCHMENT PLAN
D03 - EXISTING DRAINAGE PLAN
D04 - PROPOSED DRAINAGE PLAN
D05 - BASIN AND DRAIN SECTIONS

TOPO.

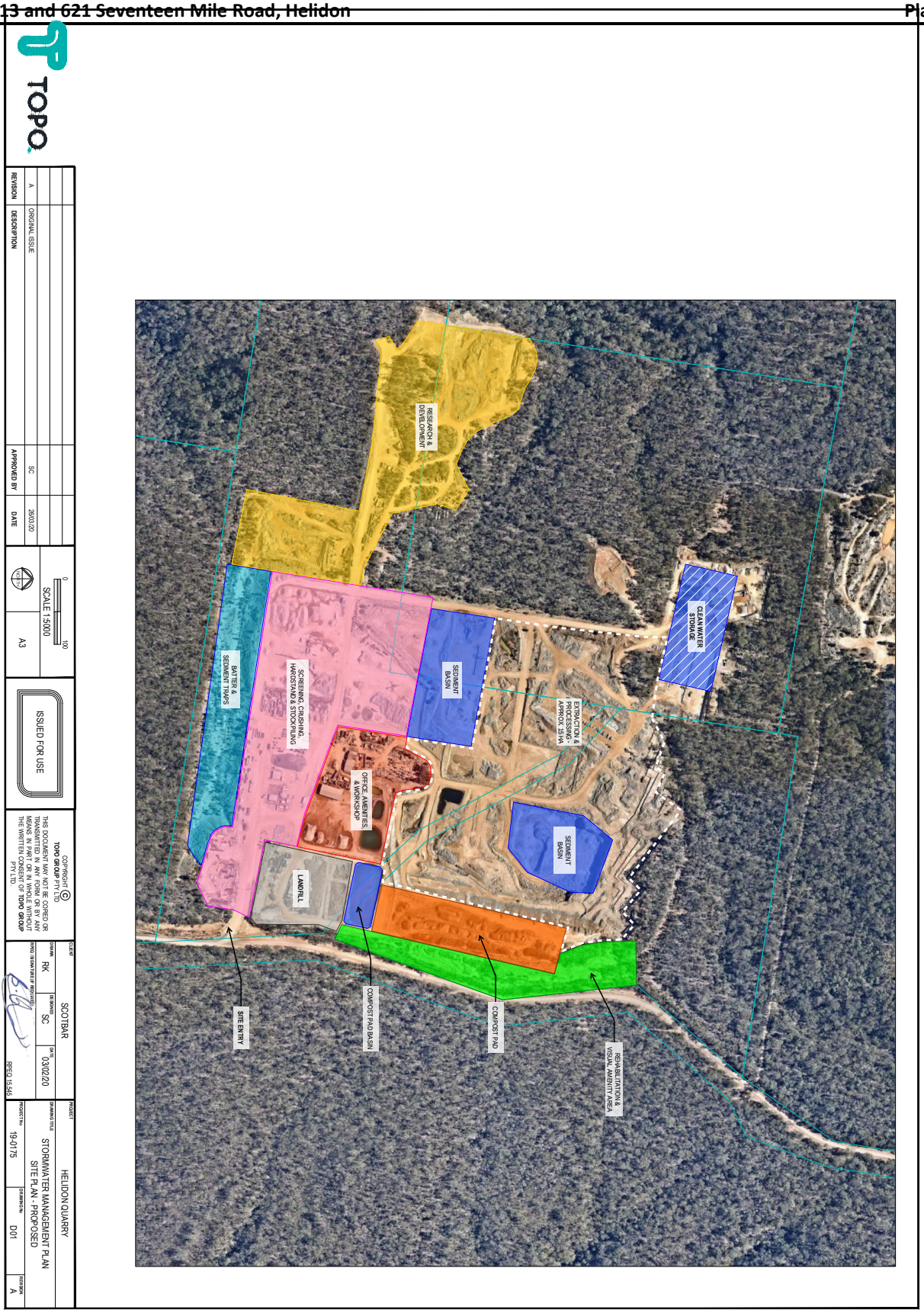
REVISION	DESCRIPTION	APPROVED BY	DATE
B	SITE PLAN ADDED	SC	26/03/20
A	ORIGINAL ISSUE	SC	03/02/20

A3

ISSUED FOR USE

CLIENT: SCOTBAR
DRAWN: RK
DESIGNED: SC
DATE: 03/02/20
RPEQ SIGNATURE (IF REQUIRED): RPEQ 15,545

PROJECT: HELIDON QUARRY
DRAWING TITLE: STORMWATER MANAGEMENT PLAN COVER SHEET
PROJECT No: 19-0175
DRAWING No: D00
REVISION: B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A
DESCRIPTION
ORIGINAL ISSUE
APPROVED BY
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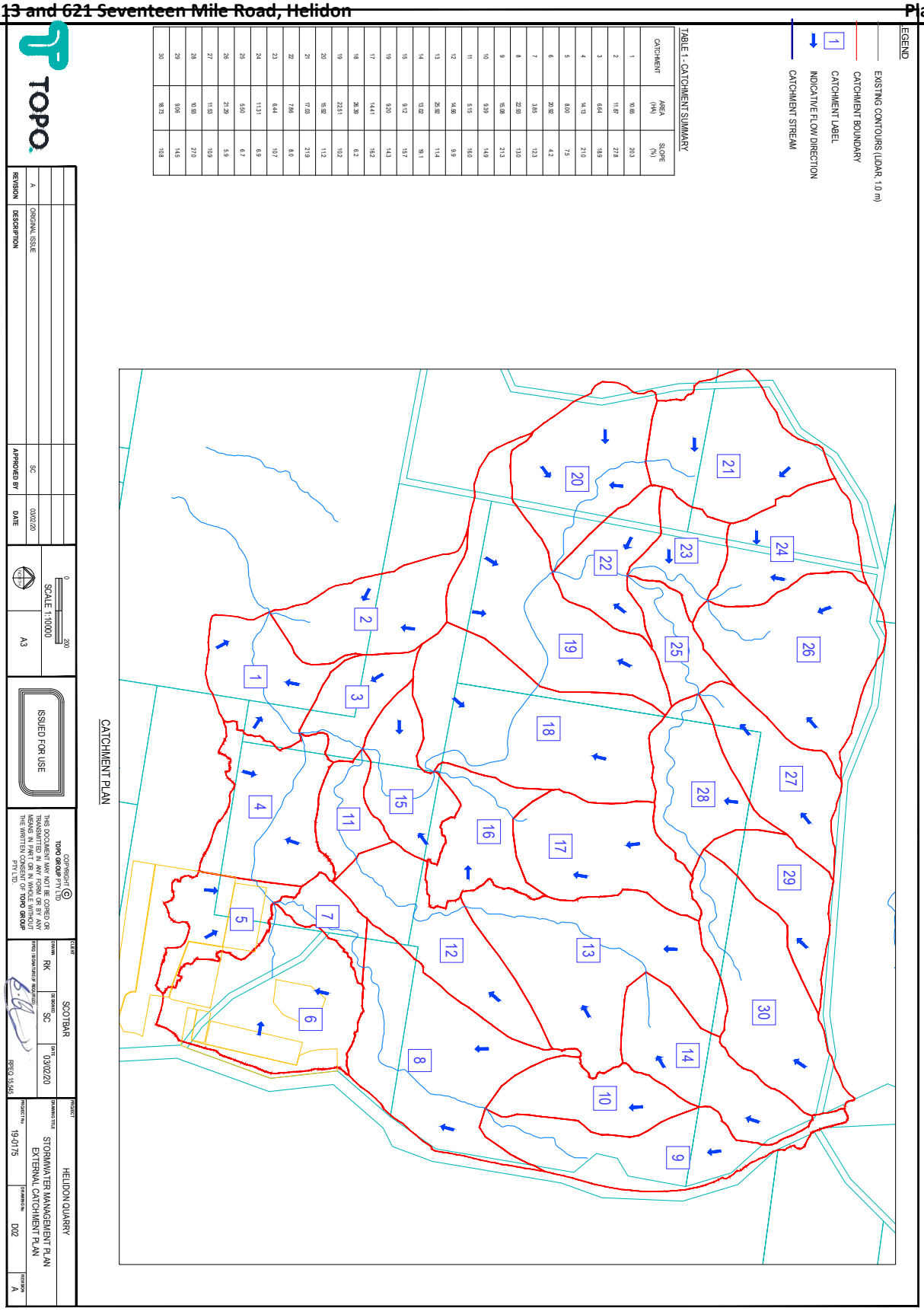
SC
DATE
03/02/20
JOB/EQ 15.545
PROJECT
HELIDON QUARRY
DRAWING TITLE
STORMWATER MANAGEMENT PLAN
SITE PLAN - PROPOSED
PROJECT No
19-0175
DRAWING No
D01
ISSUE NO
A
RESEARCH & DEVELOPMENT
CLEAN WATER STORAGE
SEDIMENT BASIN
EXTRACTION & PROCESSING APPROX 25Ha
SEDIMENT BASIN
BATTER & SEDIMENT TRAPS
SCREENING, CRUSHING, HARDSTAND & STOCKPILING
OFFICE, AMENITIES & WORKSHOP
LANDFILL
SITE ENTRY
COMPOST PAD BASIN
COMPOST PAD
REHABILITATION & VISUAL AMENITY AREA


LEGEND
EXISTING CONTOURS (LIDAR, 1.0 m)
CATCHMENT BOUNDARY
1
CATCHMENT LABEL
INDICATIVE FLOW DIRECTION
CATCHMENT STREAM
TABLE 1 - CATCHMENT SUMMARY
CATCHMENT
AREA (HA)
SLOPE (%)
CATCHMENT PLAN
TOPO
REVISION
DESCRIPTION
A
ORIGINAL ISSUE
APPROVED BY
SC
DATE
03/02/20
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DATE
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TOPO SIGNATURE IF REQUIRED
REQ 15.545
PROJECT
HELIDON QUARRY
DRAWING TITLE
STORMWATER MANAGEMENT PLAN
EXTERNAL CATCHMENT PLAN
PROJECT No
19-0175
DRAWING No
DX2
REVISION
A


LEGEND
EXISTING CONTOURS (LIDAR, 1.0m)
INTERNAL DRAINAGE AREA
LOT BOUNDARY
STREAM
BASIN NUMBER
INDICATIVE FLOW DIRECTION
TWO WAY FLOW BETWEEN BASINS
EXISTING SEDIMENT BASIN
EXCAVATED SEDIMENT TRAP
EXISTING SITE DISCHARGE 2
EXISTING SITE DISCHARGE 1
EXCAVATED SEDIMENT TRAPS IN USE IN AREA BELOW BATTER.
CLEAN WATER CURRENTLY DIRECTED THROUGH SITE TO BASIN 1 LOCATION.
BASIN 4 CURRENTLY PUMPED BACK INTO BASIN 5 AFTER SEDIMENTATION HAS OCCURED.
COMPOST PAD BASIN
1
2
3
4
5
DRAINAGE PLAN - EXISTING
TOPO.
REVISION
DESCRIPTION
APPROVED BY
DATE
A
ORIGINAL ISSUE
SC
03/02/20
SCALE 1:5000
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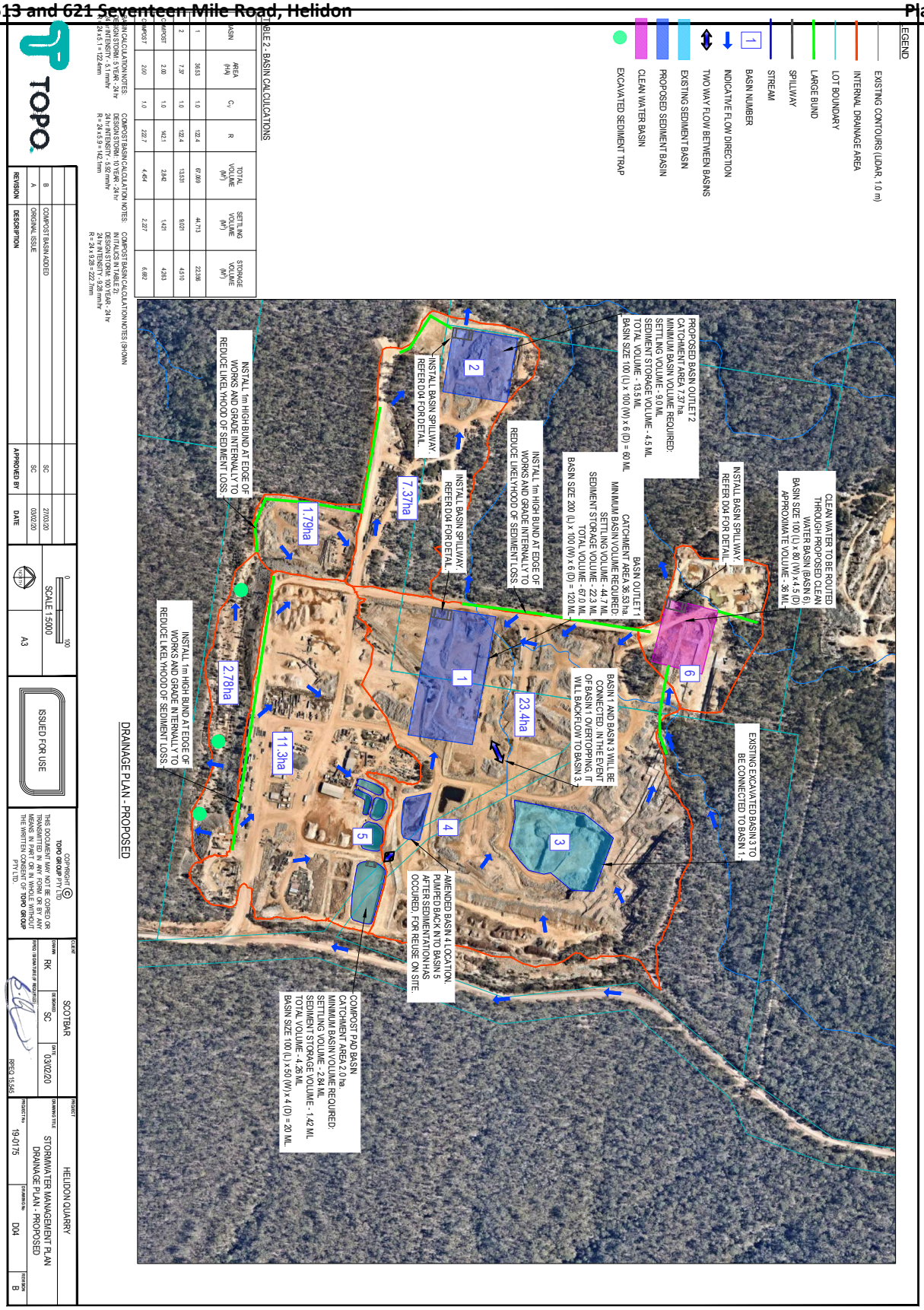
DESIGNED
SC
DATE
03/02/20
RPEQ 15,545
PROJECT
HELIDON QUARRY
DRAWING TITLE
STORMWATER MANAGEMENT PLAN
DRAINAGE PLAN - EXISTING
PROJECT No
19-0175
DRAWING No
D03
REVISION
A



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A	ORIGINAL ISSUE	SC	03/02/20

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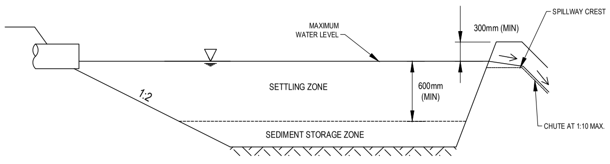
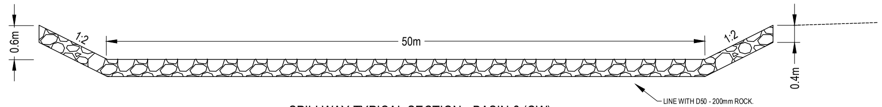
A3
ISSUED FOR USE

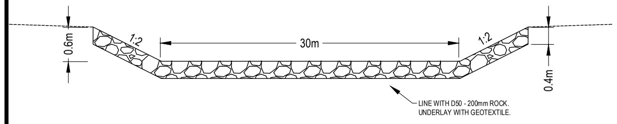
CLIENT: SCOTBAR
DRAWN: RK
DESIGNED: SC
DATE: 03/02/20
TOPO SIGNATURE IF REQUIRED
PROJECT: HELIDON QUARRY
DRAWING TITLE: STORMWATER MANAGEMENT PLAN DRAINAGE PLAN - PROPOSED
PROJECT No: 19-0175
DRAWING No: D04
REVISION: B
PREQ 15545



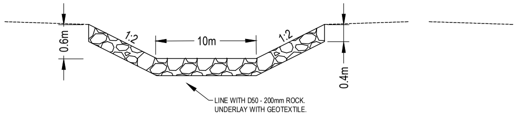
TYPE D (OVERSIZED) SEDIMENT BASIN TYPICAL SECTION



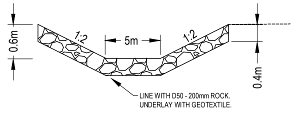
SPILLWAY TYPICAL SECTION - BASIN 6 (CW)



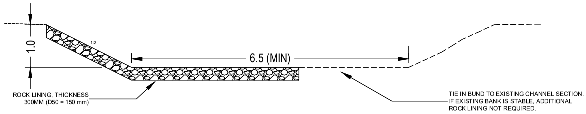
SPILLWAY TYPICAL SECTION - BASIN 1



SPILLWAY TYPICAL SECTION - BASIN 2



SPILLWAY TYPICAL SECTION - COMPOST BASIN



CLEAN WATER DIVERSION TYPICAL SECTION

SPILLWAY CALCULATIONS

				WEIR						CHUTE						DISSIPATER			
BASIN ID	CATCH AREA (HA)	ARI	FLOW - Q (m³/s)	BASE WIDTH	SIDE SLOPE 1 (1 in x)	U/S WATER LEVEL (m)	FREEBOARD (m)	MIN. HEIGHT SPILLWAY TO TOB (m)	TOP WIDTH (m)	LONG. SLOPE (m/m)	ROCK SIZE - D50 (mm)	MANNING ROUGH COEFF	DESIGN VEL (m/s)	DEPTH OF FLOW (m)	DEPTH WITH F/BOARD (m)	MEAN ROCK SIZE - D50 (mm)	WIDTH 1 (m)	WIDTH 2 (m)	LENGTH (m)
BASIN 1	36.53	50	15.20	30	2	0.44	0.3	0.74	32.96	0.1	150	0.075	1.78	0.28	0.58	200	32.9	33.4	2.7
BASIN 2	7.37	50	3.43	10	2	0.33	0.3	0.63	12.53	0.1	150	0.071	1.54	0.21	0.51	200	12.7	13.1	2.7
BASIN 6 (CW)	89.6	50	27.00	50	2	0.46	0.3	0.76	53.05	0.25	250	0.100	2.04	0.26	0.56	200	52.8	53.7	3.6
COMPOST	2	50	0.80	5	2	0.20	0.3	0.50	7.00	0.1	150	0.065	1.19	0.13	0.43	100	7.3	7.6	2.1

CLEAN WATER DIVERSION DRAIN CALCULATIONS

DRAIN ID	CATCH AREA (HA)	ARI	FLOW - Q (m³/s)	LONG. SLOPE (m/m)	BASE WIDTH	SIDE SLOPE 1 (1 in x)	SIDE SLOPE 2 (1 in x)	ROCK SIZE - D50 (mm)	MANNING ROUGH COEFF	DESIGN VEL (m/s)	DEPTH OF FLOW (m)	FREEBOARD (m)	DEPTH WITH F/BOARD (m)	TOTAL DRAIN WIDTH (m)
CW DIVERSION - Q100	89.6	100	15.30	0.015	6.5	2	2	150	0.043	2.19	0.85	0.15	1.00	10.51
CW DIVERSION - Q50	89.6	50	13.43	0.015	6.5	2	2	150	0.043	2.11	0.79	0.15	0.94	10.25

TOPO.

REVISION	DESCRIPTION	APPROVED BY	DATE
A	SECTIONS REVISED	SC	30/03/20
A	ORIGINAL ISSUE	SC	03/02/20

SCALE 1:2000 (0 – 40)
NORTH
A3

ISSUED FOR USE

CLIENT: SCOTBAR
DRAWN: RK
DESIGNED: SC
DATE: 03/02/20
RPEQ / SIGNATURE (IF REQUIRED): RPEQ 15,545

PROJECT: HELIDON QUARRY
DRAWING TITLE: STORMWATER MANAGEMENT PLAN BASIN AND DRAIN SECTIONS
PROJECT No: 19-0175
DRAWING No: D05
REVISION: B

APPENDIX B

RATIONAL METHOD CALCULATIONS

TIME OF CONCENTRATION

Table B1 – Overland Flow/Standard Inlet Time

Catchment	8	9	10	13	14
Estimated Length of Sheet Flow (Table 4.06.3)	50	100	50	100	50
Hortons Roughness Value	0.06	0.035	0.06	0.06	0.06
Slope (%)	15	7	11	7	10
Tc (minutes)	13.7	11.8	14.6	20.2	14.9

Table B2 – Channel Flow Time

Catchment	8	9	10	13	14
Length of Channel Flow	700	920	589	846	750
Velocity (m/s)	1.5	3	3	1.5	3
Tc (minutes)	7.8	5.1	3.3	9.4	4.2

Table B3 – Total Time of Concentration

Catchment	8	9	10	13	14
TOTAL Tc (minutes)	21.5	16.9	17.9	29.6	19.1

Table B4 – Rational Method

Catchment	Area	I100 (mm/hr)	C100	Q100 (m^3/s)	I50 (mm/hr)	C50	Q50 (m^3/s)	I20 (mm/hr)	C20	Q20 (m^3/s)	I10 (mm/hr)	C10	Q10 (m^3/s)	I5 (mm/hr)	C5	Q5 (m^3/s)	I2 (mm/hr)	C2	Q2 (m^3/s)	I1 (mm/hr)	C1	Q1 (m^3/s)
8	22.93	151.0	0.70	6.7	136.0	0.67	5.8	116.0	0.61	4.5	101.0	0.58	3.7	84.7	0.55	3.0	61.1	0.49	1.9	53.4	0.46	1.6
9	15.08	171.0	0.70	5.0	154.0	0.67	4.3	132.0	0.61	3.4	115.0	0.58	2.8	96.8	0.55	2.2	69.9	0.49	1.4	61.2	0.46	1.2
10	9.39	167.0	0.70	3.0	150.0	0.67	2.6	128.0	0.61	2.0	111.0	0.58	1.7	94.1	0.55	1.4	67.9	0.49	0.9	59.4	0.46	0.7
13	25.92	127.0	0.70	6.4	114.0	0.67	5.5	97.4	0.61	4.3	84.4	0.58	3.5	72.4	0.55	2.9	56.7	0.49	2.0	44.6	0.46	1.5
14	13.03	162.0	0.70	4.1	146.0	0.67	3.5	125.0	0.61	2.8	108.0	0.58	2.3	91.5	0.55	1.8	66.0	0.49	1.2	57.8	0.46	1.0

Plan of Operations

For Mining Lease 50218

(2013-2018)

Located at Seventeen Mile Road, Helidon, Queensland

On lands described as Lot 154 on CA311380

Written on behalf of

Scotbar Pty Ltd

By

The LZ Environmental Company Pty Limited

The LZ Environmental Company Pty Limited
T/A Zambelli Environmental
luke@zbe.com.au
Providing environmental stewardship for industry today

Document Control

Document name	Plan of Operations For Mining Lease 50218 - Located at Seventeen Mile Road, Helidon, Queensland	**Version**	2

Person Responsible

	Name	Position
Author	Kate Baker	Environmental Scientist
Contributing Author(s)	Rowena Barthel	Environmental Scientist
Reviewing Officers(s)	Luke Zambelli	Director / Environmental Engineer
Authorised by	Luke Zambelli	Director / Environmental Engineer

Revision History

Version	Issue Date (dd/mm/yy)	Amendment Details	Author	Authorised By
1	28.02.13	First issue to client for review.	Kate Baker	Luke Zambelli
2		Second issue	Rowena Barthel	Luke Zambelli

Table of Contents

Figures

Tables

Appendices

Glossary of Terms

BPEM	Best Practise Environmental Management
CEC	Code of Environmental Compliance [*within this document refers to the CEC for Mining Lease Projects*]
DA	Development Application
DEHP	Department of Environment and Heritage Protection
EA	Environmental Authority
EMS	Environmental Management System
ERA	Environmentally Relevant Activity
LVRC	Lockyer Valley Regional Council
ML	Mining lease
PoO	Plan of Operations

1 Introduction

Scotbar Pty Ltd (Scotbar) currently holds mining Environmental Authority (EA) MIC200366805 for a code complaint level 2 mining project on mining lease (ML) 500218 at Seventeen Mile Road, Helidon, Queensland. Scotbar conducts the mining of sandstone in block or slab form at the Facility. Mining activities are undertaken in accordance with condition contained within EA MIC200366805, specifically to comply with the standard conditions of the *Code of Environmental Compliance* (CEC) *for Mining Lease Projects*.

Furthermore, Scotbar is approved to conduct Environmentally Relevant Activity (ERA) 16 extraction and screening under Development Application (DA) 3323 to remove material that is not suitable for sale as a mineable resource.

The purpose of this Plan of Operations (PoO) is to demonstrate how Scotbar will manage its operations within ML50218 in compliance with the standard conditions of the *CEC for Mining Lease Projects*. Further to compliance with these items, this PoO has been created to assist onsite personnel perform mining activities, in compliance with all applicable legislation. It is to be noted that mining and extraction activities will be performed concurrently within ML 50218 and that where information pertaining to environmental controls and methods of management associated with impacts related to extraction are silent, then actions stated within this PoO will be adopted to control such impacts.

It is to be noted that sandstone of an export quality which is suitable for mining in block or slab form is not available close to the ground surface, the mining of the sandstone cannot commence until extractable material has been removed from the overlying layer. Therefore, mining has not and will not commence until this has been completed. Consequently, Scotbar will provide the financial assurance, calculated at $17,200,00 to the Department of Natural Resources and Mines (DNRM) at least 28 days prior to the commencement of any mining operations (refer to *Section 6.3 Financial Assurance*).

It should be noted that the mining and extraction facility on ML50218 and ML50185, is located on lands described as Lot 154 on Plan CA311380 and Lot 95 and CSH352, and is referred to as the Helidon Facility or the Facility (refer to **Appendix 3 - Figure 2: Facility layout**). Although this PoO specifically relates to ML50218, mention will be made to larger areas of the Helidon Facility in order to adequately describe the environmental management procedures and control measures in place at the Facility due to the concurrent operations.

To optimise efficiency and ensure Best Practise Environmental Management (BPEM), this PoO further builds on the commitments and controls documented in the PoO for ML50185 and ***Environmental Management System*** (***EMS***) to ensure appropriate and holistic management of the

Helidon Facility and its operating procedures. As this PoO is in addition to the ***EMS***, reference will be made to the original document which was comprised of the following parts:

- **Part A Rehabilitation Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia;**
- **Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia;**
- **Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia;**
- **Part D Site Based Management Plan (SBMP) for ERA 16 2(b) & 16 3(a) Extraction and Screening Conducted By Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld Australia;**
- **Part E Weed Management Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia; and**
- **Part F Fire Management Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Queensland, Qld, Australia.**

2 Project Description

Project Lease Holder: Scotbar Pty Ltd.

Mining Tenement and Real Property Details: Refer to *Section 2.1* below.

2.1 Description of the Tenements To Which Land Applies

Scotbar is the registered holder of this tenement, as shown in *Table 1*.

EPM Number	Grant Date	Tenure Holder	Size in Area (km^2)	Status	Permit Expiry Date
ML50218	18.01.2010	Scotbar Pty Ltd	0.193	Granted	17/1/2015

Table 1: Tenement Details

2.2 Contact Details

Scotbar Pty Ltd
c/o – Zambelli Environmental
56 Leah Avenue
Salisbury, Brisbane Qld, 4107

The contact person for this Plan of Operations is:

Luke Zambelli
Director
Zambelli Environmental
Ph: 0431 272 824
Fax: 07 3272 7420
Email: luke@zbe.com.au

2.3 Notifiable Activities

It can be noted that no 'Notifiable Activities' as defined in Schedule 3 of the *Environmental Protection Act 1994* will be carried out at the location of the Helidon Facility.

2.4 Stakeholders

The stakeholders include:

- Scotbar Pty Ltd;
- The landholder of the background tenures associated with ML50218 is highlighted in *Table 2* below;
- Department of Natural Resources and Mines (DNRM); and
- Department of Environment and Heritage Protection (DEHP).

Background Tenure	Tenure Type	Landholder Details
Lot 154 on CA311380	Freehold	Scotbar Pty Ltd

Table 2: Landowners of ML50218

2.5 Location

The Helidon Facility is located approximately 6.5 km north east of Helidon, at Seventeen Mile Road, Helidon, Queensland, and is within the Lockyer Valley Regional Council (LVRC) constituency.

2.6 Land Use

ML50218 is of a triangular shape adjoined at two boundaries by other mining leases (ML50185 and 50086) and on the remaining side by Seventeen Mile Road, as shown in **Appendix 3 - Figure 1: ML 50218 and adjoining mining leases**. Seventeen Mile Road abuts the eastern boundary of the site, and the main site access road for ML50218 branches off this road. Currently, the land use of ML50218 is mining and ERA 16 extraction and screening, and further information on the mining activity being undertaken on site can be found in *Section 3 Nature and Extent of Onsite Activities* below.

For further information on the ERA 16 extraction and screening activities, readers are directed to **Part D - Site Based Management Plan (SBMP) for ERA 16 2(b) & 16 3(a) Extraction and Screening Conducted By Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld Australia, Section 4 Description of the Extraction Activity**.

2.7 Local Soils

The surrounding soil quality at the site is of poor health, this is portrayed in *Figure 1* below and a chemical analysis of the topsoil at Helidon further demonstrates the poor quality of the soil (refer to *Table 3: Topsoil analysis at Helidon*). The following table provides indicative values of parameters analysed within the topsoil located onsite.

Figure 1: Portraying Quality of Soil

Whilst Organic Carbon is not listed in *Table 3*, observations made of the existing top soil at Helidon indicates, that organic carbon is quite low.

Parameter	**Helidon Topsoil**
Total Phosphorus (mg P/Kg)	189
Total Sodium (mg/Kg)	210
Total Potassium (mg/Kg)	568
Total Calcium (mg/Kg)	225
Total Magnesium (mg/Kg)	303
Total Boron (mg/Kg)	122
Total Sulphur (mg S/Kg)	357
Wettability (mm/min)	25.0
Nitrogen Drawdown (no units)	1.16
Toxicity (mm)	110.9
Permeability (cm/hr)	2.65
Metals	
Silver (mg/Kg)	<0.5
Arsenic (mg/Kg)	12.7
Lead (mg/Kg)	14.4
Cadmium (mg/Kg)	<0.5
Chromium (mg/Kg)	20.9

Copper (mg/Kg)	<0.5
Manganese (mg/Kg)	189
Nickel (mg/Kg)	3.7
Selenium (mg/Kg)	0.6
Zinc (mg/Kg)	23
Mercury (mg/Kg)	<0.1
Iron (mg/Kg)	89,993
Aluminium (mg/Kg)	18,889

Table 3: Topsoil analysis at Helidon

2.8 Climate

The local area has a maximum average temperature of 31.6°C in January, a minimum average temperature of 20.7°C and an average annual rainfall of 797.6 mm (Australian Bureau of Meteorology, 2012). These statistics are from the Gatton QDPI Research Station which is approximately 20 km away from Helidon.

2.9 Geology

The geology of the Helidon Facility and the surrounding area is a mix of quartzose sandstone, siltstone, shale conglomerate and coal from the Triassic to the Jurassic period (Department of Natural Resources and Mines, 2013). The above geology is illustrated as dark green in *Figure 2: State Detailed Surface Geology ML50218* below and ML50218 is highlighted in yellow with the surrounding MLs in dark brown. The figure was taken from the Interactive Resource and Tenure Maps (IRTM) geographical information system (GIS) provided by the Department of Natural Resources and Mines.

Figure 2: State Detailed Surface Geology ML50218

2.10 Sandstone Resources

There is an abundance of sandstone within the tenement of ML50218, albeit of varying quality available on the site. As a result the sandstone will be harvested by mining in both slab and block form for that sandstone of export quality, and through ERA 16 extraction for the sandstone of lower quality to create a range of construction and landscaping materials.

2.11 Topography of Local Environment and Vegetation

Appendix 3 - Figure 5: Environmentally Sensitive Area Map of ML50218 portrays the land classification and category of the tenure and surrounding areas. The yellow areas, to the east and the south west of ML50218, are classed as 'Resource Reserves' a Category C Environmentally Sensitive Area (ESA). The red area, to the south of ML50218, is classed as 'State Forest' a Category C ESA and is known as the Lockyer State Forest.

Appendix 3 - Figure 6 illustrates that the Regional Ecosystems (REs) present within ML50218 are 12.9-10.5 / 12.5.1 (80%/20% ratio) both of which is listed as 'Not of Concern' (refer to *Table 4: Regional Ecosystems on ML50218*) (Department of Environment and Heritage Protection, 2012).

RE ID	Description	VMA class	Biodiversity status
12.9-10.5	Open forest complex often with Corymbia trachyphloia, C. citriodora, Eucalyptus crebra, E. fibrosa subsp. fibrosa on quartzose sandstone	Least concern	No concern at present
12.5.1	Open forest complex with Corymbia citriodora on subcoastal remnant Tertiary surfaces. Usually deep red soils.	Least concern	No concern at present

Table 4: Regional Ecosystems on ML50218

2.12 Hydrology and Surface Water Hydrology

The Sheep Station Creek to the west of the site is where stormwater runoff would have flowed before ML50218 and the surrounding MLs were disturbed, and the stormwater released to the Lockyer State Forest would traverse the natural gully lines in the forest and enter Sheep Station Creek.

However, it should be noted that stormwater which falls within ML50218 will be managed so as to minimise the detrimental impacts of the mining and extraction facilities to be carried out onsite, with the majority of stormwater being contained onsite, refer to *Section 5.2 Water* below for more information on stormwater management.

3 Nature and Extent of Onsite Activities

This section provides a general overview of the mining activities being undertaken at the Helidon Facility and introduces the concepts and management practises that must be adopted. Importantly, it should be noted that the control measures described below will be detailed further in **Appendix 1, Section 2 – Workplace Procedures** and **Section 3 – Emergency Procedures**.

The extraction and screening activities (ERA 16) may briefly be mentioned in this document, however, for an in depth understanding of these activities refer to ***Part D Site Based Management Plan (SBMP) for ERA 16 2(b) & 16 3(a)***.

With regard to the operations to be conducted at ML50218, Scotbar intends to remove sandstone in block or slab form for on sale. As sandstone of a quality to mine in block and slab form is not present close to the ground surface, extraction will occur to remove the overlying layer of unsuitable material prior to the commencement of mining.

It should be noted that Scotbar will provide the financial assurance to the DNRM at least 28 days prior to the commencement of any mining activities (refer to *Section 6.3 Financial Assurance*).

Extraction will also occur concurrent to mining activities from time to time to remove sandstone of insufficient quality for mining and excess rock material leftover following the completion of mining activities. ERA 16 activities will result in the removal of up to between 5,000 and 100,000 tonnes of decomposed sandstone (varying particle sizes) and rock per year.

Sandstone mined in slab and block form will be harvested with the use of a long arm excavator equipped with a saw. Cutting and excavation of the sandstone will be the only method of removal from the operating face whilst mining occurs. During and after mining operations, sandstone will also be removed by excavation. Once mined or extracted, material is removed from the operating face, and in most instances will require further processing before movement offsite. In the event that excessive dust/particulates are liberated during mining or extraction activities that may be released offsite, consideration must be given to the use of water sprays, earthen wind breaks or shields to prevent and/or minimise dust and particulate releases.

When wind speeds are seen to be excessive and operations are inhibited or resulting in substantial dust/particulate liberation, consideration will be given to the temporary cessation of the activity.

Block or slab mined sandstone may require reshaping or trimming before being considered appropriate for on sale. Reshaping will be performed at either the base of the mining void or inside the shed on the on the hardstand area.

It is to be noted that extracted material, including overburden will require crushing, and screening via a trommel, so as to create appropriate rundown material before it is permissible to sell, this will occur on the hardstand. Once extracted material has been processed and appropriately sized it will then either be loaded onto a truck at the hardstand pad or stockpiled for later sale on the hardstand pad.

Any excess material that is stockpiled will be managed in a manner that minimises and/prevents the liberation of windborne particulates and the mass movement of sediment. To accomplish this, Scotbar must give consideration to wetting down stockpiles, covering stockpiles, or erecting windbreaks/screens when weather conditions are unfavourable, to prevent any such release of airborne particulates (refer to *Section 5.1* for more information on air management).

Furthermore, in the event of heavy rainfall consideration must be given to the installation of sediment fencing around stockpiles of extracted material. Alternatively, straw bales may be placed surrounding the stockpiles whereby the straw will act as a filter to remove excess sediment from the stormwater runoff from the stockpiles. For further information on sediment control refer to *Section 5.2 Water Management* below.

If there is a possibility that material exhibits a dust potential whilst in transit, loads to be transported will either be wet down prior to this transport or covered with a tarpaulin or similar material. Similarly, any spillages to the side rails, tail gates and draw bars of vehicles will be removed to eliminate the liberation of any dust produced during transport.

Blasting will not occur during mining operations as it is prejudicial to the integrity of the rock desired in block or slab form. However, after mining operations have ceased blasting may need to occur from time to time to spilt rock for extraction where it cannot ordinarily be removed by heavy plant and machinery. The DEHP and LVRC will be advised prior to the commencement of any blasting.

Dust suppression will occur on a regular basis on the hardstand pad (including the soil and extracted material stockpiles) and the haulage road. Water must be applied to these areas utilising the onsite water cart or sprinkler(s). Scotbar will take into account seasonal variations in the evaporation rate and will explore the use of proprietary products to suppress dust. Water from the sedimentation pond(s), Freshwater Dam and the Main Dam can be utilised for dust suppression within ML50218. For further information on the prevention and minimisation of airborne dust and particulate matter at the Helidon Facility refer to *Section 5.1 Air Management* below and the relevant workplace procedure (refer to **Appendix 1, Section 2, Workplace Procedure 1 - Dust and Particulate Management**).

The layout of the Helidon Facility has been updated from that in the ***Environmental Management System*** (***EMS***), i.e. ***Part A*** to ***Part F***. These changes are portrayed in **Appendix 3 - Figure 2: Facility layout**, the changes have been to accommodate an extended mining void denoted as the 'Extension of mining void'.

It should also be noted that the perimeter bund (type one - refer to *Figure 4* in *Section 6.1 Rehabilitation Activities*) along Seventeen Mile Road no longer extends to the southern border of the ML50218. It now stops after the southern edge of the hardstand pad, this is so that the water from Seventeen Mile Road can be harvested and directed into the Freshwater Dam for use onsite, by the local authority (for road construction / maintenance etc.) and for community fire fighting (refer to **Appendix 3 - Figure 3: Stormwater management diagram**). For further guidance on how stormwater must be managed within ML50218 readers are directed to *Section 5.2 Water Management* and the relevant workplace procedure (refer to **Appendix 1, Section 2, Workplace Procedure 3 – Freshwater Dam and Sedimentation Pond(s) Management** and **Workplace Procedure 4 - Stormwater Management**).

The proposed hardstand pad and Freshwater Dam have been altered to suit the dynamics of the changing site and to accommodate the extended mining void. The site access road is on top of the hardstand pad so that the road is level with Seventeen Mile Road, which is illustrated as a purple line in **Appendix 3 - Figure 2: Facility layout**. It should be noted that the southern batter slope of the

hardstand pad is approximately 65 metres from the southern boundary of ML50218, adjacent to the Lockyer State Forest. The batter slope will be grassed to prevent erosion of the batter slope.

It should also be noted that the southern rim of the Freshwater Dam is 25 metres away from the border of the Lockyer State Forest. There is a 10 m wide vehicle access road running along the southern edge of the Freshwater Dam, so as to facilitate easy vehicle access to the dam primarily for fire fighting purposes. From the southern edge of this vehicle access road there is a batter slope which slopes downward to the border of ML50218 until it reaches the ground level of the Lockyer State Forest.

The vehicle access road and the batter slope will be grassed to prevent erosion and the mass transport of sediment in the event of rainfall. It should be noted that no higher order vegetation, e.g. shrubs, bushes or trees, should be allowed to grow within 25 metres from the southern border of ML50218, as this has been designated as a fire line (refer to *Section 5.4 Land and Vegetation Management* for more information regarding fire management).

With regard to the mining activity, it is not expected that any sensitive receiver will experience noise impacts associated with these activities. This noise attenuation is largely achieved by the topography of land located between the source and the receiver, the density of flora existing on this land and maintaining operating hours between 6am and 6pm Monday to Saturday, excluding public holidays (refer to *Section 5.3 Noise* for more information on the noise management of the Facility).

Further detail on the general procedures and control measures implemented at the Facility to reduce the risk of any environmental harm or nuisance from occurring is provided in *Section 5 Environmental Management* below.

3.1 Spill Management

Any spills (i.e. oil or fuel) that occur will not be intentionally directed to onsite stormwater flow paths unless there is a necessity to do so, for example, in the case of an emergency. Spills will instead be contained, cleaned up and removed via dry methods of removal, utilising spill kit(s). Waste generated as part of spill clean-up will also be managed correctly, being removed from the site to a facility lawfully allowed to accept such waste(s). For further detail on spill management readers should refer to the relevant emergency procedure (refer to **Appendix 1, Section 3, Emergency Procedure 3 - Spill Management**).

It should be noted that all waste generated by a hydrocarbon spill, including any contaminated soil, will be transferred to the Hardstand Pad on ML50185 for bioremediation with urea, super phosphorus and mulch. If quantities are excessive then offsite management will occur.

4 Environmental Impacts

The following sections provide the reader an insight into the potential impacts that could arise when undertaking activities associated with mining at the Helidon Facility. For detail on the management practices that are designed to assist in the avoidance or minimisation of the potential impacts introduced below, readers are directed to *Section 5 Environmental Management* below.

4.1 Air Environment

If mismanaged, mining and its associated activities have the potential to cause environmental harm, particularly environmental nuisance as result of uncontrolled emissions to air that leave the site and are deposited offsite at a dust sensitive place. The aforementioned activity could become a source of dust and particulate emissions, resulting in loss of aesthetic value, health impacts on employees and other environmental impacts at sensitive receptors. Dust and particulates are considered the main potential pollutants that could have impact on the air environment. However, odour could also be problematic if the Freshwater Dam and sedimentation pond(s) are not kept in an aerobic state. It should be noted that the time of day and prevailing wind conditions can play a role in the severity of these problems and the level of environmental harm or nuisance which prevails.

The types of issues that may arise in relation to the air environment are listed below:

- Dust liberation arising from loading and unloading activities;
- Dust liberation arising from traffic movements at the Helidon Facility;
- Dust liberation resulting from mining and reshaping activities; and
- Dust liberation resulting from a lack of maintenance and favourable weather conditions.

Readers are referred to *Section 5.1 Air* and the relevant workplace procedures for further information on the implementation on management procedures to prevent environmental nuisance through the air medium occurring (refer to **Appendix 1, Section 2, Workplace Procedure 1 - Dust and Particulate Management** and **Workplace Procedure 2 - Odour Management**).

4.2 Water Environment

Scotbar recognises that, if not adequately managed, the types of waste materials generated during mining and extraction activities, namely sediment, have the potential for causing detrimental impacts on the receiving environment. A release of sediment ladened water to a watercourse may result in a change of primary productivity, the loss of sensitive species (such as fish or macroinvertebrates) and consequently a change in the ecosystem structure (Department of Environment and Resource Management, 2012).

As illustrated in *Figure 3* below, sediment rich waters decrease the ability for light to penetrate into the aquatic environment, which results in a decrease in photosynthesis and the loss of submerged plants and/or algae. The deceased plants and/or algae decompose significantly reducing dissolved oxygen levels and creating an anaerobic environment. The decrease in the availability of oxygen for aquatic fauna results in the death of sensitive species, and further exacerbating the depletion of oxygen during decomposition.

Further to the above, increased sediment loads can also smother or clog the gills of fish, and reduce visibility (for catching prey) all of which can result in the loss of sensitive species.

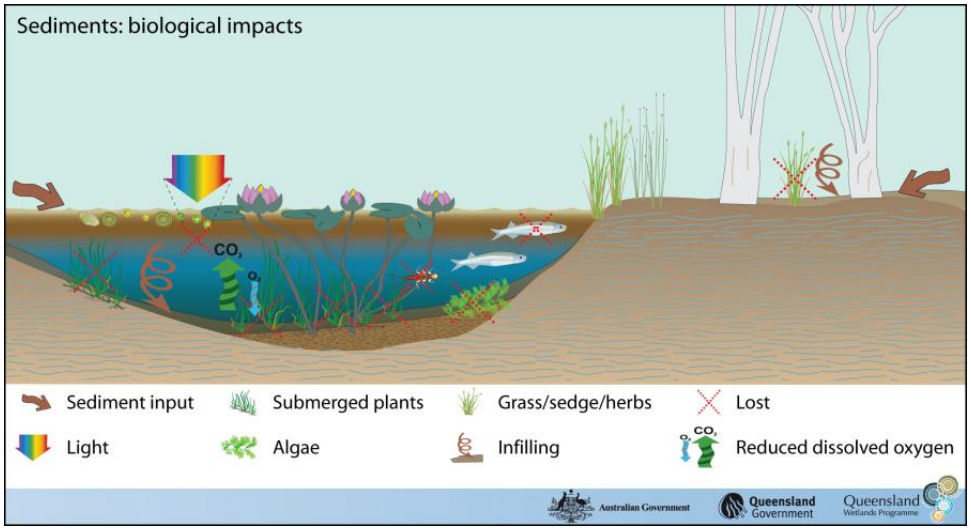


Figure 3: Biological impacts of sediment loading in aquatic environments

If mismanaged the sewage generated at the onsite toilet block has the potential to detrimentally effect the receiving environment, not least of which is the water environment. Sewage waste contains certain oxygen demanding contaminants, which if released to water can cause fish kills due to oxygen

depletion and if continued could threaten the sustainability of fish and invertebrate life in an aquatic system.

It is therefore of paramount importance for Scotbar employees to adhere to the procedures in this PoO, as they provide a framework for BPEM which when implemented minimises the likelihood of any adverse impacts to the receiving environment.

In addition to the above, the mass transport of sediment around site will decrease the holding capacity of the dams and sedimentation pond(s), and could potentially block the stormwater drainage pathways, leading to the rerouting of stormwater flows in an undesirable manner and causing erosion.

The procedures and control measures outlined in *Section 5.2 Water Management* and ***Part C Stormwater Management Plan*** of the ***EMS*** effectively minimise the transfer of sediment to the stormwater dams and how the dam/ponds can be maintained in an aerobic state.

All spills must be managed by dry methods to prevent the unnecessary contamination of stormwater (refer to *Section 3.1 Spill Management* and **Appendix 1, Section 3, Emergency Procedure 3 - Spill Management**).

4.3 Noise Environment

Whilst heavy machinery will be used at the Helidon Facility, it is not expected that the daytime background noise level for the area will be exceeded by any more than 5 dB(A). If noise greater than 5 dB(A) above background level is emitted from the Facility, environmental nuisance could be created and loss of amenity may be experienced at nearby sensitive receivers.

Any excessive and obviously audible tonal noise (e.g. screeching, high or low frequency hums or whines) emitted from machinery must be attended to immediately by Scotbar because this type of noise emission is often a result of mechanical problems with machinery (e.g. failed bearings) and is often the cause of intrusive noise experienced at a sensitive receiver. If works have to be performed outside of normal operating hours, employees must be aware that the background noise environment within the immediate area will be significantly lower than what is experienced during daytime hours of operation. Due care has must be taken when performing works so that noise is not created. Impact noise such as performing maintenance works must be kept to a minimum. Care must also be taken when performing rock cutting activities as screeching and/or high pitch tones can be emitted.

The main issues that may arise impacting the noise environment are listed below.

- Failure to conduct activities in the appropriate manner (i.e. as specified in procedures); and

- Faulty or malfunctioning plant and or equipment (pump, excavator and rock saw).

If allowed to occur the above issues could become a source of environmental nuisance for surrounding sensitive receivers. In such instances the regulatory authority may require noise assessments to be performed or if significant enough will take enforcement action. This may result in Scotbar receiving an infringement notice or prosecution for breaching the development approval. Therefore these issues must be managed through the protocols outlined above and in the relevant workplace procedure (refer to **Appendix 1, Section 2, Workplace Procedure 5 - Noise Management**).

It is to be noted that no environmental nuisance has occurred to date when performing rock cutting. The distance between sensitive receiver locations and the facility is such that the sound pressure level emitted, including tonality is non-existent. It is expected that this will also be the case for rock cutting performed within ML50218.

4.4 Land and Vegetation Environment

It should be noted that vegetation clearing/tree extraction has occurred beyond that which is clearly visible in the aerial photos in the background of the **Appendix 3 - Figure 2: Facility layout**. The vegetation has been cleared to the east of the existing mining void, hardstand pad and the proposed freshwater dam to the boundary of where the perimeter bund has been/will be created along Seventeen Mile Road. This was done in order to make way for the extended mining void, hardstand pad and Freshwater Dam.

Further to this, vegetation has been removed in accordance with ***Part F Fire Management Plan*** to created fire breaks, approximately 25 metres wide, in the location illustrated in **Appendix 3 - Figure 2: Facility layout**.

The removal of vegetation onsite will only affect the vegetation classified as 'of least concern'. Rehabilitation and revegetation of disturbed land will generally accord with the commitments provided within ***Part A Rehabilitation Plan*** (refer to *Section 5.4 Land and Vegetation Management* and *Section 6 Rehabilitation Program and Financial Assurance*).

4.5 Waste Impacts

If mismanaged, waste can create an unsightly appearance, cause off site contamination and pollution to the receiving land, air and water environments.

It is not envisaged that significant quantities of waste will be generated during the course of mining or extraction operations at the Helidon Facility. All general rubbish associated with daily operations will be sorted, segregated, and placed in the relevant general waste or recycling receptacle and regularly taken offsite for recycling or disposal. No general waste will be disposed of on site.

In regards to waste created from the mining of the sandstone, it is not expected that activities on ML50218 will create an excessive amount of waste material as all material, accept for overburden utilised in the construction of the perimeter bund wall and that has been utilised to create the hardstand pad will be on sold through the extraction activity.

Sewage waste from the onsite toilet block, if managed inappropriately has the potential to create an odour nuisance. Apart from human health risks through inappropriate management, releases of raw sewage can contaminate stormwater which can cause land and water contamination both on and offsite. As such Scotbar will ensure that sewage generated will be held in a sealed holding tank whereby it will be regularly pumped out by a licensed contractor. Dockets will be kept as a record of sewage removal. Furthermore, Scotbar will ensure that appropriate intervals are maintained between pump outs and proprietary products will be utilised to ensure odour is minimised from the holding tank and that effluent does not sour.

As mentioned within the EMS and also the PoO created for ML50185, Scotbar will be undertaking composting on ML50185 in order to bolster the nutritionally poor quality soils available onsite so that vegetation may thrive during rehabilitation. Therefore, Scotbar will be accepting certain wastes to the 'Proposed composting pad', for incorporation into composting windrows (refer to ***EMS - Part B Site Environmental Management Plan*** (***SEMP***)). However, no waste accepted for the purpose of composting will be stored, handled, composted or otherwise managed within ML50218. ***Part B SEMP*** outlines the management practises, procedures and control measures for the composting activity to ensure that the environmental impact is minimal to non-existent.

5 Environmental Management

This PoO has been created with intention for it to be read in conjunction the commitments given in the ***EMS*** associated with DA 3323 for ERA 16, and outlines how ML50218 will be managed in accordance with the standard conditions of the *CEC for Mining Lease Projects*. Scotbar is committed to maintaining BPEM throughout the terms of the EA, such that mining activities will be conducted in such a manner so as to minimise potential impacts to the receiving environment. The previous section highlighted the anticipated impacts to the various environmental aspects, and this section addresses

the management practises which must be implemented to minimise and/or prevent environmental harm occurring from the proposed activities.

5.1 Air Management

The mining activities could become a source of dust and particulate emissions resulting in an environmental nuisance prevailing. Further to this, airborne crystalline silica (a basic component of sand) can cause significant health ramifications for onsite personal, such as silicosis, pneumoconiosis or dust disease of the lungs (United States Deparment of Labour, 2006). Adherence to **Appendix 1, Section 2, Workplace Procedure 1 - Dust and Particulate Management** and the below mentioned controls, will ensure dust and particulate generation is minimised to the greatest extent possible and that Employee health is protected.

A water cart and/or sprinklers will be utilised regularly to minimise dust generation on the haulage roads, the hardstand pad (including the soil and extracted material stockpiles) and all topsoil stockpiles. Water from the Main Dam, the Freshwater Dam, and the sedimentation ponds will be utilised for this purpose. The water from the Leachate and Stormwater Dam associated with composting should not be utilised anywhere, but on the Composting Pad, except for in an emergency.

Scotbar will take into account the daily evaporation rate so that adequate amounts of water are used. Care must be taken to ensure also that excessive moisture is not applied so as to cause ponding or pooling. The haulage roads will be maintained so that traffic does not cause excessive dust re-entrainment and liberation. Speed signs will be erected on haulage roads utilised by transport companies for the pick up or drop off of products so as to minimise the liberation of dust and particulate matter. Records of all water cart or sprinkler usage must be kept via **Form 4 – Dust Suppression Form** contained within **Appendix 2 – Forms and Checklists**.

Roads will be kept clean of any excess dust and the use of wind breaks will be considered where deemed necessary to minimise the liberation of dust. Consideration will also be given to the application of proprietary products on the internal haulage road where excessive dust liberation is experienced. If there is a possibility that material exhibits a dust potential whilst in transit, loads to be transported will either be wet down prior to this transport or covered with a tarpaulin or similar material.

With regards to the mining, where it is seen that the removal of material from the operating area is liberating excessive dust or particulate matter that maybe released off site, the use of water sprays, earthen wind shields or breaks will be considered. These attenuation techniques will also be

considered where further processing of the material, i.e. screening, is resulting in dust and particulate release.

It is not envisaged that as reshaping of sandstone that is occurring within the shed will cause environmental harm or nuisance at sensitive receptor offsite. However, the activity needs to be managed in such a way so as to minimise the potential for detrimental health affects for all Employees involved. The reshaping of the sandstone utilises a wet cutting process, the primary reason of which is to cool the blades so that they do not overheat and warp. The wet process also minimises dust liberation within the shed.

All Employees must be equipped with suitable Personal Protective Equipment (PPE), including safety goggles/glasses, and dust masks or respirators (as appropriate) during reshaping activities performed at the shed. These measures will effectively minimise the risks to Employee health.

It should be noted that when wind speeds are seen to be excessive and operations are inhibited or resulting in substantial particulate liberation, consideration will be given to the temporary cessation of mining activity. Further to this, consideration must be given to wetting down the stockpiles of extracted material (on the hardstand pad), covering stockpiles, or erecting windbreaks/screens to prevent dust and particulate liberation. The site manager will be responsible for this to occur.

Daily weather conditions will be monitored at the Facility (using **Form 3 – Daily Weather Conditions** in **Appendix 2**). The recording of such information will help verify and validate if and when a complaint regarding dust or particulate matter is received as well as ensuring adequate remediation has taken place. All complaints should be recorded and investigated on **Form 9 - Complaint Investigation Form** in **Appendix 2**.

5.2 Water Management

Scotbar recognises the importance of holistically managing stormwater at the Helidon Facility, whether it is occurring off site or is partially contaminated onsite by mining, and associated activities. Scotbar commits to:

- ***Implementing an onsite stormwater management plan that contains procedures which effectively manages stormwater generated onsite.***

As alluded to above, ***Part C Stormwater Management Plan (SMP)*** of the ***EMS*** was created which provided overall guidance to the management of stormwater created at the facility. Readers will find that this section has restated certain pieces of information contained within ***Part C SMP***, that is

relevant to ML50218. It should be noted that the management of stormwater generated within ML50218 will involve infrastructure positioned over the larger area of the Helidon Facility, and therefore readers should refer to ***Part C SMP*** for a more detailed understanding of how stormwater is managed within the Helidon Facility as a whole.

It is the intention that Scotbar will operate the Facility as a non-release site up to and including an event equivalent to a 1-in-100 year (Q_{100}) 24 hour rainfall event, equivalent to 10 mm / hour for 24 hours falling. Moreover, incidental rainfall within ML50218 must be managed through adopting processes and procedures located in **Workplace Procedure 3 – Freshwater Dam and Sedimentation Pond(s) Management** and **Workplace Procedure 4 - Stormwater Management** that are designed to ensure that ML50218 is operated as a no-release system.

The one significant change to the information provided in ***Part A Rehabilitation Plan*** and ***Part C SMP***, as mentioned above, the perimeter bund located along Seventeen Mile Road no longer extends to the southern border of ML50218 but rather, extends only to the northern side of the site entrance. This will enable stormwater from Seventeen Mile Road to be harvested and diverted to the Southern Freshwater Dam for storage, so that it can be utilised onsite, or by the local authority for road maintenance and construction and for community fire fighting purposes, whilst ensuring that incidental rainfall which falls outside the perimeter bund on Seventeen Mile Road is directed away from the mining and extraction activities, as outlined in ***Part C SMP***.

The positioning of the perimeter bund and drainage channel located next to Seventeen Mile Road ensures that there is no intensification in stormwater volume or velocity entering the Helidon Facility. It is essential that these conditions be maintained.

The Freshwater Dam will also act as a sedimentation basin to remove excess sediment and particulates re-entrained on Seventeen Mile Road.

There are also smaller changes to ***Part C SMP*** resulting from the changes to the layout of ML50218 (refer to **Appendix 3 - Figure 3: Stormwater management diagram**). Incidental rainfall landing on ML50218 will flow via drainage channels and natural or artificial contours into the temporary sedimentation pond(s) within the mining void located within ML50185. The drainage channels and contouring of the site shall be installed and maintained so as to ensure to the stormwater flows are directed as illustrated in **Appendix 3 - Figure 3**. The drainage channels will be installed throughout ML50218 at a frequency and gradient necessary to eliminate any unnecessary pooling, sheet flow run-off and concentrated flow run-off of stormwater and to ensure that all stormwater generated is directed as required in **Appendix 3 - Figure 3**.

As mentioned in *Section 4.2 Water Environment* above, due to nature of the activities at the Helidon Facility sediment and erosion control is essential to ensure that any impacts to the receiving environment are minimised or avoided. Therefore, the measures outlined below must be adhered to.

In the event of heavy rainfall, consideration must be given to installing sediment fencing around stockpiles of extracted material stored on the hardstand pad, alternatively, straw bales may be placed surrounding the stockpiles; the straw will act as a filter. Both of these methods will remove excess sediment from the stormwater runoff being released from the stockpiles.

Erosion control devices in the form of check dams must also be placed where stormwater flow is seen to be excessive and a catalyst for erosion. The check dams will act as energy dissipaters, minimising the erosive force of the stormwater. Similarly temporary sedimentation ponds will be in place along stormwater flow paths within the footprint of mining void to minimise sediment transport. The stormwater retained within these sedimentation ponds will when required be released in a controlled manner to the Main Dam or will be utilised for dust suppression. The positioning of the sedimentation ponds will change due to operational convenience. Where it is undesirable due to space restrictions or operational expansions that a check dam be installed to slow the flow of stormwater, Scotbar will implement rip rap along the base of the drainage channel as an alternative to velocity control. Consideration to utilising vetiver grass as a natural energy dissipater will occur along drainage channels. Grass swales will be utilised to minimise scouring in some instances.

The sewage waste containment tank must be regularly emptied, maintained and serviced as per the manufacturer's specifications.

It is to be noted that a "healthy" and well managed dam/pond is one where the water is in an oxidised state. If dam/pond water is maintained in an oxygen-rich state, there is little likelihood of any offensive odours being released or travelling offsite with prevailing wind to reach any sensitive receivers. Therefore, in the event that excessive loads of organic matter are released to the Freshwater Dam or sedimentation pond(s) (unlikely), the relevant dam or pond will be treated with a biological inoculum, such as, BioAktiv. This will assist in maintaining the water in an oxidised and odour-free state.

If the addition of BioAktiv (or equivalent) is insufficient to maintain an oxidised state and the water within this dam or pond is reduced, action including aeration or the introduction of hydrogen peroxide may be required (refer to **Appendix 1, Section 2, Workplace Procedure 3 – Freshwater Dam and Sedimentation Pond(s) Management**). Specialist help will be required and sought for the addition of hydrogen peroxide.

Stormwater management within ML50218 must occur in accordance with **Workplace Procedure 3 – Freshwater Dam and Sedimentation Pond(s) Management** and **Workplace Procedure 4 - Stormwater Management** which have been created for stormwater management occurring solely within this ML (refer to **Appendix 1, Section 2 – Workplace Procedures**).

Although not strictly related to ML50218, it is worth mentioning that from time to time controlled releases will occur from the Main Dam. Due to this, Scotbar has committed to tri-annual surface water quality monitoring to demonstrate that its impact on the receiving environment is minimal. Monitoring procedures can be found in ***Part C SMP, Appendix 1, Section 2, Workplace Procedure 1 - Stormwater Containment Dam Management and Workplace Procedure 2 - Stormwater Management***. These procedures contain details on weekly monitoring requirements in the event of a controlled release from the Main Dam. Monitoring will also be conducted in such an event at the point of release and both at up and downstream points to demonstrate any impact (if any) on the receiving environment. Further to this, ***Part C SMP, Appendix 1, Section 2, Emergency Procedure 2 - Release to Waters*** provides instruction on what is required when obtaining samples at up and downstream locations for an uncontrolled release event.

Any spills that occur at the Facility will not be intentionally directed to stormwater containment dam(s) unless there is a necessity to do so, e.g. as in an emergency for example. Spills will instead be contained and dry methods of clean up and removal of the spill will be adopted. For procedures relating to spill management and clean up refer to **Appendix 1, Section 3, Emergency Procedure 3 - Spill Management**.

5.3 Noise Management

Whilst heavy machinery will be used at the Helidon Facility, it is not anticipated that any sensitive receiver will experience noise impacts associated with mining and extraction activities performed within ML50218. This is due to the topography of the land that exists between the source and the sensitive receiver(s), the density of the vegetation onsite and in the surrounding area, and maintaining the operating hours between 6am and 6pm Monday to Saturday (excluding public holidays). Also the loading and the operation of delivery trucks is restricted to between 7am and 6pm Monday to Friday and 7am to 1pm on Saturdays. Therefore, it is not expected that the daytime background noise for the area will be exceeded by any more than 5 db(A).

Any excessive and obviously audible tonal noise (e.g. screeching, high or low frequency hums or whines) emitted from machinery will be attended to immediately by Scotbar because this type of

noise emission is often a result of mechanical problems with machinery (e.g. failed bearings). All plant and equipment must also be maintained in accordance with manufacturer's specifications.

Scotbar will not use excessively noisy equipment, unless it is at a time of an onsite emergency, and it is essential that something has to occur, such as the movement of waste from a stormwater flow path or to extinguish a fire.

All trucks entering the Helidon Facility are required to be appropriately silenced. Drivers of trucks with defective noise mufflers must be warned that they will not be allowed to return to the Facility until any defects are rectified. Excessively noisy equipment must not be used unless it is has to be used in an emergency situation, such as in the movement of waste from a stormwater flow path or to extinguish a fire.

Daily start-up checks will be conducted by onsite personnel to ensure machinery is not emitting excessive noise, this monitoring will be recorded using **Form 2 - Daily Equipment / Machinery Start up** Checklist (refer to **Appendix 2 – Forms and Checklists**). Noise attenuation barriers will be constructed where required if excessive audible noise is heard.

Scotbar is aware that in the event of a noise complaint, the DEHP may ask for noise monitoring to occur. It is important to note wind speed and direction, cloud cover and other factors such as traffic or additional significant noise sources that could affect noise monitoring results. If requested by the DEHP, the Site Manager is responsible for ensuring that noise monitoring is conducted by a suitably qualified person(s).

The above procedures and control measures to prevent noise nuisance and minimise noise impacts on sensitive receptors are summarised in **Workplace Procedure 5 - Noise Management** (refer to **Appendix 1, Section 2 – Workplace Procedures**).

5.4 Land and Vegetation Management

The mining activities must be carried out onsite and be managed in such a way so as to avoid or minimise the impacts on the Category C 'State Forest' and 'Resource Reserve' areas in the vicinity of the Helidon Facility, including the release of bulk sediment. No activities must be carried out in a Category C ESA. *Section 5.2 Water* above, describes the method through which all stormwater will be contained onsite and managed at the Helidon Facility to prevent contamination of the surrounding environment.

As mentioned in *Section 4.4 Land and Vegetation Environment*, in accordance with ***Part F Fire Management Plan*** fire lines spanning approximately 25 m must be created as indicated by the orange dashed lines in **Appendix 3 - Figure 2: Facility layout**. A fire line is a strategically placed low fuel area. It will not necessarily stop fire, but can slow and reduce the intensity of a fire front. It can also allow access for fire fighting or boundaries for planned controlled burns. ***Part F Fire Management Plan*** should also be referred to for the other land and vegetation management commitments in relation to onsite fire prevention and management.

Whilst not associated with mining at the Helidon Facility, extraction stockpile integrity and heights are to be carefully managed as they will be placed within ML50218. Stockpiles should be created in the designated hardstand area with heights of less than 5 metres. Stockpiles must also be located at least 5 m from the top of the batter slope. This is such to prevent stockpiled material falling into the Fresh Water stormwater dam causing excessive sedimentation. Stockpiles must be placed into position whereby it is unlikely that the blocking of stormwater flow paths or bunding will occur or be affected, as such impacts may impede the correct flow of stormwater and increase the risk of a release of sediment to the receiving environment.

It is anticipated that due to the size of the area disturbed for the mining and extraction activities, from time to time some segments of this land may go relatively untouched for prolonged periods (in excess of six months), due to operational requirements or limitations. If this is the case, then these areas of the Helidon Facility will have semi-permanent pollution control devices installed. Various types of erosion and pollution controls will be implemented dependent upon the topography and soil type and the length of time the area of disturbed land is to be left unused. ***Part C SMP, Appendix 1, Section 2, Workplace Procedure 3 – Management of Unused Disturbed Area*** provides further detail on the type of erosion and pollution control measures that must be implemented in the above mentioned areas.

Once mining and extraction activities cease at the Helidon Facility, vegetation rehabilitation will commence. Scotbar has committed to restoring the disturbed areas that will not be kept by the landowner with a stable vegetation community that is similar to that of the surrounding undisturbed areas of endemic species to ensure the aesthetic amenity of the site is enhanced. For further details on rehabilitation, readers are directed to *Section 6 Rehabilitation Program and Financial Assurance* of this document.

Weed management is essential to the healthy development and maintenance of vegetated areas, therefore a weed management plan was developed in ***Part E*** of the ***EMS***, and this information has been summarised in *Section 6.1.1 Weed Management* below.

5.5 Waste Management

The following commitment is given by Scotbar with regard to waste management and waste generation:

- ***To implement procedures and practices to minimise, reuse, recycle and appropriately dispose of the wastes generated onsite.***

An important aspect of the *Waste Recycling and Resources Act 2011*(*WR&R Act*) is the waste and resource management hierarchy as detailed in Section 9 of the legislation. The waste and resource management hierarchy sets the objectives for sustainable waste management which is relevant to the making of certain environmental decisions concerning waste. Scotbar acknowledges that the hierarchy represents a framework for prioritising waste management practices to achieve the best environmental outcomes. In the absence of waste avoidance, wastes that are generated at ML50218 should be reused where possible. With this in mind, Scotbar are screening rock, overburden and non-export grade sandstone generated from the mining process and preparing it for on sale. It is therefore expected that, although additional non-export grade material will be generated over and above current levels, this will not be classed as waste and will be on sold. Practises such as this, and utilising stormwater for dust suppression represent a waste management practice second on the preferred order of adoption in the waste and resource management hierarchy and demonstrates how Scotbar operates in accordance with BPEM principles. All onsite employees must be aware of this fact.

Furthermore, wastes unable to be avoided will be recycled. Where wastes are unable to be avoided, reused or recycled they will be stored, handled and transferred in a proper and efficient manner to a facility that is lawfully allowed to disposal of such wastes.

The onsite toilet block, comprised of toilets and sinks is linked up to a sealed holding tank, which is pumped out on a regular basis. This ensures that all sewage and grey water generated onsite will be appropriately contained and thereby limiting the risk of the sewage and grey water being released to the receiving environment.

All plant and equipment maintenance and servicing must be conducted in an area whereby offsite impacts are avoided. Where required, bunding must be installed to ensure that spills are contained. The storage of any associated fuel, oils or lubricants must be carried out within a bunded area. All refuelling will occur via a mobile refuelling tank.

All spillages are to be managed via dry methods in accordance with **Emergency Procedure 3 - Spill Management** (refer to **Appendix 1, Section 3 – Emergency Procedures**). Once contained as appropriate, all spilt waste (and material contaminated by the spilt waste) must be transported to a facility that can legally accept such wastes.

Regulated wastes (as defined in Schedule 7 of the *Environmental Protection Regulation 2008*) must be transported by a regulated waste transporter, if transported in loads greater than 250 kilos. Furthermore, if the waste is trackable waste, as defined in Schedule 1 of the Environmental Protection (Waste Management) Regulation 2000, it must be tracked according to Part 4 of the *Environmental Protection (Waste Management) Regulation 2000*

It should be noted that all hydrocarbon spill waste, including contaminated soil, will be transferred to the Hardstand Pad on ML 50185 for bioremediation with urea, super phosphate and mulch. Employees must be aware that all waste onsite, both mine waste and general waste, are to be managed in accordance with **Workplace Procedure 6 - Waste Management** (refer to **Appendix 1, Section 2 – Workplace Procedures**).

6 Rehabilitation Program and Financial Assurance

Scotbar will undertake rehabilitation of mining activities in accordance with the conditions of the EA and the relevant conditions of the *Code of Environmental Compliance (CEC) for Mining Lease Projects*. The long term aim of the rehabilitation program is to revegetate identified disturbed areas with a stable vegetation community that is similar to that of the surrounding undisturbed areas of endemic species.

It should be noted that rehabilitation of the mining void will not occur immediately after the end of mining activities, as extraction activities (ERA 16) will continue onsite after the cessation of mining activities. As such, the landowner, Scotbar Pty Ltd, wish for all infrastructure within ML50218 associate with extraction activities to remain after the cessation of mining activities. This would include the mining void, sedimentation ponds, hardstand storage pad, haulage road, Freshwater Dam, the site office and shed.

Following on from the plan provided with the project timeline provided in ***Part A*** of the ***EMS***, the following table has been provided (refer to *Table 5: Rehabilitation timetable*).

Commitment	Commencement Date	Duration
All topsoil will be kept on site and will be stockpiled in a manner that aids in the preservation of native seed. Furthermore, the location is shown within **Appendix 3 - Figure 2**.	Immediate	Ongoing till end of operation.
Place Sandstone blocks to a height of 1.5 metres along the boundary of ML50218 adjacent to Seventeen Mile Road.	Immediate	18 months
Whilst task 2 is being performed, construction of the perimeter bund will occur adjacent to Seventeen Mile Road within mining lease 50218. The perimeter bund will be created with mine site overburden.	Immediate	18 months

Spread stockpiled top soil and fungi dominated compost created on ML50218 on the road side batter of the perimeter bund wall. Water after immediately application to germinate native seed rain.	6 months from the commencement of composting.	2.5 years
Spread stockpiled top soil and bacteria dominated compost created on ML50218 on the inside batter of the perimeter bund wall. Water after immediately application to germinate native seed rain.	6 from the issuing of the Extractive Industry permit.	2.5 years
Plant vegetation on outside perimeter bund wall along Seventeen Mile Road and the boundary of ML50218.	At the completion of constructing the outside batter and ongoing.	2.5 years
Seed grass on inside batter of perimeter bund wall.	At the completion of constructing the inside batter and ongoing.	2 years
Construct Freshwater Dam on the southern side of ML50218.	Immediate and ongoing.	2.5 years
Spread stockpiled top soil and bacteria dominated compost on the southern batter slope of the fire line adjacent to the Lockyer State Forest.	At the completion of constructing the Freshwater Dam.	6 months
Spread stockpiled topsoil and bacteria dominated compost on the batter slopes leading from the hardstand storage pad.	At the completion of constructing the hardstand pad.	6 months
Seed grass on batter slopes leading from hardstand storage pad and on the southern batter slope of the fire line adjacent to the Lockyer State Forest.	At the completion of spreading top soil and bacteria dominated compost.	6 months

Table 5: Rehabilitation timetable

The construction of the perimeter bund and batter slopes are not considered to be part of the rehabilitation as they are merely a use for overburden, which would otherwise need to be stockpiled elsewhere. Therefore, the cost of constructing the bund wall has not been taken into account for the calculation of the financial assurance.

The financial assurance to be held by DNRM for ML50218 has been calculated at $17,200 and will be provided by Scotbar at least 28 days prior to the commencement of any mining activities (refer to *Table 7: Summary of rehabilitation costs* in *Section 6.3 Financial Assurance* below for the detail).

6.1 Rehabilitation Activities

Rehabilitation of the ML50218 will accord with the overall commitments detailed in ***Part A Rehabilitation Plan*** of the ***EMS***. A summary of the rehabilitation plan relevant to ML50218 is outlined in this section below.

The rehabilitation will meet the following objectives:

- Topsoil stockpiles will be managed in such a way that native seed stock will be preserved.
- Construct a bund wall that screens the mining activities from observation from Seventeen Mile Road. This bund wall will have vegetated batter slopes to the front and the rear of the bund wall (refer to *Figure 4* below).
    - Stockpiled topsoils and compost (created on ML50185) will be spread over the bund wall to ensure that vegetation has a suitable rooting medium.
    - Soil that is to support vegetation growth will be loose enough so that vegetation establishment is successful i.e. has not been compacted.
    - The compost utilised will be of a suitable quality to provide the necessary nutrients for vegetation growth.
- Native seed stock (including *Eucalyptus taurina* and *Paspalidium grandispiculatum*) will be collected and propagated for use in the revegetation of disturbed areas. Further to this, nurseries providing the same endemic species will be utilised to maintain diversity if necessary.
- Weed species should not proliferate at the Helidon Facility (refer to *Section 6.1.1 Weed Management* below).
- The mining void will be rehabilitated to create a stable landform, after the cessation of extraction activities on ML50218.

It should be noted that a final landform design will not be provided until both mining and extraction activities have ceased.

The bund wall along the Eastern boundary of the site not only screens mining and extraction activities from observation along Seventeen Mile Road, it also offers a stable landform to plant native species of vegetation. The bund is illustrated as a dashed red line adjacent to Seventeen Mile Road in **Appendix 3 - Figure 2: Facility layout**. The bund wall will also couple as a security barrier to stop people from easily accessing the site when unattended.

The bund wall will be 20 metres at the base, and will have a flattened top 10 metres in width that. The batter that fronts Seventeen Mile Road will be battered back behind a 1.5 metre high wall of sand stone blocks. The batter will be revegetated with endemic species of the Helidon area due to the viable seed stock contained within the topsoils and also to some degree within the upper levels of

overburden removed. Revegetation will also be initiated through seed rain that falls in the area and strikes, a method that continues to be demonstrated on site (refer *to Table 6: Species for rehabilitation* below for species proposed). The density of planting will be such that the batter remains stable. The inward batter slope (1:3) will be grassed to prevent erosion which will assist in minimising sediment transport.

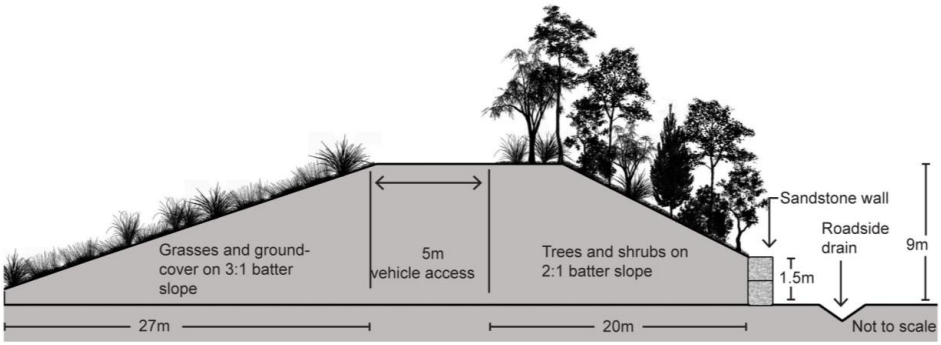


Figure 4: Typical section of bund wall for visual screening on ML50218, adjacent to Seventeen Mile Road.

The bund wall will end at the northern edge of the site entrance, adjacent to Seventeen Mile Road. The water from the road side drain will be diverted to the Freshwater Dam, which can then be utilised to maintain the vegetation planted/seeded during rehabilitation activities.

The tree and grass species listed in *Table 6: Species for rehabilitation* below are those selected for site revegetation. These species have been selected to reflect the natural plant communities that occur within and around the site. Two of the species selected are listed as vulnerable, rare or threatened. Scotbar is committed to ensuring that these two species are present within revegetation that is to occur on site. As such, these species marked with a superscript "a" will be actively sort after, including purchase from commercial nursery operators if available.

Canopy Species	Common Name
Angophora leiocarpa	Smooth Bark Apple
Angophora woodsiana	Smudgee
Callitris baileyi	Bailey's cypress pine
Corymbia citriodora	Lemon Scented gum
Corymbia trachyphloia	Brown Blood wood
Eucalyptus amenoides	White Mahogany
Eucalyptus crebra	Narrow-leaved ironbark
Eucalyptus fibrosa subsp. fibrosa	Broad-leaved red ironbark
Eucalyptus helidonica	Helidon Hills White Mahogany
Eucalyptus major	Grey gum
Eucalyptus microcorys	Tallow wood

Eucalyptus pilularis	Black Butt
Eucalyptus propinqua	Grey gum
Eucalyptus siderophloia	Grey Iron bark
Eucalyptus taurina [a]	Helidon Hills Iron bark
Lophostemon confertus	Brushbox
Lysicarpus angustifolius	Buderoo
Understorey species	**Common Name**
Acacia blakei	Blake's Wattle
Acacia leichhardtii	(no common name)
Allocasuarina inophloia	Thready (Wooly)-barked oak
Boronia splendida	Splendid boronia
Leptospermum lamellatum	(no common name)
Melaleuca groveana	Grove's paperbark
Melastoma affine	Blue tongue
Sophora fraseri	Brush sophora
Melaleuca linariifolia	Narrow-leaved Paperbark
Melaleuca sieberi	Sieber's Paperbark
Groundcover species	Common Name
Carex lophocarpa	Sedge
Cyperus gunnii subsp. Novaehollandiae	Flat sedge
Gahnia clarkei	Tall sawsedge
Leionema obtusifolium	Helidon Hills Phebalium
Paspalidium grandispiculatum [a]	Helidon Hills panic grass
Lomandra longifolia	Mat rush
Carex appressa	Tall sedge

Table 6: Species for rehabilitation

Whilst all efforts will be made to maximise species diversity, plants that are not available will be substituted with a similar local native plant species or omitted from the list. Where possible, seed collection and contract propagation will be undertaken prior to planting for plant species that are not commercially available.

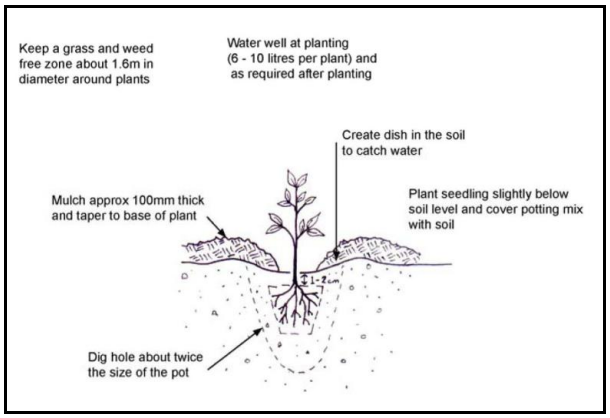


Figure 5: Planting Detail

Revegetation will occur on the batter slopes (front and back) of the perimeter bund, as outlined above, on the southern and western batter slope of the hardstand pad, on the batter slope running to the south of the fire line, and along the eastern and southern perimeter of the soil stockpile area located on the hardstand pad adjacent to Seventeen Mile Road. Prior to revegetation, the spreading of topsoil containing natural seed stock and compost will be spread at least 100mm thick on the areas to be revegetated by mechanical means, namely a tractor. Where batter slopes are too steep, topsoil will be released from a front end loader or long arm excavator down the slope. Care must be taken to ensure that excessive amounts of topsoil are not spread down steep batter slopes.

Once spread, grass will be broadcasted via a seed spreader, attached to a tractor. Again where slopes are too steep, grass seed will be broadcasted by hand. This is to occur on the western and southern batter slopes of the hardstand pad. These areas shall be sprayed with water to help trigger the germination process.

After 6 months supplementary planting using tube stock will occur if determined as necessary. The minimum plant spacing of disturbed areas shall contain a mix of canopy: mid-storey: groundcover species as outlined in *Figure 6: Typical Plant Spacing* below, and shall be planted in accordance with *Figure 5: Planting Detail*. This includes the removal and replacement of dead or dying plants.

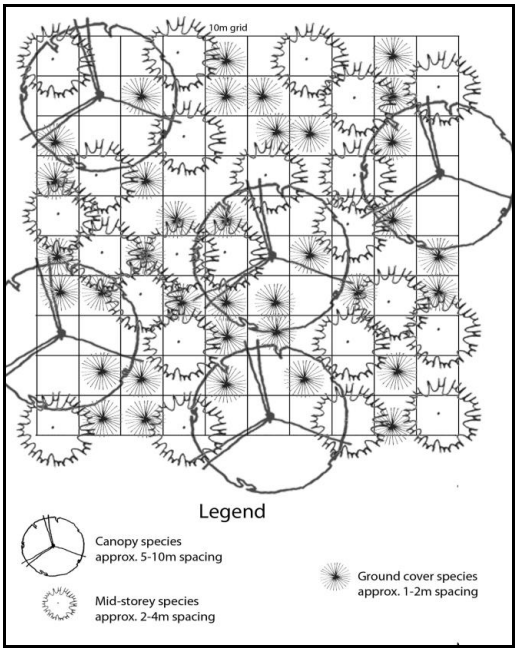


Figure 6: Typical Plant Spacing

In accordance with the *Assessment of Revegetation* in the *Technical Guidelines for the Environmental Management of Exploration and Mining in Queensland* (Department of Mineral and Energy, 1995) revegetation will be considered successful if:

- The vegetation community develops into a stable and sustainable ecosystem envisaged and planned for;
- Species density and composition is reflective of Table 6: Species for rehabilitation, *Figure 5: Planting Detail* and *Figure 6: Typical Plant Spacing*;
- Plant survival rates are greater than 90% after the first 12 months of planting. Any dead or missing plants will be replaced within the first 12 months to achieve a 90% survival rate; and
- Revegetated areas are maintained in a weed free state with no pest plants present within the revegetated areas (refer to *Section 6.1.1 Weed Management* below).

6.1.1 Weed Management

Part E Weed Management Plan of the ***EMS*** outlines how weeds will be monitored and managed at the Helidon Facility in the course of rehabilitation activities. The objectives of the Weed Management Plan are:

- Observed weed species are recorded across the site;
- Weed locations are mapped across the site;
- Noxious and environmental weeds are controlled in accordance with the Land Protection (Pest and Stock Route Management) Act 2002 (LPA) and the LVRC guidance; and
- Topsoil stockpiles are managed to prevent weed infestation.

In addition to these objectives weeds must be managed so as to minimise infestations and rehabilitated areas are to remain free from noxious weeds.

A study of the Helidon Facility has shown that the surrounding areas are relatively undisturbed and free of noxious weeds or exotic plants, except for the occurrence of lantana, a widespread and common weed in South East Queensland. Currently, there are no Class 1, 2 or 3 declared plants on ML 50218, as defined by the LPA. Consequently, there is no risk of weed incursion from surrounding land. The majority of the weeds declared under the LPA are an agricultural threat or domestic escapees and thus are unlikely to occur due to the land use of ML50218 and the surrounding area.

The main risk of weed occurrence on the subject site is via imported materials such as soils, compost, plant material and or machinery that are transported to the site for use. All plant and vehicles must be decontaminated to prior to entrance at the Helidon Facility. Decontamination and vehicle wash down must be carried out in accordance with the *Queensland checklist for clean down procedures* which can be found on the Department of Agriculture, Fisheries and Forestry (DAFF) website.

Monitoring of ML50218 for weed species must occur at least once a year (during operations and rehabilitation) in high risk areas, namely the main site access, imported soil /compost or plant material (including the rehabilitated areas), and machinery that is transported to the site or vehicle/machinery wash down areas. This will ensure that no class 1 or 2 declared plants occur onsite, that no exotic species occur in revegetated areas, and that there is no spread of existing exotic plants within the Facility or to neighbouring areas. However, if any class 1 or 2 declared plants are found on the subject site the appropriate measures will be undertaken to ensure that these plants are eradicated, and any exotic plant species that occur within revegetated areas will be controlled with the appropriate techniques. Additions of calcium to soil and microbial inoculums will be considered in an attempt to successfully grow higher order vegetation, thus making conditions for weed species to flourish problematic. It is essential that efforts are taken to emulate conditions that exist in undisturbed areas so that weed species do not take hold. The Site Manager will be responsible for ensuring that regular monitoring occurs.

There are many forms of pest control available to eradicate or control weed/pest species, a variety of these methods should be utilised to control serious weeds, and integrating several methods over a long period tends to be more successful. The main forms of weed control are listed below:

- **Chemical control** – includes foliar spray, basal bark spraying, stem injection, cut stump, cut and swab, stem scraper or wick applications.
- **Soil Nutrient /Chemistry Balancing** – ensuring that a calcium driven system is created as opposed to a nitrogen based system in accordance with the teachings of Dr Arden Anderson.
- **Mechanical control –** includes slashing, mowing, dozing, pushing and felling.
- **Manual control –** includes hand pulling, grubbing or chipping.

It should be noted that chemical weed control should only be undertaken by a licensed operator (under the Agricultural Chemical Distribution Control Act).

Further information on the above weed control techniques refer to ***Part E Weed Management Plan, Appendix 3 – Weed Control Measures***.

6.2 Rehabilitation Monitoring

The objective of rehabilitation, monitoring and maintenance is to ensure that rehabilitation is successful and permanent. Therefore, a rehabilitation log will be maintained (refer to ***Form 1 – Rehabilitation Management*** in ***Part A Rehabilitation Plan, Appendix 3 – Forms and Checklists***). The log will be filled in and will identify:

- Date of rehabilitation;
- Date of check-up;
- State of surface;
- States of grass vegetation, and
- State of any planted trees.

Any maintenance required will be undertaken in the normal course of mining and extraction activities.

6.3 Financial Assurance

The financial assurance to be held for Scotbar's mining activities equates to $17,200.00 (rounded to the nearest $100). The estimated cost of rehabilitation activities are outlined in *Table 7* below. **Appendix 5** contains a quote from Beaumont Transport for rehabilitation/revegetation of ML50218 and 50185.

Rehabilitation Activity	Machinery	Cost Per Hectare	# of Hectares	Cost Per Hour	# of Hours	Cost Per kg	# of kg	Total Cost	Notes
Purchase of grass seed	N/A		2.83			$9.59	565	$5,418.93	Calculated as 2kg of grass seed per 100m^2.
Spreading of topsoil and grass seed over batter slopes of hardstand pad (i.e. area A4 and A5).	Long arm excavator and hand broadcast.		1.08	$ 100.00	13			$1,300.00	Batter slope too steep for machinery to operate. Topsoil will be thrown from top of batter and grass will broadcasted by hand.
Spreading of topsoil and grass seed over remaining areas (i.e. area A1, A2, A3 and A6).	Long arm , excavator, drott and spreader.	$2,800.00	1.75					$4,886.84	Refer to **Appendix 5** for the quote.
Spreading of topsoil and trees seed over front perimeter batter (i.e.	Long arm excavator	$2,800.00	1.17					$3,271.80	
Subtotal								**$14,877.57**	
CPI								$446.33	3%
Maintenance								$297.55	2%
Total (ex. GST)								**$15,621.44**	
GST								**$1,562.14**	
Total								**$17,183.59**	

Table 7: Summary of rehabilitation costs

The financial assurance calculated above is related to the areas to be revegetated which are outlined in *Table 8* below and are illustrated in **Appendix 3 - Figure 4: Rehabilitation areas**.

Area Name	Description	Area (m^2)
A1	Inner perimeter bund batter slope.	8,664.00
A2	Inner perimeter bund batter slope.	3,021.00
A3	Soil stockpile perimeter (east and south).	1,025.00
A4	Hardstand Pad batter slope (south).	9,000.00
A5	Hardstand Pad batter slope (west).	1,800.00
A6	Batter slope of Freshwater Dam (south).	4,743.00
A7	Outer perimeter bund batter slope.	11,685.00
Total area to be rehabilitated (m^2)		39,938.00
Total area to be rehabilitated (ha)		3.99

Table 8: Areas to be revegetated

7 Action Programs

The *Code of Environmental Compliance (CEC) for Mining Lease Projects* action program is detailed within the table contained within **Appendix 4**. Auditing of the action programs will occur as and when required as highlighted within these tables.

In some instances auditing and recording will occur at set time intervals for certain aspects associated with the activity that are considered to have priority. Scotbar will undertake a measurable and auditable monitoring and maintenance program as outlined in *Section 6.1 Rehabilitation Activities* above of this PoO.

Scotbar is committed to the keeping of records to demonstrate compliance with the condition of the EA and any relevant conditions of the CEC. As such records will be kept for 5 years. The Site Manager is responsible for this aspect to occur.

8 Monitoring and Reporting

The frequency of auditing compliance against the condition of the EA and any relevant conditions of the *CEC for Mining Lease Projects* has been provided within the audit table (refer to **Appendix 4 - Compliance with CEC for Mining Lease Projects and Audit Template**). Auditing of certain aspects that are considered to take priority with regard to the activity must also occur. The following table highlights the auditing frequency of certain aspects that are considered to take priority with regards to the activity.

Data and Information	Method of Record Keeping To be Used				Frequency
	Site Plans	Journal	Photos	Other	
Topsoil stripping and stockpiling (record topsoil stockpiles, location and age).	•	•	•		6 months
Area disturbed and rehabilitated.		•	•	Map	6 months
Pre – Post mine landform.		•	•		Before and after activity.
Demonstration of water run-off management.		•	•		During activity.
Monitoring of revegetated areas.	•	•	•		6-12 months

Table 9: Environmental monitoring and reporting schedule

Scotbar is committed to monitoring where required by the condition of the EA, namely compliance with the standard conditions of the *CEC for Mining Lease Projects*. The action program identifies when certain measures are to be taken by Scotbar and the frequency at which monitoring should occur. All site personnel need to become familiar with the action program, the commitments made within the program and the frequency at which monitoring must be conducted.

8.1 Objective

The objective of the monitoring program is to demonstrate that the mining activities are not having an impact on the receiving environment. Moreover, monitoring and sampling must be performed in line with the following publications:

- *Monitoring and Sampling Manual* – Version 2 September 2010, published by the former Department of Environment and Resource Management (DERM);
- *Air Quality Sampling Manual* – November 1997, published by the former Department of Environment; and
- *Noise Measurement Manual* – Third Edition, 1 March 2000, published by the former EPA.

9 Continuous Improvement

Scotbar will hold an annual meeting intended for the periodic review of the Workplace and Emergency Procedures to ensure that BPEM is being undertaken at the Facility. The aim of this annual review meeting is not only to review these procedures but also to review all information collected and recorded throughout the year, as well as, any past, present of foreseeable problems associated with the way the Helidon Facility is operated. The focus of this meeting is on improving

the level of environmental protection provided and to maintain a robust and adaptive approach to BPEM.

The aforementioned meeting is aimed at the continual improvement of the level of environmental protection offered by appropriately managing the Helidon Facility. Improvements can be made at any time when identified by any employee by submitting **Form 11 - Continuous Improvement Form** to a Manager located in where they believe a current Workplace or Emergency Procedure can be improved (refer to **Appendix 2 – Forms and Checklists**).

10 Staff Training

Scotbar believes that no employee should be allocated a task to perform without adequate training. The safety of employees is paramount and essential for a successful operation and as such, the following commitment is given by Scotbar:

- ***All employees engaged in the operations at the Helidon Facility will receive relative training in respective aspects of the activity.***

As a way of introduction, this PoO has been written so that information can be easily accessed regarding environmental management. Familiarisation with the PoO (particularly the Workplace and Emergency Procedures in **Appendix 1**) will assist employees in becoming aware of any environmental issues that could arise when activities are improperly conducted and of the penalties associated with contravention of the *Environmental Protection Act 1994*.

11 Audit Statement

The format of this Environmental Audit Statement (EAS) and the method for calculating the Financial Assurance presented in this EAS is both in compliance with the following publications:

- *Preparing a plan of operations and audit statement for level 1 mining projects* (Department of Environment and Heritage Protection, 2012); and
- *Code of Environmental Compliance for Mining Lease Projects*, Form 5 – Schedule of Rehabilitation Costs (Environmental Protection Agency and Department of Mines and Energy, 2001).

11.1 Introduction

The mining activities and associated rehabilitation described within this document are confined to ML50218.

11.2 Auditor's Name

Luke Zambelli
The LZ Environmental Company Pty Ltd
T/A Zambelli Environmental
56 Leah Avenue
Salisbury
Qld 4107
Tel & Fax: 07 3272 7420
Email: luke@zbe.com.au

11.3 Auditor's Credentials

The Auditor holds a Bachelor of Environmental Engineering and has over 15 years' experience in the field of environmental management and consulting. The auditor is a member of the Institute of Environmental Engineers of Australia (membership # 55291).

11.4 Relationship with Environmental Authority Holder

Zambelli Environmental is an independent environmental consultancy commissioned by Scotbar, to conduct environmental management and auditing works associated with this PoO.

11.5 Date and Method of Audit

A site visit was conducted on the 15.2.13. Based on this site visit an audit against CEC conditions has occurred (refer to **Appendix 4**). This PoO has been created to support the mining operations within ML50218. Observations on this day highlighted that extraction was occurring within ML50218. No mining was occurring as the desired sandstone has not been reached. Mining will not occur until 28 days after this PoO has been submitted to the DEHP and 28 days after the financial assurance has

been provided to the DNRM. As mentioned above, rehabilitation will occur after the completion of extraction activities (ERA 16).

An audit will be completed at the end of the permit period to ensure compliance is achieved.

11.6 Compliance with Environmental Authority

EA MIC200366805 requires for the permit holder of a code-compliant level 2 project to be compliant with the standard conditions of the relevant Code of Environmental Compliance (CEC), in this case, the *CEC for Mining Lease Projects*.

For further detail on the rehabilitation that is to occur on completion of the extraction facilities, refer to *Section 6 Rehabilitation Program and Financial Assurance* above.

Compliance with the relevant conditions of the *CEC for Mining Lease Projects* will be achieved at the Helidon Facility (refer to **Appendix 4 - Compliance with the Code of Environmental Compliance for Mining Leases Projects and Audit Template**).

11.7 Financial Assurance of Environmental Authority

The estimated amount to be held by the DNRM is $17,200.00 and will be provided at least 28 days prior to the commencement of any mining activities.

11.8 Audit of Action Program

Readers are directed to **Appendix 4** for detail of the action program.

11.9 Verification of Financial Assurance

Financial assurance has been calculated in using *Form 5 – Schedule of Rehabilitation Costs* in Appendix D of the *Code of Environmental Compliance for Mining Lease Projects*.

12 Conclusion and Certification

I, Luke Zambelli am aware that it is an offense under section 480 of the *Environmental Protection Act 1994* (*EP Act*) to provide false or misleading information in relation to matters of environmental protection. Within this Plan however;

- I can verify that all information provided is true and complete;
- I am aware that information given within this Plan of Operations and Audit Statement could become available to the public in accordance with the *EP Act* and *Right to Information Act 2009*; and
- That this Plan is consistent with the conditions in the EA.

13 References

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Appendix 1

Workplace and Emergency Procedures

Workplace Procedures

Emergency Procedures

1 Introduction

Section 2 below details Workplace Procedures for the day-to-day activities that will be conducted at the Facility. Stated measures contained within the respective procedures detail information for site personnel to use as a guide when conducting various activities that have the potential to cause environmental harm (including environmental nuisance).

Emergency Procedures are highlighted in *Section 3* below. The Emergency Procedures have been prepared for the purpose of responding to incidents in an environmentally responsible manner.

The following Workplace and Emergency Procedures are intended as a guide for Facility employees when carrying out specific tasks whilst having due regard for the receiving environment. For the purpose of accessibility to site personnel, Workplace and Emergency Procedures will be laminated and positioned in various locations throughout the facility, including inside vehicles or machinery used as part of the facility operations.

Workplace Procedure Title	Workplace Procedure Number
Dust and Particulate Management	1
Stormwater and Sediment Management	2
Noise Management	3
Waste Management	4
Emergency Procedure Title	**Emergency Procedure Number**
Fire Incident	1
Release to Waters	2
Spill Management	3

Appendix 1 - Table 1: Workplace and Emergency Procedures

2 Workplace Procedures

Workplace Procedure 1 - Dust and Particulate Management	
Environmental Commitment • To ensure that activities at the Facility do not cause environmental harm or nuisance.	
Identification of Issues	**Possible Impact**
• Excessive dust and particulate liberation is created.	• Contravention of CEC conditions. • Enforcement action by the DEHP, including issuing a fine. • In situ adverse impacts including discomfort and irritation to the lungs and eyes of site personnel.
• Dust liberation generated by vehicles on trafficable areas.	• Release of dust and/or particulates that causes environmental nuisance. • Enforcement action by the DEHP, including issuing a fine. • In situ adverse impacts including discomfort and irritation to the lungs and eyes of site personnel.
• Dust and/or particulate release from mining operations (including loading and removal offsite).	• Release of dust and/or particulates that causes environmental nuisance. • Enforcement action by the DEHP, including issuing a fine. • In situ adverse impacts including discomfort and irritation to the lungs and eyes of site personnel.
• Complaint received regarding nuisance at a dust sensitive place.	• If serious enough, enforcement action may be taken by the DEHP, including issuing a fine. • DEHP may request that monitoring be performed at a dust sensitive place. Parameters to consider: o Dust deposition = 120 mg/m^2 /day –AS 3580.10 of 1991; o $PM_{2.5}$ = 25 $\mu g/m^3$ – 24 hour; o $PM_{2.5}$ = 8 $\mu g/m^3$ – 1 year; o PM_{10} = 50 $\mu g/m^3$ - 24 hour average – 5 days / year.
• Sprays in the 'wet cutting' reshaping process are not utilised; or • Sprays in the 'wet cutting' reshaping process are malfunctioning or broken.	• In-situ adverse impacts including discomfort and irritation to the lungs and eyes of site personnel. • Employee health compromised.

Control Measures • All employees engaged in mining operations must be aware and have an understanding of the standard conditions of the *Code of Environmental Compliance for Mining Lease Projects* (refer to **Appendix 4 - Compliance with CEC for Mining Lease Projects and Audit Template**). • Consider ceasing mining activities when wind speed is excessive. • If excessive dust is liberated from mining or extraction activities consideration must be given to utilising water sprays, earthen wind shields or breaks to mitigate the situation. • Ensure that the seasonal variations in the evaporation rate are taken into account with regard to the regularity of dust suppression. • Ensure that the waters for dust suppression be sourced from the Main Dam, the Freshwater Dam and the sedimentation ponds. • The onsite water cart or sprinklers must be utilised for dust suppression. Ensure that if utilised, the water cart and sprinkler system is effective and is maintained in good working order. The Site Manger is to be promptly advised when they are ineffective / not in good working order. • Ensure that haulage roads and hardstand pad are regularly wetted down to suppress dust. • Limit traffic to designated internal road ways. This will lessen the amount of dust that is created and the need for watering. • Limit speed on haulage roads to 25 km/hr. This will minimise the re-entrainment of dust and particulate. • Ensure that moisture is regularly applied to the topsoil and soil stockpile. Alternatively, consider adding compost to overburden and spread seed over stockpile. Spread grass seed over surface and apply water. Water regularly so as to ensure good grass coverage. • Ensure that the water sprays in the wet cutting reshaping process are utilised when reshaping is occurring, to protect the cutting equipment and employee health. • Ensure that the sprays in the wet cutting process are maintained as per the manufacturer's specification. In the event, that the sprays are not working the Site Manager should be immediately informed and reshaping activities should cease until this has been rectified. • When wind conditions are unfavourable, consideration must be given to wetting stockpiles of extracted material if dust is being liberated. • If a complaint is received use **Form 9 - Complaint Investigation Form** to record all details of the complaint and keep these records updated as the complaint is investigated (refer to **Appendix 2 – Forms and Checklists**). • If requested by the DEHP conduct dust and particulate monitoring in accordance with the relevant Australian Standards.	
Record Keeping • Record when dust suppression occurs (refer to **Appendix 2, Form 4 – Dust Suppression Form**). • Record daily weather conditions (refer to **Appendix 2, Form 3 – Daily Weather Conditions**). • Record all complaints (refer to **Appendix 2, Form 9 - Complaint Investigation Form**). • Record and report all breaches of the standard conditions of the *Code of Environmental Compliance for Mining Lease Projects* to the DEHP (use **Appendix 2, Form 1 – Daily Running Sheet**).	
Responsibility and Communication • It is the responsibility of all employees engaged in the abovementioned activities to ensure that	

all control measures are carried out.

- It is the responsibility of the Site Manager to allocate tasks and to ensure that activities at the site do not result in the release of particulate and/or dust that causes environmental nuisance.
- The Site Manager must promptly inform the Facility Manager of any incident that is likely to cause environmental harm or nuisance.

Relevant Legislation

- *Environmental Protection Act 1994*; and
- *Environmental Protection (Air) Policy 2008*.

<table>
<tr><th colspan="2">Workplace Procedure 2 - Odour Management</th></tr>
<tr><td colspan="2">Environmental Commitment:

• To ensure that the activities undertaken at the facility do not cause odour nuisance.</td></tr>
<tr><td>Identification of Issues:

• Organic overloading of Freshwater Dam or sedimentation pond(s).</td><td>Possible Impacts:

• The onset of anaerobic activity and the release of offensive or noxious odour from pond(s).
• Possible enforcement action taken by DEHP.</td></tr>
<tr><td>• Freshwater Dam or sedimentation pond(s) has received excessive organic loading.</td><td>• Anaerobic activity predominates within the water column releasing offensive odour.
• Possible enforcement action taken by the DEHP.</td></tr>
<tr><td colspan="2">Control Measures:

• Refer to Workplace Procedure 3 – Freshwater Dam and Sedimentation Pond(s) Management for the management of the stormwater dam and sedimentation ponds in an aerobic state.
• Ensure that stormwater dam and sedimentation ponds are kept in an aerobic state.
• Do not release wastes (solid or liquid) directly to the stormwater drainage system or to the stormwater dam and sedimentation ponds.
• In the event of a spill follow the procedures detailed in Emergency Procedure 3 - Spill Management.
• If Scotbar receives a complaint use Form 9 - Complaint Investigation Form to record all details of the complaint and keep these records updated as the complaint is investigated.
• Record the results of all odour monitoring using Form 8 - Odour Monitoring (refer to Appendix 2 – Forms and Checklist).</td></tr>
<tr><td colspan="2">Record Keeping:

• Record the DO, Redox Potential, Electrical Conductivity, Turbidity and pH of the dam or ponds (refer to Appendix 2, Form 6 – Dissolved Oxygen, EC, Redox Potential, Turbidity and pH).
• In the event of an odour complaint (on or off site) use Form 9 - Complaint Investigation Form and Form 8 - Odour Monitoring contained within Appendix 2.</td></tr>
<tr><td colspan="2">Responsibility and Communication:

• The Site Manager is responsible for ensuring that all records are collected and maintained at the frequency stipulated in the procedure.
• The Site Manager is responsible for the prompt notification to DEHP if a release of offensive odour occurs and is known to be detectable off site or is likely to move offsite and may cause a nuisance to sensitive receivers.
• The Site Manager is to promptly report to the Facility Manager any variance from the control</td></tr>
</table>

measures that result in environmental harm or nuisance.
Relevant Legislation: • *Environmental Protection Act 1994*; and • *Environmental Protection (Air) Policy 2008*.

Workplace Procedure 3 – Freshwater Dam and Sedimentation Pond(s) Management	
Environmental Commitment: • Ensure that the functioning of the Freshwater Dam and sedimentation pond(s) does not result in the release of contaminants to receiving waters and/or that offensive and noxious odour that creates environmental nuisance at an odour sensitive place does not occur.	
Identification of Issues:	**Possible Impact:**
• Overloading the dam with high strength (High Biological Oxygen Demand (BOD)) and (Chemical Oxygen Demand (COD)) substances, both in liquid or solid forms. • Overloading of the dam with excessive amounts of organic matter, such as green waste.	• A reduction in dissolved oxygen resulting in anaerobic conditions, which results in the liberation of offensive or noxious odour from the pond. • A reduction in redox potential which results in the liberation of offensive or noxious odour. • If released, environmental may occur. • Enforcement action taken by the DEHP.
• Discharging toxic and hazardous liquid wastes to the dams.	• The killing of beneficial aerobic bacteria and the introduction of toxicants to the water column. • If released, environmental harm. • Enforcement action taken by the DEHP.
• Increase in the amount of sediment/sludge at the bottom of the dams.	• Reduced capacity of the ponds. • Failure to remove particulates from stormwater. • Release of sediment ladened water that results in environmental harm.
• The structural integrity of a dam or pond is compromised.	• Release of contaminated stormwater to surface water (Sheep Station Creek). • Possible enforcement action by the DEHP.
• Dam and pond(s) are not maintained in an aerobic state.	• Liberation of offensive or noxious odour from dam or pond(s). • Possible enforcement action by the DEHP.
• The pH of the dam or pond(s) is not maintained above 6.5.	• Increase in acidity with the dam or pond(s). • Killing of beneficial bacteria. • A reduction in the DO and redox potential resulting in anoxic conditions, which results in the liberation of offensive or

	noxious odour from the dam or pond(s).
• Contained stormwater has been released without knowledge of the suspended solids and or turbidity.	• Unknown quantity of sediment being released. • Enforcement action taken by the DEHP if considered necessary.

Control Measures:

- Only stormwater from Seventeen Mile Road is allowed to be accepted in the Freshwater Dam.
- Only stormwater from disturbed areas of the Facility is allowed to be accepted in the sedimentation ponds.
- Do not allow toxic or hazardous substance to enter the dam or pond(s). If a release or discharge occurs to the dam or pond(s) that results in the souring of the dam and hence the liberation of noxious or offensive odour, the Site Manager must inform the Facility Manager to obtain direction.
- Maintain Facility perimeter bunds and drainage channels to prevent water external to the Facility from entering the Helidon Facility, in any way but intended, i.e. to Freshwater Dam.
- Ensure that the top half of the dam and ponds are aerobic. Do not allow dissolved oxygen (DO) < 2 ppm or mg/l.
- If DO falls below 2 ppm activate aeration utilising an aerator.
- If rapid oxidation is required above what the aerator can induce, then consideration should be given to introducing ozone or hydrogen peroxide. **Given the hazardous nature of hydrogen peroxide, specialist help will be required when introducing it to the dam or ponds.**
- As an alternative to the above, microbial inoculums could be added to the containment dam(s) to suppress odour.
- Do not allow pH of the water column to fall below 6.5.
- If pH adjustment is required, introduce dilute solutions to neutralise. This can be determined by performing a jar or bucket test, whereby solutions of sodium bisulphate or dilute solutions of either sulphuric acid or sodium hydroxide can be added to a sample of contaminated water to determine the volume required. **However, since both sulphuric acid and sodium hydroxide represent a strong acid and alkali respectively, consideration should be given to the use of weaker acids and bases if a significant adjustment is not required. Contact should be made with a person who is appropriately qualified to make this determination.**
- In the event of a release ensure that **Emergency Procedure 2 - Release to Waters** is followed.
- Measure Turbidity in the event of a release. Correlate Turbidity with a suspended solids value of 50 ppm.

Record Keeping:

- Record incidental rainfall (refer to **Appendix 2, Form 3 – Daily Weather Conditions**).
- Record DO, Redox, EC, Turbidity and pH weekly in the event of a controlled release of contained stormwater (refer to **Appendix 2, Form 6 – Dissolved Oxygen, EC, Redox Potential, Turbidity and pH**).
- Water quality parameters must be measured tri-annually.

Responsibility and Communication:

- It is the responsibility of all Facility employees to report any variance from the control measures stated above to the Site Manager.
- The Site Manager is responsible for the collection of DO, Redox Potential, EC, Turbidity and pH data tri-annually.
- If high strength liquid or solid wastes are released to the dams, immediate notification to the Site Manager is to occur. Measurement of DO, Redox potential, EC, Turbidity and pH must occur. If DO < 2 ppm and or pH is < 6.5 aeration and pH adjustment must occur.
- The Site Manager is to promptly report to the Facility Manager any variance from the control measures that result in environmental harm or nuisance.

Relevant Legislation:

- *Environmental Protection Act 1994*; and
- *Environmental Protection (Water) Policy 2009.*

Workplace Procedure 4 - Stormwater Management	
Environmental Commitment: • To effectively manage stormwater generated at the Facility so as not to cause environmental harm or nuisance. • To ensure that releases to the receiving environment do not result in environmental harm. • To minimise the environmental impact that occurs from any release from the Facility.	
Identification of Issues:	**Possible Impact:**
• Diversion drains and or bunds have become compromised, obstructed and or blocked.	• Rerouting of stormwater that results in uncontrolled releases off site. • Release of sediment ladened waters that may result in environmental harm. • Enforcement action taken by the DEHP.
• The development of cracks in the perimeter bund and the Freshwater Dam or sedimentation pond(s) (including the base and side walls).	• Release of contaminated stormwater to land and surface water. • Enforcement action taken by the DEHP.
• A 0.5 m freeboard has not been maintained within the Fresh water dam and an uncontrolled release has occurred.	• Erosion to batter occurs resulting in a larger release. • Excess sediment released to receiving waters. • Loss of species diversity and or richness. • Enforcement action taken by the DEHP.
• The allowance of gross solids to be transported via stormwater to the Freshwater Dam or sedimentation pond(s).	• Possible overloading creating anaerobic conditions that if released to the receiving environment could cause environmental harm. • Enforcement action taken by the DEHP.
• The blocking or obstruction of internal drains.	• Ponding or pooling of stormwater, which may result in the redirection of contaminated stormwater. • Settlement of sediment cannot occur.
• External stormwater sources allowed to enter the Facility (except that to be diverted to the Freshwater Dam).	• Possible overloading both in strength and volume of stormwater. • Enforcement action taken by the DEHP.
• Sedimentation pond(s)/check dams are overloaded with sediments. • Integrity of Rip Rap compromised.	• No decrease in stormwater velocity. • Increased stormwater velocity when entering stormwater containment pond

	resulting in less effective sedimentation. • Failure to remove sediments from stormwater. • Increased sediment loads in stormwater transported to the Stormwater Containment Dams. • Increase loads in released stormwater impacting on the receiving environment in the event of a release.

Control Measures:

- Maintain sufficient freeboard (>0.5 metres) in Freshwater Dam or sedimentation pond(s) at all times accept for in times of emergency.
- Controlled releases are to occur from the Freshwater Dam once water has been determined as being suitable.
- Maintain perimeter bund and diversion channels in an integral state.
- Consider utilising grass swales to minimise scouring of water.
- Implement check dams, sedimentation ponds or other energy dissipaters to minimise the momentum of water.
- Consider utilising vetiver grass to slow water velocity to induce sedimentation.
- Check stormwater performance (all directional, pollution and velocity controls) after every rainfall event that induces stormwater runoff (refer to **Appendix 2, Form 7 - Stormwater Performance Checklist**).
- Maintain integrity of any pollution or velocity control mechanisms (i.e. check dams/rip rap). Ensure that regular removal of sediment occurs to enhance functionality of the control mechanisms.
- Ensure internal drains and the stormwater containment dams are integral so that movement and storage of contaminated stormwater does not result in releases to the receiving environment.
- Ensure that sediment does not block drainage paths.
- In the event of heavy rainfall, consideration must be given to the implementation of sediment fencing or straw bales around the stockpiles of extracted materials on the hardstand pad.

Record Keeping:

- Record any repairs conducted on the perimeter bund or dam walls or any of the pollution and velocity controls (refer to **Appendix 2, Form 7 - Stormwater Performance Checklist** and **Form 1 – Daily Running Sheet**).
- Record all observations as to the performance of the stormwater containment system after rainfall events that induce stormwater runoff (refer to **Appendix 2, Form 7 - Stormwater Performance Checklist**).
- Record any releases to the receiving environment (refer to **Appendix 1, Section 3, Emergency Procedure 2 - Release to Waters** in the event of a release to the receiving environment).

Responsibility and Communication:

- All Facility employees must report any release to the receiving environment immediately to the Site Manager for attention and any necessary action.
- The Site Manager is responsible for ensuring any repairs to the bund wall are done promptly.
- The Site Manager is responsible for the collection and recording of any observations made as to the performance of the stormwater containment system.

- The Site Manger is responsible for advising the Facility Manager about a release to the receiving environment.

Relevant Legislation:

- *Environmental Protection Act 1994*; and
- *Environmental Protection (Water) Policy 2009*.

<table>
<tr><th colspan="2">Workplace Procedure 5 - Noise Management</th></tr>
<tr><td colspan="2">Environmental Commitment

• To ensure that activities conducted at the Facility do not create environmental nuisance at a noise sensitive place.</td></tr>
<tr><td>Identification of Issues</td><td>Possible Impact</td></tr>
<tr><td>• Excessive noise release from onsite machinery or works performed.
• Onsite plant or equipment is fitted with an ineffective muffler system.</td><td>• Noise complaint from noise sensitive place.
• Possible enforcement action taken by the DEHP.</td></tr>
<tr><td>• Tonal noise from the operation of faulty equipment.</td><td>• Dependant on frequency, noise nuisance could occur, which could result in possible noise complaints.</td></tr>
<tr><td>• Impact noise from the loading of trucks onsite, especially after hours.</td><td>• Noise levels may be emitted greater than background for the area.
• Possible enforcement from the DEHP.</td></tr>
<tr><td>• Construction of new buildings/facilities or processes.</td><td>• Could result in noise levels being emitted greater than background for the area.</td></tr>
<tr><td>• Impact noise from the loading of trucks.</td><td>• Noise levels may be emitted greater than background for the area.
• Possible enforcement from the DEHP.</td></tr>
<tr><td colspan="2">Control Measures

• All employees engaged in mining operations must be aware and have an understanding of the standard conditions of the Code of Environmental Compliance for Mining Lease Projects (refer to Appendix 4 - Compliance with CEC for Mining Lease Projects and Audit Template).
• Ensure that the operations only occur between 6am to 6 pm Monday to Sunday, excluding public holidays. Further to this, loading and the operation of delivery trucks is restricted to between 7am and 6pm Monday to Friday and 7am to 1pm on Saturdays, excluding public holidays.
• If noise not ordinarily present is experienced to be emanating from any machinery or equipment that is likely to cause environmental nuisance at any time, prompt attention should be given to rectifying the noise. The noise should cease until rectification has occurred.
• All machinery and equipment must be maintained as specified by the manufacturer.
• The Daily Machinery Start-up Checklist should be completed (refer to Appendix 2, Form 2 - Daily Equipment / Machinery Start up Checklist).
• Unusual impulsive or tonal noise must be investigated and avoided where possible.
• Unnecessary impact noise should not occur.
• All mining operations should occur between 6am to 6pm.
• Unnecessary noise outside of normal operating hours should not occur.</td></tr>
</table>

- Loading of trucks should occur from lowered heights, particularly material that contains rocks.
- Steady state and impact noise generated by operating mining plant may be attenuated by using stockpiled overburden or large overburden rock material placed around plant and equipment. Stockpiled material acts as a noise attenuating barrier and will mitigate potential offsite noise impacts. These attenuating barriers will be positioned adjacent to plant and equipment and will effectively block sound transmission in the direction of any potential noise sensitive receivers.
- If a complaint is received use **Form 9 - Complaint Investigation Form** to record all details of the complaint and keep these records updated as the complaint is investigated (refer to **Appendix 2 – Forms and Checklists**).
- Ensure that if noise monitoring is requested by the DEHP, a suitably qualified person is engaged to perform and report on the measured noise.

Record Keeping

- Daily start up records must be taken to demonstrate that on-site plant and equipment is not creating excessive noise (refer to **Appendix 2, Form 2 - Daily Equipment / Machinery Start up** Checklist).
- Record all noise data that is requested by the administering authority (DEHP).
- Record and report all breaches of the standard conditions of the *Code of Environmental Compliance for Mining Lease Projects* to the DEHP (use **Appendix 2, Form 1 – Daily Running Sheet**).
- All complaints should be recorded using **Form 9 - Complaint Investigation Form** (refer to **Appendix 2**).

Responsibility and Communication

- The Site Manager is responsible for the prompt notification to the Mine Facility Manager if noise is released that is likely to cause environmental nuisance.
- It is the responsibility of the Site Manager to investigate any complaints received regarding noise nuisance and report all findings to the DEHP.
- The Site Manager is responsible for the ensuring that the Daily Equipment / Machinery Start-up Checklist is completed.

Relevant Legislation

- *Environmental Protection Act 1994;* and
- *Environmental Protection (Noise) Policy 2008*.

Workplace Procedure 6 - Waste Management	
Environmental Commitment • To ensure that the generation of waste is managed in a responsible manner to ensure that environmental nuisance or harm does not occur.	
Identification of Issue	**Possible Impact**
• All general waste generated at the Facility (cardboard, plastic, food waste, paper etc.) is not stored correctly within the general waste bins.	• Possible generation of contaminated stormwater and its subsequent release. • Reduced employee occupational health and safety.
• Litter is not contained in onsite waste receptacles and is blown around the site and possibly offsite by the force of the wind.	• Unsightly mess, with entry of litter to stormwater retention ponds. • Offsite movement of litter resulting in compromising the aesthetic value of the receiving environment.
• Site personnel have allowed food waste to accumulate in amenities bins at the site.	• Vector attraction including vermin, ibis and flies. • Pathogenic bacteria become prevalent and odour is released.
• More than 5 tonnes of waste has been buried onsite. • Regulated waste has been disposed of onsite. • Waste that creates leachate such as putrescible waste has been buried onsite.	• Contravention of CEC conditions. • Unknown harm potential. • Contamination of land and dependent upon location watercourses. • Enforcement action taken by the DEHP.
• Waste oil from the servicing of plant and equipment has been stored in an unbunded area at the site and a rupture has occurred resulting in the spill of waste oil.	• Release of contaminant to stormwater retention pond. • Death of beneficial aerobic bacteria. • Large volume of contaminated water to be removed to a facility that can accept such waste.
• Used tyres and or scrap metal from plant or equipment have been stored onsite.	• Unsightly mess. • Potential fire hazard.
• Regulated waste has been stored on site.	• Enforcement action taken by the DEHP for undertaking an activity that has not been approved.

• Regulated waste generated onsite (>250 kilos) has not been removed by a regulated waste transporter.	• Enforcement action taken by the DEHP.
• Waste oversized rock/overburden has been placed in drainage channels.	• Interference with drainage of incident rainfall with potential to inhibit traffic movement. • Unnecessary contamination load to receiving waters. • Possible enforcement action taken by the DEHP.
• Waste is disposed of within a Category C environmentally sensitive area.	• Contravention of CEC conditions. • Enforcement action taken by the DEHP.

Control Measures

- All employees engaged in mining operations must be aware and have an understanding of the standard conditions of the *Code of Environmental Compliance for Mining Lease Projects* (refer to **Appendix 4 - Compliance with CEC for Mining Lease Projects and Audit Template**).
- Ensure that no waste is disposed of within a Category C environmentally sensitive area.
- Ensure all general waste generated as part of operations, is sorted, segregated and placed in the appropriate general waste or recycling receptacle.
- Regularly empty amenity bins at the site.
- Allow for the contents of onsite industrial bins to be removed regularly.
- Do not store waste oil generated from the servicing of plant and equipment onsite in an unbunded area.
- Do not store or dispose of unusable or damaged tyres onsite.
- Do not allow prohibited wastes, including regulated wastes to be delivered, stored or handled at the site.
- Do not dispose of waste (in any form) at the site.
- All regulated waste (>250 kilos) must be removed from site must be transported by an approved waste transporter.
- All oversized rock/overburden material will be positioned in a manner that prevents any interference with drainage and/or onsite operations.
- Ensure that no waste is burnt unless approved by the DEHP.
- All waste generated as a result of a hydrocarbon spill, including contaminated soil, will be transferred to the Composting Pad and bioremediated with urea, super phosphorus and mulch.
- Ensure that the sealed holding tank in the toilet block is regularly pumped out to prevent on overtopping event.
- All waste spillages are to be managed in accordance with **Emergency Procedure 3 - Spill Management**.

Record Keeping

- The Site Manager is responsible for the recording of the movement of all waste offsite (use **Appendix 2, Form 1 – Daily Running Sheet**).
- Ensure that the removal of generated regulated waste is recorded as required by the provisions contained within the Part 4 of the *Environmental Protection (Waste Management) Regulation 2000*.

- Ensure that trackable wastes as defined in Schedule 1 of the *Environmental Protection (Waste Management) Regulation* 2000 are indeed tracked.
- Record and report all breaches of the standard conditions of the *Code of Environmental Compliance for Mining Lease Projects* to the DEHP (use **Appendix 2, Form 1 – Daily Running Sheet**).

Responsibility and Communication

- The Site Manager is responsible for the prompt notification to the Mine Facility Manager if prohibited wastes are brought onto the site.
- The Site Manager is responsible for the proper waste management of onsite waste. All waste generated must be sent to a facility that can reasonably accept such waste.
- All staff engaged in activities is responsible for implementing control measures.

Relevant Legislation

- *Environmental Protection Act 1994*;
- *Environmental Protection (Waste Management) Regulation 2000*; and
- *Waste Reduction and Recycling Act 2011*.

3 Emergency Procedures

<table>
<tr><th colspan="2">Emergency Procedure 1 - Fire Incident</th></tr>
<tr><td colspan="2">Environmental Commitment

• To ensure that in the event of fire ignition, all reasonable and practicable measures are taken to minimise or prevent environmental harm (including environmental nuisance).</td></tr>
<tr><td>Identification of Issues</td><td>Possible Impact</td></tr>
<tr><td>• A smoker onsite carelessly disposes of a lit cigarette or match.</td><td>• A fire starts and may spread to combustible material.
• If a smouldering fire is not noticed the unattended fire could spread uncontrolled.
• Release of particulate, ash and smoke and fumes which may cause environmental nuisance.</td></tr>
<tr><td>• Flammable waste has been stored haphazardly and has subsequently caught on fire.</td><td>• If not identified before end of day closing, fire could increase after hours and move into nearby grass and bushland.
• Movement of fire into neighbouring facilities which could create major damage and loss plus release of particulate, ash and noxious vapours.</td></tr>
<tr><td>• Tyres and waste are being stored on site and have caught on fire.</td><td>• Release of thick black smoke resulting in environmental nuisance being caused.
• Fire water contains contaminants (i.e. partially burnt rubber) that requires treatment offsite.
• Release of fire water resulting in environmental harm and enforcement action taken by the DEHP.</td></tr>
<tr><td>• Fire control equipment such as fire extinguishers, sprinklers has not been maintained and a fire has started in an onsite office or storage facility.</td><td>• Spread of fire to an uncontrollable level.
• Explosions of contained flammable or combustible liquids resulting in death.
• Extensive loss of property and equipment.
• Environmental harm and enforcement action taken by DEHP.</td></tr>
<tr><td colspan="2">Control Measures

• No flammable liquids are to be stored onsite (in quantities that require licensing by the Local Authority).
• No smoking is to occur in or around compost windrows.</td></tr>
</table>

- All water collection points need to be checked regularly to determine ability to access.
- Fire extinguishers are to be positioned in readily accessible points so that use in an emergency is not restricted.

Record Keeping

- If applicable material safety data sheets (MSDSs), describing the properties of the solid wastes being kept or handled on site and the appropriate first aid measures for them must be kept onsite and readily accessible to all site personnel.
- Any release to air from fire is to be reported to the DEHP via telephone as soon as practicable after becoming aware a release has occurred that is likely to result in environmental harm (including environmental nuisance at any odour or dust sensitive place).
- All releases to the air are to be recorded (refer to **Part B Appendix 2 - Form 13 – Odour Monitoring**) for the recording of any release.
- Air sensitive receptors must be monitored after an incident to determine if nuisance is occurring or likely to occur.
- If a complaint is received, utilise **Form 14 – Complaint Investigation Form** located in **Part B Appendix 2** for recording.

Responsibility and Communication

- All site personnel that are engaged in the abovementioned activities are responsible for ensuring control measures are met.
- The Site Manager is responsible for advising the DEHP of any event/incident that requires notification.
- The Site Manager is responsible for controlling the incident unless an administering authority, such as the Queensland Fire and Rescue or the DEHP takes control of an incident.
- The Site Manager is responsible for ensuring that all employees carry out appropriate measures as assigned.
- The Site Manager is responsible for carrying out any necessary action to minimise the effect of a release to air.
- The Site Manager is responsible for providing the DEHP with a written report detailing the incident, measures taken to prevent where possible or minimise environmental harm and the measure(s) that will be taken to minimise or prevent a recurrence of such an incident.

Relevant Legislation

- *Environmental Protection Act 1994.*

<table>
<tr><th colspan="2">Emergency Procedure 2 - Release to Waters</th></tr>
<tr><td colspan="2">Environmental Commitment:

• To ensure that any uncontrolled release to surface waters is minimised or prevented from causing environmental harm.</td></tr>
<tr><td>Identification of Issues:

• Release through a crack in the walls of one of the Freshwater Dam or sedimentation pond(s).
• Release through blockage within diversion drain.</td><td>Possible Impact:

• Release of sediment rich waters that may cause environmental harm.
• Enforcement action taken by the DEHP.</td></tr>
<tr><td>• Rainfall has been excessive resulting in a release over one or more of Freshwater Dam’s wall.</td><td>• Release of sediment rich waters.
• Environmental harm.
• Enforcement action taken by DEHP if other control measures have not been met to mitigate impact.</td></tr>
<tr><td>• Freeboard has not been maintained at > 500 mm.</td><td>• Rainfall has caused a release that ordinarily would not occur.
• Release of sediment ladened water.
• Environmental harm.
• Enforcement action taken by the DEHP.</td></tr>
<tr><td colspan="2">Control Measures:

• Ensure that extended weather forecasts are consulted to ensure Stormwater Containment Dam freeboard is sufficient to capture any imminent run-off.
• Ensure stormwater containment dams, bunds, batter slopes and or diversion channels are integral and that no cracks, gaps or erosion occurs.
• Immediately try to plug any crack or gaps observed in the dam walls or perimeter bund if safe to do so.
• Ensure that water quality is suitable before performing a controlled release (i.e. obtain a turbidity measurement that equates to a suspended solids value of 50 ppm).
• Use contained water to establish revegetation.</td></tr>
<tr><td colspan="2">Record Keeping:

• Record all volumes of any release to waters (refer to Appendix 2, Form 1 – Daily Running Sheet).
• Obtain DO, EC, Redox, Turbidity and pH of the Stormwater Containment Dam where the release is occurring from and at the release point on the perimeter of the Facility. Ensure meters are calibrated.
• Obtain a sample for suspended solids from the dam water.
• Go upstream of the release point and try to obtain a sample for suspended solids from the</td></tr>
</table>

water course that the release is discharging to. Measure DO, EC, Redox, Turbidity and pH insitu.

- Go down stream of the release point and obtain a sample for suspended solids. Measure DO, EC, Redox, Turbidity and pH insitu.

N.B. upstream and downstream samples will help determine the likelihood of environmental harm.

- Note any observations whilst collecting samples, such as fish kills, offensive odour, or gross contaminants (refer to **Appendix 2, Form 1 – Daily Running Sheet**).

Responsibility and Communication:

- All Facility employees that are engaged in the above mentioned activities are responsible for ensuring control measures are met.
- All releases of contaminants to waters that result in environmental harm must be brought to the attention of the DEHP via the telephone as soon as practicable after becoming aware that there has been a release that results or may result in environmental harm occurring.
- The Site Manager is responsible for notifying the Facility Manager immediately upon becoming aware that a release has occurred or a release is likely.
- The Facility Manager is responsible for notifying the DEHP in the first instance. The Site Manager will take responsibility if the Facility Manager is unable to do so.

Relevant Legislation:

- *Environmental Protection Act 1994*; and
- *Environmental Protection (Water) Policy 2009*.

<table>
<tr><th colspan="2">Emergency Procedure 3 - Spill Management</th></tr>
<tr><td colspan="2">Environmental Commitment

• To ensure that prompt attention is given to the cleaning up of spills, to minimise the likelihood of causing environmental harm.</td></tr>
<tr><td>Identification of Issues

• Stormwater runoff is allowed to come into contact with spilt substance resulting in generation of contaminated stormwater.</td><td>Possible Impact

• Generation of contaminated stormwater.
• Unnecessary contamination of stormwater.
• Possible release of contaminants to unsaturated ground zone, ground water, land and surface water.
• Possible enforcement action by the DEHP.</td></tr>
<tr><td>• Failure to contain spilled substance.</td><td>• Possible generation of contaminated stormwater.
• Unnecessary contamination of stormwater.
• Possible release of contaminants to unsaturated ground zone, ground water, land and surface water.
• Possible enforcement action by the DEHP.</td></tr>
<tr><td>• A spilt substance is allowed to sit and/or spread.</td><td>• Possible generation of contaminated stormwater.
• Unnecessary contamination of stormwater.
• Odour nuisance due to increased surface area whereby mass of released volatile odours has increased.
• Release of contaminants to unsaturated ground zone, groundwater, land and surface water.
• Possible enforcement action by the DEHP.</td></tr>
<tr><td colspan="2">Control Measures

• Ensure all spills are contained, collected and removed promptly.
• Always ensure sufficient quantities of spill kit materials are readily available to Facility employees to contain and recover spills.

Cleaning Up of oil/fuel Spills

• Only dry methods of clean-up will be used.
• As soon as possible spilt material should be contained as necessary so as it does not spread.
• The following is a typical list of materials and equipment to be used by site personnel in the event of a spill of material:</td></tr>
</table>

- Shovels;
- Yard brooms;
- Booms (on-ground or water);
- Kitty litter, sawdust;
- Screens/temporary fencing;
- Portable bin; and/or
- A wheelbarrow.

- If spill is significant block flow paths with soil moved by a front end loader.
- All land contacted in the event of spill will also be treated as spill waste.
- All hydrocarbon contaminated waste will be transferred to the Hardstand Pad for bioremediation with urea, super phosphate and mulch.

Record Keeping

- Record all volumes spilt and actions taken to remedy the spill (refer to **Appendix 2, Form 10 - Spill/Incident Notification Form**).

Responsibility and Communication:

- All Facility employees that are engaged in the abovementioned activities are responsible for ensuring control measures are met.
- The Site Manager is responsible for informing the Facility Manager immediately upon becoming aware of a spill.
- The Site Manager is responsible for ensuring that the appropriate procedures are adopted and implemented in a timely manner in the event of a spill (i.e. monitoring, reporting and repair).
- The Facility Manager is responsible for notifying the DEHP of all spills, in the first instance that may result or are likely to result in environmental harm. The Site Manager is responsible if the Facility Manager is unable to do so.

Relevant Legislation:

- *Environmental Protection Act 1994*;
- *Environmental Protection (Waste Management) Regulation 2000*; and
- *Environmental Protection (Waste Management) Policy 2000*.

Appendix 2

Forms and Checklists

Forms

Form 1 – Daily Running Sheet

Date	Time	Description of Daily Events Include extraordinary events such as non-compliances or emergencies, as well as the removal of all waste from the Facility and necessary information (transporter, volumes, etc.). This should link with information contained in other forms.

Form 2 - Daily Equipment / Machinery Start up Checklist

Date	Item	Any change in apparent noise output. If so what?	Any broken or loose fitting items.	Next service or calibration date.	Any fuel or liquid leakage.

Form 3 – Daily Weather Conditions

Date	**Description of Weather** **Note**: Incorporate any changes throughout the working day and include previous night time conditions.

Form 4 – Dust Suppression Form

Date	Area Covered	Duration of Sprinkling or Water cart Usage

Form 5 - Dust and/or Particulate Monitoring

(Page 1 of 2)

Date and Time / Initials	**Wind Direction**	**Wind Speed**	**Location of Dust Monitoring** (including whether upwind or downwind)	**Dust and/or Particulates Observed Migrating Beyond Boundary** (Yes/No and if yes, describe the extent)
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				
Saturday				
Sunday				

Dust and/or Particulate Monitoring

(Page 1 of 2)

Note:

Beaufort scale number	Descriptive term	Units (km/h)	Description on Land
0	Calm	0	Smoke rises vertically.
1-3	Light winds	19 km/h or less	Wind felt on face; leaves rustle; ordinary vanes moved by wind.
4	Moderate winds	20 - 29 km/h	Raises dust and loose paper; small branches are moved.
5	Fresh winds	30 - 39 km/h	Small trees in leaf begin to sway; crested wavelets form on inland waters.
6	Strong winds	40 - 50 km/h	Large branches in motion; whistling heard in telephone wires; umbrellas used with difficulty.
7	Near gale	51 - 62 km/h	Whole trees in motion; inconvenience felt when walking against wind.
8	Gale	63 - 75 km/h	Twigs break off trees; progress generally impeded.
9	Strong gale	76 - 87 km/h	Slight structural damage occurs -roofing dislodged; larger branches break off.
10	Storm	88 - 102 km/h	Seldom experienced inland; trees uprooted; considerable structural damage.
11	Violent storm	103 -117 km/h	Very rarely experienced - widespread damage.
12+	Hurricane	118 km/h or more	

Form 6 – Dissolved Oxygen, EC, Redox Potential, Turbidity and pH

Date and Description of location	Dissolved oxygen (DO) ppm or mg/l + Redox potential + EC		Turbidity (ntu) + pH	
	DO: Redox: EC:	Corrective action – if so what?	Turbidity: pH:	Corrective action – if so what?
	DO: Redox: EC:	Corrective action – if so what?	Turbidity: pH:	Corrective action – if so what?
	DO: Redox: EC:	Corrective action – if so what?	Turbidity: pH:	Corrective action – if so what?

Form 7 - Stormwater Performance Checklist

Date	Amount of Rainfall (mm)	Performance of Internal Drains. (Any cracks or blockages evident).	Performance of rip rap.	Performance of checked dams (location/number/functioning)	Integrity of perimeter bund	Any erosion on site or to the perimeter bund.	Repairs/ maintenance conducted (where/what)

Form 8 - Odour Monitoring

Date and Time and initials	Location	Intensity (1- 6)	Characteristics	Hedonic Tone	Duration (Seconds / Minutes)
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					

Note: **Intensity**: 0 = not perceptible; 1 = very weak; 2 = weak; 3 = distinct; 4 = strong; 5 = very strong; and 6 = extremely strong.
Characteristics: The character of the odour e.g. describing the odour as similar to rotten eggs or putrescible waste etc.
Hedonic tone: The degree to which the odour is perceived as pleasant or unpleasant rated on a scale of -50 to +50 see below (after T. Hummer *et al*, 1996):

-50	-40	-30	-20	-10	0	+10	+20	+30	+40	+50
Absolutely unpleasant		Unpleasant	Slightly unpleasant		Neutral		Slightly pleasant	Pleasant		Absolutely pleasant

Form 9 - Complaint Investigation Form

Note: The information on this form must be completed as soon as possible following a complaint. All details must be completed and the form filed and any necessary actions about resolution of the complaint must be filed with it.

Date and time of complaint: **……../……./…….……..am/pm**	**Approximate volume of any releases?** **……litres**
Is the cause of the complaint presenting any immediate safety risk to others? E.g. other bystanders? If so has the Police or QFRS been notified? Call 000 if there is any possible safety risk. **Action(s) taken?** **…….** **……**	**Regulated Waste Transport Registration Certificate Number (if applicable)** **Vehicle type……** **…….** **Vehicle Registration Number……..**
Name and contact phone number of complainant, (record as "anonymous", if no contact details are provided by the complainant): **(Mobile) …….** **(Landline) ……**	**Location of complainant:** **Street address……** **…….** **Location description…….** **…….**
Name and contact phone number of the Manager responsible: **(Mobile) …….** **(Landline) ……**	**Suspected cause of complaint:** **…….** **…….** **…….**
Has a sample of been collected? YES / NO If a compliant involves a substance that has been released if possible, collect a sample in the sample container. Ensure sample is marked with the date, time and name of the person taking sample. Ensure sample is handed to the Manager responsible.	**Have any actions been taken to minimise/mitigate the environmental effects causing the complaint? E.g. activities suspended/ceased?** **…….** **…….** **…….** **Has this action been successful?** Not at all / somewhat / prevented further release(s)

Form 10 - Spill/Incident Notification Form

Note: In the event of a spill/incident DEHP must be called on 1300 130 372 and advised by telephone of the basic information regarding the spill/incident. The information on this form must be completed as soon as possible following a spill or incident. All details must be completed and the form faxed to DEHP to the number advised when reporting by telephone.

Date and time of spill/incident: ……../……../…… ……am/pm	**Approximate volume of the spill or area affected?** ……..litres/m^2
Is the spill/incident presenting any immediate safety risk to others? E.g. other road users or bystanders? If so has the Police or QFRS been notified? Call 000 if there is any possible safety risk. **Action(s) taken:** ……... ……...	**Regulated Waste Transport Registration Certificate Number (if applicable)** …… **Vehicle Type**…… …… **Vehicle Registration Number** ……
Name and contact phone number of driver of the vehicle: ……... **(Mobile)**…….....	**Suspected cause of spill/incident:** …… ……
Name and contact phone number of the Manager responsible: ……... **(Mobile)** ……... **(Landline)** ……	**Location of spill/incident:** **Street address**…….. ……..... **Location description**…… …….....
Have any samples been collected? YES / NO If a contaminant is being released to the air or water after a spill, collect a sample in a sample container or take a photograph of the release to the air or water. Ensure sample is marked with the date, time and name of the person taking sample. Ensure sample is handed to the Manager responsible.	**Have any actions been taken to minimise/mitigate the environmental effects of the spill/release incident? E.g. blocked drains.** ……..... ……..... **Has this action been successful?** Not at all / Somewhat / Prevented further release(s)

Form 11 - Continuous Improvement Form

See reverse for instructions on how to complete.

DATE:	**ACTIVITY:**
IDENTIFIED BY:	**IDENTIFIED TO:**
ISSUE: **RATIONALE:**	
PROPOSED RESOLUTION:	
SUPERVISOR'S COMMENTS:	
FOLLOW-UP/RESOLUTION (please date):	
SIGNATURE OF IDENTIFIER	**SIGNED (Site Manager)** **DATE ISSUE RESOLVED**

Copies:

- Original to staff member who lodged form;
- Copy to supervisor for personnel file; and
- Copy to be brought forward as agenda item for staff meetings.

Continuous Improvement Form Instructions

DATE: Date that staff member completed form.	**ACTIVITY:** Onsite activity/work area
IDENTIFIED BY: Name of staff member**.**	**IDENTIFIED TO:** Supervisor or Manager (Supervisor would bring this to weekly/monthly meeting, and discuss as part of agenda).
ISSUE: Staff member succinctly identifies issue (what, how, when, who, where), giving sufficient details of the concern. **RATIONALE:** Staff member identifies why he/she feels it is an issue. Provides some detail regarding history, implications, consequences.	
PROPOSED RESOLUTION: Staff member identifies his/her suggestions to resolve this issue. Provides details regarding benefits, costs, implications, time lines, responsibility, and accountability to enact recommendation.	
SUPERVISOR/MANAGER'S COMMENTS: Supervisor could make comments to support or endorse idea, or may note other opinions. May provide details regarding benefits, costs, implications, time lines, responsibility, and accountability to enact recommendation**.**	
FOLLOW-UP/RESOLUTION (please date); Leadership team reviews the issue and resolution. May direct issue and recommendations to other work areas (i.e. Building facilities, OH&S, HR, Admin) who would then be responsible to follow up with investigation of issue and possible changes). In this area the leadership or those assigned would respond to issue, noting action taken, or not taken and rationale.	
SIGNATURE OF IDENTIFIER(s)	**SIGNED (Site Manager)** **DATE ISSUE RESOLVED:** *Note that there should be a set timeline to respond to the issue

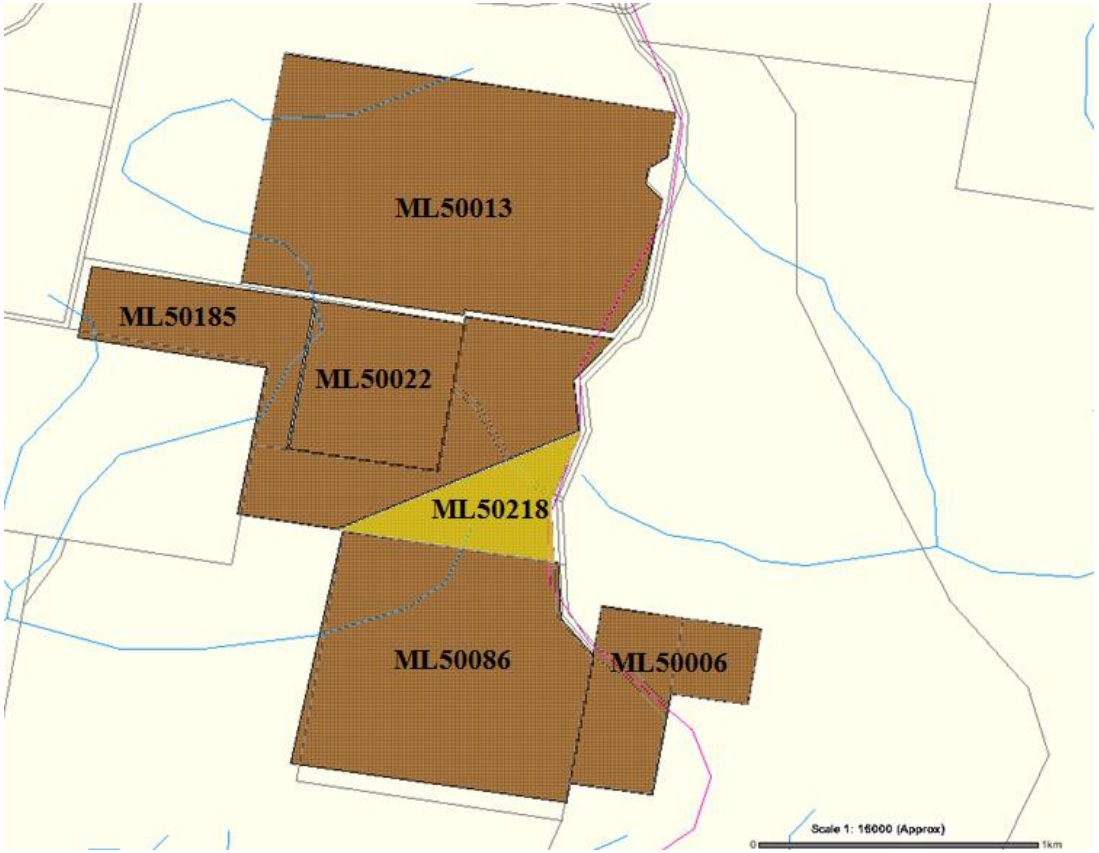
Copies:

- Original to staff member who lodged form.
- Copy to supervisor for personnel file.
- Copy to be brought forward as agenda item for staff meetings.

Appendix 3

Figures

Figures

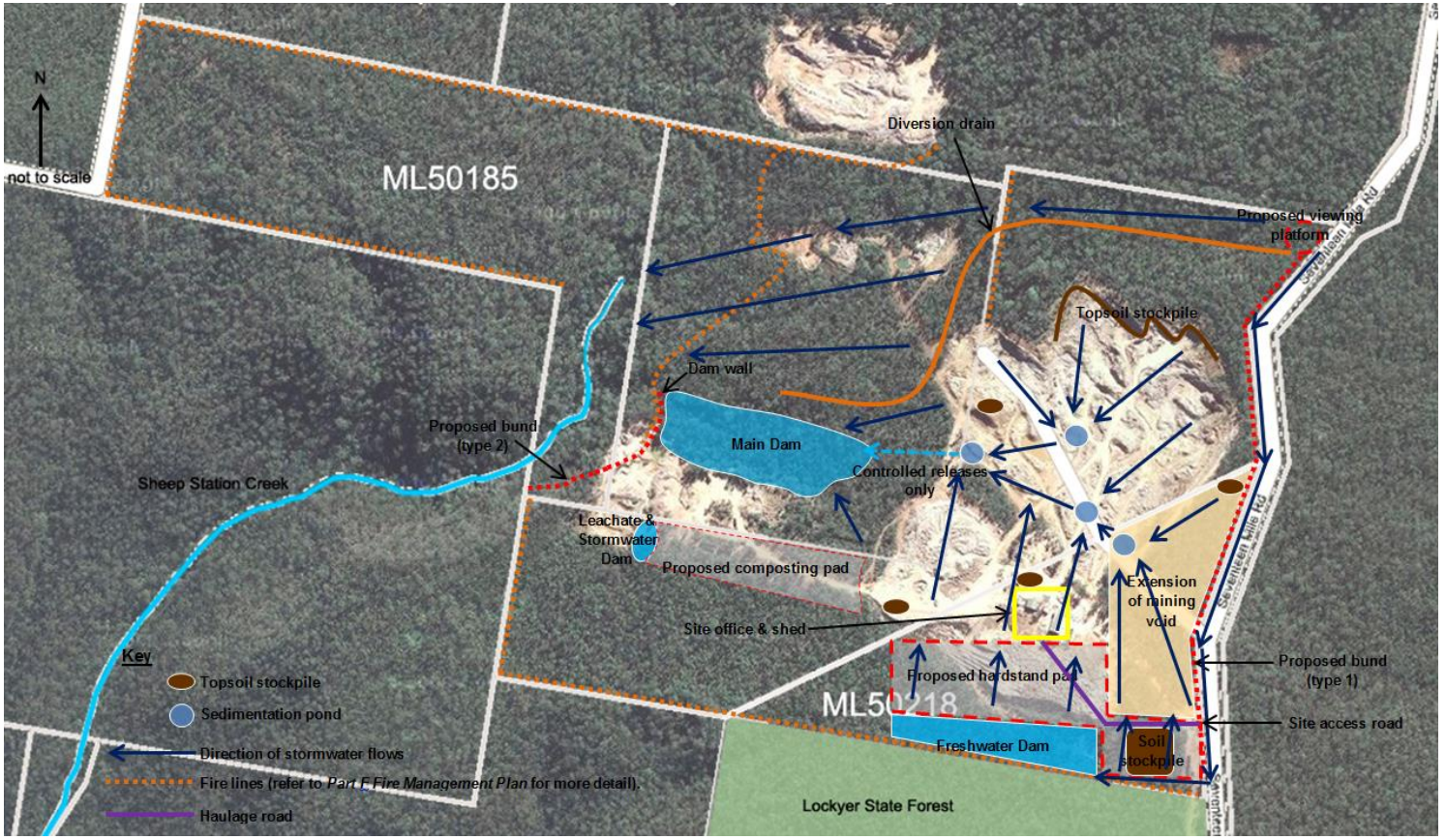


Appendix 3 - Figure 1: ML 50218 and adjoining mining leases

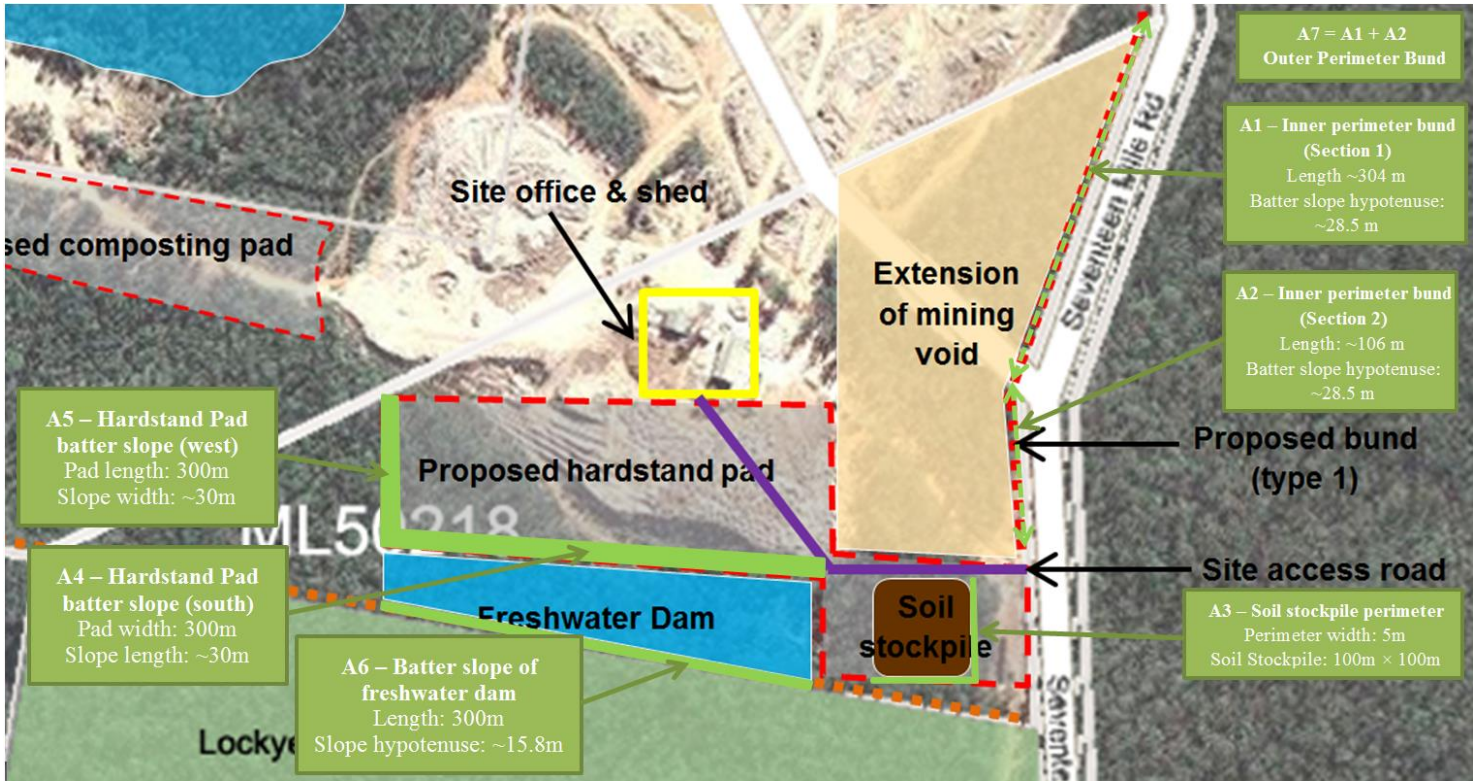
The above figure has been taken from the IRTM (© The State of Queensland Department of Natural Resources and Mines).

Appendix 3: Figures

Appendix 3 - Figure 2: Facility layout

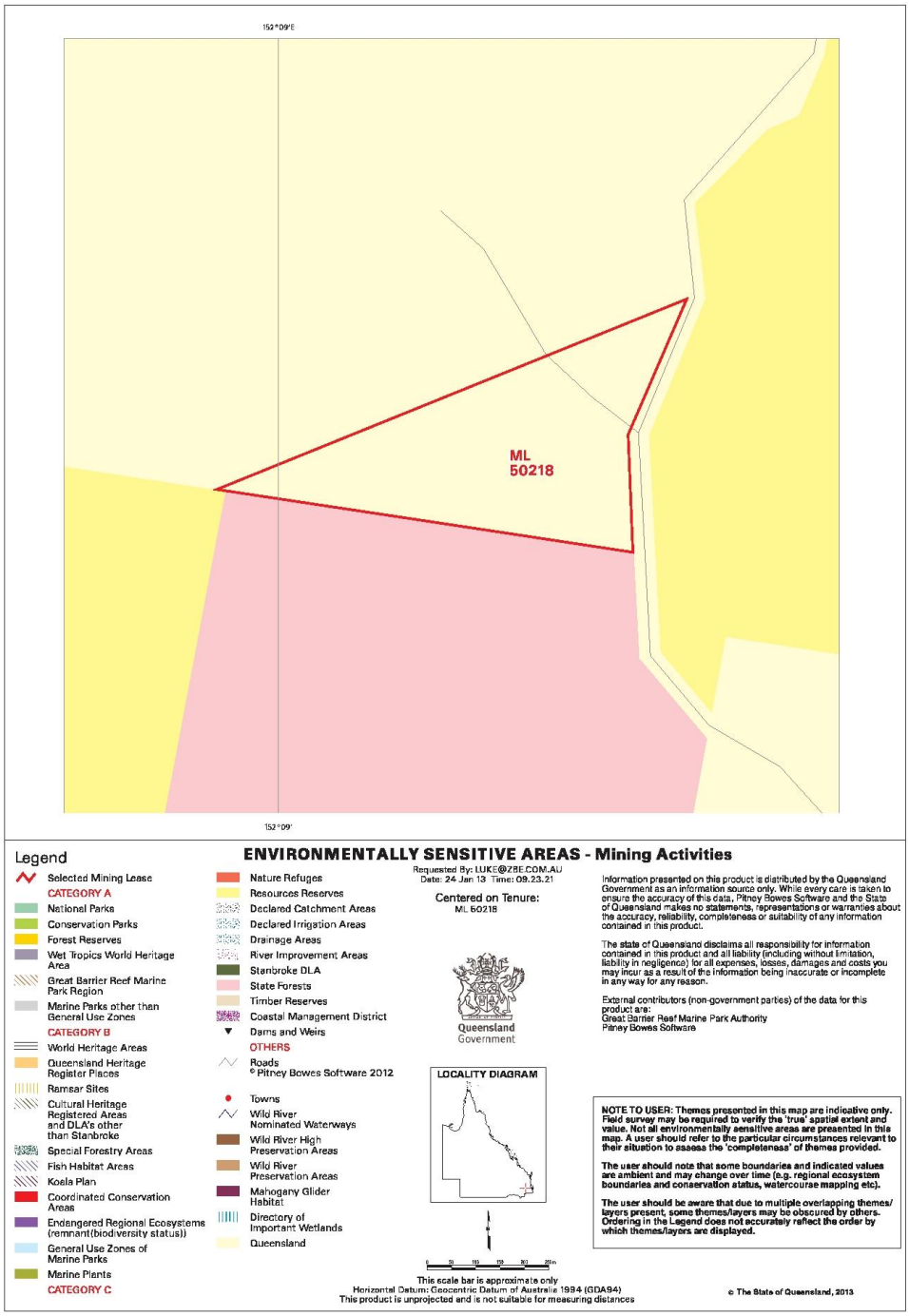


Appendix 3 - Figure 3: Stormwater management diagram



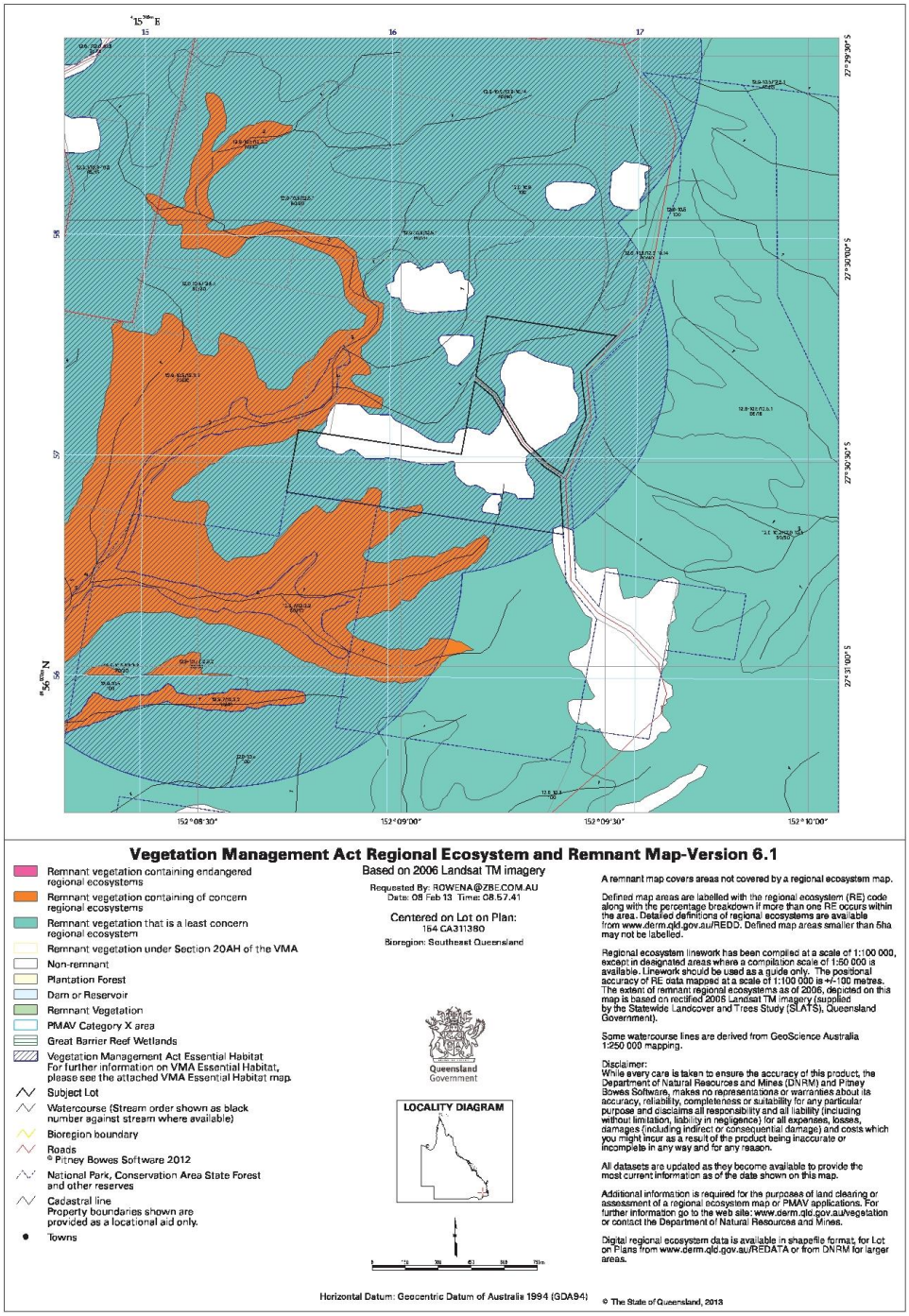
Appendix 3 - Figure 4: Rehabilitation areas

Appendix 3: Figures



Appendix 3 - Figure 5: Environmentally Sensitive Area Map of ML50218

Appendix 3: Figures



Appendix 3 - Figure 6: Regional Ecosystem and Remnant Map of Lot 154 on Plan CA311380

Appendix 4

Compliance with CEC for Mining Lease Projects and Audit Template

The LZ Environmental Company Pty Limited

T/A Zambelli Environmental

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
C1 The holder of the Environmental Authority must submit to the administering authority a Plan of Operations for the mining lease, at least 28 days prior to carrying out any activities on site, unless a shorter period is approved by the administering authority.	• A PoO (this document) has been developed to demonstrate compliance.	• Submit this PoO and request consideration be given to the expedition of the approval process.	• Yes	• Ongoing.	• It is expected that approval will be granted based on the information contained within this PoO.
C2 The holder of a new environmental authority must submit the required amount of *Financial Assurance* (i.e. a security deposit) to the administering authority prior to carrying out any activities on the mining lease. If the holder of the environment authority submits an application to amend the plan of operations or submits a new plan of operations, they must also submit an application to amend their financial assurance to the administering authority. If an application is lodge to transfer the environmental authority to another person or company, the proposed transferee must submit the required financial assurance prior to the transfer taking effect.	• The financial assurance for the area of ML50218 has been set at $17,200.00. • Ensure that a bank guarantee for this amount is in place 28 days prior to the commencement of mining.	• Ensure that bank guarantee is in place 28 days prior to the commencement of mining. • The amount of financial assurance has been calculated in accordance with the *Guideline - Mining - Calculating financial assurance for mining projects*. • The FA has been calculated based the area of the site requiring revegetation and associated activities.	• Yes	• Ongoing. • Report as and when required.	
C3 The holder of the environmental authority must ensure that the area and duration of disturbance to land and vegetation are minimised.	• The disturbance of land and vegetation must be kept to a minimum throughout operations. • Ensure that disturbance to land and vegetation beyond that indicated in **Appendix 3 - Figure 2: Facility layout** does not occur. The area of disturbance will not	• The disturbance of land and vegetation must be kept to a minimum throughout operations. • Unnecessary disturbance to land and vegetation will not occur. • Ensure that disturbance to land and vegetation beyond that indicated in	• Yes	• Ongoing. • Record level of disturbance as and when required.	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
	increase.	**Appendix 3 - Figure 2: Facility layout** does not occur. The area of disturbance will not increase. • Record the amount of area disturbed. Take photographic records. Ensure to date the photo images.			
C4 The holder of the environmental authority must not cause an *Unreasonable Release** of dust.	• Ensure dust is managed as specified with the **Workplace Procedure 1 - Dust and Particulate Management** (refer to **Appendix 1**). • Ensure regular dust suppression occurs on hardstands and internal roadways. • Ensure that the bund wall adjacent to Seventeen Mile Road is installed, to provide a wind break.	• Implement the control strategies outlined within **Workplace Procedure 1 - Dust and Particulate Management** (refer to **Appendix 1**). • Ensure appropriate PPE is worn as and when required.	• Yes	• Ongoing. • Report as and when required.	
C5 The holder of the environmental authority must not cause *Unreasonable Noise** at a *Noise Sensitive Place**.	• Do not perform activities outside the hours of 6 am – 6 pm Monday to Sunday (excluding public holidays) that may result in noise nuisance to sensitive receptors. • Ensure noise is managed as specified with the	• Implement the control strategies outlined within **Workplace Procedure 5 - Noise Management** (refer to **Appendix 1**). • Ensure outside hour activities that may create environmental nuisance does not occur.	• Currently yes.	• Ongoing. • Report as and when required.	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
	Workplace Procedure 5 - Noise Management (refer to **Appendix 1**).				
C6 The holder of the environmental authority must design, install and maintain adequate banks and/or diversion drains to minimise the potential for stormwater runoff to enter area disturbed by mining activities.	• Ensure the stormwater control system is in place as specified within **Workplace Procedure 4 - Stormwater Management** (refer to **Appendix 1**). • Ensure that batter slopes and drainage channels are in place to prevent the ingress of clean stormwater into the mining void or hardstand pad.	• Implement the control strategies outlined within **Workplace Procedure 4 - Stormwater Management** (refer to **Appendix 1**). • If considered necessary (unlikely however), ensure check dams, sedimentation ponds and sediment fencing is in place.	• Currently yes.	• Ongoing. • Report as and when required.	
C7 The holder of the environmental authority must design, install and maintain adequate erosion and sediment control structures whenever necessary to prevent or minimise erosion of disturbed areas and the sedimentation of any *Watercourse**, *Waterway**, *Wetland* or *Lake**.	• Ensure stormwater control system is in place as specified within **Workplace Procedure 4 - Stormwater Management** (refer to **Appendix 1**). • Identify flow paths prior to the installation of sediment and erosion control devices. • Sediment and erosion control devices must be installed as specified so as to be effective. • Regular maintenance must occur to ensure sediment and erosion control devices are performing as intended.	• Implement the control strategies outlined within **Workplace Procedure 4 - Stormwater Management** (refer to **Appendix 1**). • Ensure that flow paths have been identified prior to the installation of sediment and erosion control devices. • Ensure that devices have been installed properly.	• Currently yes.	• Ongoing. • Report as and when required.	
C8 The holder of the environmental authority	• Topsoil has been removed	• Ensure that the topsoil	• Currently	• Ongoing.	

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
must ensure that *Topsoil** is removed and stockpiled prior to carrying out any mining activity. Prevent or minimise the mixing and erosion of topsoil and *Overburden** stockpiles.	separately from the general overburden. • Ensure that the topsoil stockpiles are maintained to prevent mixing with general overburden or other materials.	stockpiles are maintained to prevent mixing with general overburden or other materials.	yes.	• Report as and when required.	
C9 The holder of the environmental authority must plan and conduct activities on site to prevent any potential or actual release of a *Hazardous Contaminant**.	• No hazardous contaminants are to be stored for use. • No storage of fuel for the plant or equipment will occur.	• All refuelling activities will be conducted via a mobile refuelling vehicle.	• Currently yes.	• Ongoing. • Report as and when required.	
C10 The holder of the environmental authority must ensure that spills of hazardous contaminants are cleaned up as quickly as practical. Do not clean up such spillage by hosing, sweeping or otherwise releasing contaminants to any watercourse, waterway groundwater, wetland or lake.	• No hazardous contaminants are to be stored.	• Ensure no hazardous contaminants are stored. • Refer to **Emergency Procedure 3 - Spill Management** for detail on the management of fuel spills (refer to **Appendix 1**).	• Yes	• Ongoing. • Report as and when required.	
C11 The holder of the environmental authority must, where practical, separate acid producing waste rock from the benign waste. Acid producing rock may be temporarily stockpiled in the catchment of the tailings dam, in a mine excavation or in an impermeable bunded area with a restricted catchment.	• No acid waste rock will be produced.	• N/A	• Yes	• Ongoing. • Report as and when required.	
C12 The holder of the environmental authority must dispose of the acid producing waste rock in the tailings dam or mine excavation and backfill as soon as practical. Where not practical, bury acid producing waste in an excavation or pit and backfill as soon as practical. Backfill all mine	• No acid waste rock will be produced.	• N/A	• Yes	• Ongoing. • Report as and when required.	

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
excavations, other excavations and pits containing acid producing waste rock with benign, low permeability material and seal the mine excavation, other excavation or pit with a compacted capping layer at least 1m thick.					
C13 The holder of the environmental authority must prevent the spread of *Declared Plants** by ensuring that all vehicles and machinery are adequately cleaned before taking the vehicles and machinery out of a *Declared Plant Area**.	• All plant and equipment that has the potential to spread declared plants must be effectively decontaminated prior to exiting a declared plant area.	• Ensure decontamination occurs as and when required. • Refer to the *Queensland checklist for cleandown procedures*, available from the DAFF website.	• Yes	• Ongoing. • Report as and when required.	
C14 The holder of the environmental authority must not carry out activities: 1. in, or within 2 km of, category A environmentally sensitive area; or 2. in, or within 1 km of, category B environmentally sensitive area. Prior to carrying out any activities in a category C sensitive area, the holder the environmental authority must consult with the relevant administering authority. If it is determined through consultation that additional conditions are necessary, the holder must comply with these conditions.	• Mining will not occur within: o 2 km of a Category A environmentally sensitive area; o 1 km of a Category B environmental sensitive area; or o A Category C environmental sensitive area. • The administering authority was consulted about the proximity of mining activities to a Category C area and no further conditions have been set.	• N/A	• Yes	• Ongoing.	
C15 The holder of the environmental authority must not carry out activities within 100m of an identified *Historical**, *Archaeological**, *Ethnographic** site.	• N/A	• N/A	• Yes	• Ongoing.	No known historical, archaeological or

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
					ethnographic sites exist on ML50218.
C16 The holder of the environmental authority must not carry out the following Level 2 *Environmentally Relevant Activities** (ERA) on the mining lease: ERA(7) Chemical Storage – storage of chemicals (other than crude oil, natural gas and petroleum products) including ozone depleting substances, gases or dangerous goods under the dangerous goods code in containers with a design storage volume of more than $10m^3$ but less than $1000m^3$; ERA(76) Incinerating Waste – operation of a waste incineration facility for incinerating: (a) vegetation; (b) clean paper or cardboard; ERA (77) Battery Recycling – operation of a facility for receiving and recycling or reprocessing any kind of battery; ERA (80) Tyre Recycling – operating a facility and commercially recycling or reprocessing tyres (other than retreading tyres).	• None of these listed ERAs are or will occur on ML50218.	• Ensure no ERA is performed unlawfully.	• Yes	• Ongoing. • Report as and when required.	
C17 The holder of the environmental authority must consult with the *Landowner** prior to establishing any new roads and tracks.	• N/A as no new tracks or roads will be required to be created.	• N/A	• Yes	• Ongoing.	
C18 When constructing new roads and tracks, the holder of the environmental authority must ensure that the area and duration of the disturbance to land, vegetation and watercourses is minimised.	• N/A as no new tracks or roads will be required to be created.	• N/A	• Yes	• Ongoing.	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
C19 The holder of the environmental authority must consult with the landowner prior to establishing any *Campsites**.	• N/A no new camp sites will need to be created.	• N/A	• Yes	• Ongoing as required.	
C20 When establishing and maintaining a campsite, the holder of the environmental authority must ensure that the area and duration of the disturbance to land, vegetation and watercourses is minimised.	• N/A no new camp sites will need to be created.	• N/A	• Yes	• Ongoing as required.	
C21 The holder of the environmental authority must not directly release waste from the project area to any watercourse, waterway, groundwater, wetland or lake.	• No waste will be released to a watercourse. • Ensure all waste is managed as specified within **Workplace Procedure 6 - Waste Management** (refer to **Appendix 1**).	• Implement the control strategies outlined within **Workplace Procedure 6 - Waste Management** (refer to **Appendix 1**). • Ensure that waste is not directly or indirectly to a water course or drainage channel.	• Yes	• Ongoing. • Report as and when required.	
C22 The holder of the environmental authority must not dispose of more than 50 tonnes of *General Waste** per year on the mining lease.	• No general waste will be disposed of on site.	• N/A	• N/A	• N/A	
C23 The holder of the environmental authority must operate, maintain and decommission all dams in accordance with the criteria outlined in Appendix B. The holder of the environmental authority must build dams, other dams commenced before 1 January 2001, in accordance with the design and construction criteria outlined in Appendix B.	• N/A Freshwater Dam will only be approximately 2.5 metres deep and have a capacity of 30ML.	• N/A	• N/A	• Ongoing.	
C24 The holder of the environmental authority must not directly or indirectly release waste water from the mine or process plant to any watercourse, waterway, groundwater, wetland or lake. This condition does not apply for alluvial miners operating mobile processing plants in	• No waste water will be released to a watercourse. • Ensure all waste water is managed as specified within **Workplace Procedure 6 -**	• Implement the control strategies outlined within **Workplace Procedure 6 - Waste Management**(refer to	• Yes	• Ongoing. • Report as and when required.	

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
flowing water. Alluvial miners operating mobile processing plants in flowing waters must discharge waste water into an in-stream settlement pond (refer to condition 39 for design requirements of in-stream settlement ponds).	**Waste Management** (refer to **Appendix 1**).	**Appendix 1).** • Ensure that waste water is not directly or indirectly released to a water course or drainage channel.			
C25 The holder of the environmental authority must prevent the release fuels, oils, lubricants or other *Contaminants** to any watercourse, waterway, groundwater, wetland or lake.	• No fuel will be stored on site. • All oil containers will be stored within a bunded area. • All spills will be managed as specified within **Emergency Procedure 3 - Spill Management** (refer to **Appendix 1**).	• All spills must be managed as specified within **Emergency Procedure 3 - Spill Management** (refer to **Appendix 1**). • Record the amount of waste oil and lubricant that is removed off site as specified within **Workplace Procedure 6 - Waste Management** (refer to **Appendix 1**). • For volumes >250 litres a regulated waste transporter should be utilised for the transport of waste oil and lubricants.	• Yes	• Ongoing. • Report as and when required.	**Note**: No fuel will be stored on site and a mobile refuelling vehicle will be utilised for the refuelling of plant and equipment.
C26 The holder of the environmental authority must ensure that all chemical, fuel and oil storage facilities less than 10,000L on a mining lease, must be designed and operated in accordance with Australian Standard 1940 – 'The storage and handling of flammable and combustable liquids', Section 2, Minor Storage.	• All storage will occur in accordance with AS1940.	• Ensure oil and lubricants are stored within bunded areas.	• Yes	• Ongoing.	
C27 The holder of the environmental authority must ensure that: 1. all chemical, fuel and oil storage facilities of	• No chemical, fuels or oils will be stored on site at such quantity.	• N/A	• Yes	• Ongoing.	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
more than 10,000L on a mining lease, must be bunded to contain at least one hundred percent of the volume of the largest container; plus twenty-five percent of the storage capacity of the largest container up to a maximum of 10,000L, together with ten percent of the storage capacity beyond 10,000L; and 2. the facility must be operated and maintained in accordance with the Australian Standard 1940 – 'The Storage and Handling of flammable and combustable liquids'.					
C28 The holder of the environmental authority must record and notify the administering authority of any emergency or incident that demonstrates non-compliance to the standard environmental conditions.	• Ensure all emergencies or incidents that demonstrate noncompliance with the standard environmental conditions are recorded and the DEHP notified as specified within the workplace procedures (refer to **Appendix 1**).	• Implement record keeping and notification of the DEHP as outlined within the workplace procedures (refer to **Appendix 1**).	• Yes	• Ongoing. • Report as and when required.	
C29 In *Riverine Areas**, the holder of the environmental authority must complete the rehabilitation process on areas disturbed by mining activities, apart from those areas currently being utilised for mining activities, as soon as practical and prior to the onset of the following wet season.	• N/A	• N/A	• N/A	• N/A	
C30 For all other areas, the holder of the environmental authority must complete the rehabilitation processes on areas disturbed by mining activities, apart from those areas currently being utilised for mining activities, as soon as practical and within six months of the completion	• Rehabilitation of the void will not occur until after the completion of extraction and screening activities (ERA 16).	• Follow Rehabilitation commitments provided within section 6 of this EMP. • Ensure landowner's	• Yes	• Ongoing. • Report as and when required.	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
of works in those areas.	• Obtain landowner signs off on infrastructure to remain after activities have been completed.	signature has been obtained for infrastructure to remain.			
C31 The holder of the environmental authority must backfill excavations less than 3m deep, with overburden and waste rock as soon as practical following the completion of mining activities.	• Excavations will be backfilled when rehabilitation commences after the completion of extraction and screening activities (ERA 16).	• Ensure all excavations less than 3m deep are filled are the completion of extraction (ERA 16).	• Yes	• Ongoing. • Report as and when required.	
C32 Where it is impractical to return overburden and waste rock to excavations deeper than 3m, the holder of the environmental authority must construct overburden and waste rock stockpiles in accordance with Condition 34.	• Mining void will not be rehabilitated until the completion of extraction and screening activities (ERA 16). • All non-export grade rock remaining from mining activities will be extracted and screened for on sale. • All overburden will be utilised to create the perimeter bund and hardstand pad, which will stay in place through the duration of extraction activities.	• Ensure all non-export grade rock is extracted for on sale. • Ensure all overburden is utilised to create the perimeter bund and hardstand pad. • Ensure the perimeter bund remains in place until extraction activities have ceased.	• N/A	• N/A	
C33 For excavations that are to remain at the completion of mining activities, by agreement with the land holder, and will be used as livestock water drinking supplies, the holder of the environmental authority must: (1) ensure that water quality in any remaining excavation complies with the acceptable	• N/A the Freshwater Dam is to remain, but not for the purposes of livestock watering. • In the event, that it should be utilised for livestock watering (unlikely) water	• N/A	• N/A	• N/A	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
water quality *Guidelines for Livestock Drinking Water** as detailed in the Australian and New Zealand Guidelines for Fresh and Marine Water Quality; and (2) provide safe access for livestock and native animals to the excavation.	quality will be managed so as to comply with Guidelines for Livestock Drinking Water; and • Safe access to the dam will be provided.				
C34 The holder of the environmental authority must rehabilitate areas disturbed by mining activities to a stable landform, similar to that of the surrounding undisturbed areas.	• After the completion of extraction activities the site will be rehabilitated to a stable landform.	• Ensure that all infrastructure relating to extraction remains until extraction activities have ceased. • Ensure that ML50218 is rehabilitated to a stable landform after extraction activities have finished. • Ensure current rehabilitation commitments are carried out.	• Yes	• Ongoing. • Report as and when required.	
C35 The holder of the environmental authority must spread seeds or plant species that will promote vegetation of a similar species and *Density of Cover** to that of the surrounding undisturbed areas or vegetation that is appropriate for providing erosion control and stabilisation of the disturbed areas.	• Rehabilitation activities will occur as specified within **Workplace Procedure 2 – Revegetation and Stabilisation** (refer to **EMS, Part A – Rehabilitation Plan, Appendix 2**). • Plant species endemic to the local area will be collected and propagated and or purchased for revegetation of the site. • Nurseries providing the	• Ensure the control strategies outlined within **Workplace Procedure 2 – Revegetation and Stabilisation** (refer to **EMS, Part A – Rehabilitation Plan, Appendix 2**) are implemented as and when required.	• Yes	• Ongoing. • Report as and when required.	

Appendix 4: Compliance with the CEC for Mining Lease Projects and Audit Template

Code Condition	Control Strategy	Action Program	Compliance	Audit Frequency	Audit Comments/ Detail
	same endemic species will be utilised to maintain diversity if necessary.				
C36 For any *Mine Infrastucture** to remain after all mining activies have ceased, the holder of the environmental authority must obtain the written agreement of the land owner stating they take over responsibility for that infrastructure.	• The landholder will be consulted at the time of surrender.	• Ensure landowner is consulted prior to the surrender of the ML.	• Yes	• Upon completion of mining. • Report as and when required.	
C37 For underground mining works, the holder of the environmental authority must determine the need and design of bat gates by consulting the administering authority. If bat gates are required, install the appropriate structures. Where a bat gate is not required by the administering authority prevent access to the underground workings.	• N/A	• N/A	• N/A	• N/A	
C38 The holder of the environmental authority must complete the rehabilitation of areas disturbed by mining activities to the satisfaction of the administering authority.	• Rehabilitation must be performed to the satisfaction of the administering authority.	• Prior to vacating the site, the administering authority must observe the rehabilitation. • Obtain photographic evidence.	• Currently yes.	• Prior to vacating the tenement. • Report as and when required.	

Appendix 5

Beaumont Transport Rehabilitation Quote

BEAUMONT TRANSPORT PTY LTD
ABN 48 010 586 286

540-604 Warrego Highway
North Tivoli Qld 4305

Telephone:
Office: (07) 3281 6744
Despatch: (07) 3282 7777
Fax: (07) 3812 3582

21st June 2010

Mr Allan Payne

Scotbar Pty Ltd

Level 1, 1925 Logan Road

UPPER MT GRAVATT. QLD 4122

Re: Mining Leases No. 50185 and 50218

This letter serves as a quotation for rehabilitation that is required for mining activities being carried out on mining leases 50185 and 50218, which are located on Scotbar Pty Ltd land being lot 95 on CSH352, and lot 154 on CA311380 Parish of Helidon.

The quote surrounds scarifying the soil surface and spreading overburden grass and tree seeds over disturbed area of 5 hectares.

The quote for the above works will be $2,800.00 per hectare PLUS GST.

If you have any queries, please contact me on (07) 3281 6744.

Yours faithfully

R.R. Beaumont

RICHARD BEAUMONT

Managing Director

BEAUMONT TRANSPORT PTY LTD

Part B

Site Environmental Management Plan (SEMP)

for

Scotbar Pty Ltd

Located at Seventeen Mile Rd, Helidon Qld , Australia

On ML 51085

Written by

The LZ Environmental Company Pty Ltd

The LZ Environmental Company Pty Limited
T/A Zambelli Environmental
Luke Zambelli B.Eng (Env)
Mobile: 0431 27 28 24
luke@zambellienvironmental.com.au

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Abstract

Australian soils are regarded in the majority as poor in relation to fertility. Often, organic matter is only present in minute amounts, compared to younger soils in Scandanavia for example. As such, huge amounts of fertiliser are required to sustain crop, pasture and tree growth in some parts of Australia for food and wood production. Additionally, the poor methods of application of fertilisers adopted can cause vast quantities of inorganic nutrients to contaminate our waterways.

Recycled organics can assist in fertiliser management and provide for other benefits to our soils as well. In particular, increasing the soil organic matter by the addition of compost increases the water holding capacity of soil which is becoming more desirable as water shortages in highly populated eastern coastal areas of Australia are at a critical low point.

1 Introduction

The requirement to rehabilitate mine sites is forever becoming a topic of concern for the public. The public expects that mine sites are rehabilitated to ensure the environment and the visual amenity is not in any way detracted. It is essential that when mine site rehabilitation occurs, consideration to site particular information such as the soil type is given. The difference as to whether rehabilitation is successful or not with regards to the vegetation that is planted can often be related to how healthy the soil for the establishment of vegetation is. Often soil disease can influence a result of success.

Disease can be introduced by utilising inappropriate compost and soils that are not created with the end use in mind. As such differing types of compost are required for the establishment of grasses and forests. Whilst one requires bacteria dominated soils or composts, the other requires a domination of fungi. Both scenarios require microbial diversity to ensure the food web is

adequately represented so that pathogenic organisms cannot flourish and create poor conditions for growth.

This document provides procedures and information surrounding the creation of soils and soil conditioners for the purpose of vegetation succession at the Helidon mining leases operated by Scotbar Pty Ltd This part follows on from Part A and makes up part of the information provided for in the plan of operations surrounding mining leases ML 50185 & ML 50218 and is referred to as ***Part B - Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd at Seventeen Mile Rd, Helidon, Qld, Australia***

Composting has been a method of treating wastes to provide fertility to soils for centuries. With rapid population growth in modern society, there is a need for waste present as an externality to be effectively managed to reduce the burden for current and future generations. With intra and intergenerational equity in mind, waste sustainability can be achieved by utilising wastes through composting.

The function of effective composting is to process organic material while utilising best practice environmental methods to transform the wastes into humus. As such, waste materials should be sought on their ability to generate humus. Scotbar intends to create various soil and compost products to be utilised in site rehabilitation

The waste requested to be received at the facility are listed below in *Table 1.* The acceptance of such waste will allow Scotbar to produce various types of compost to be utilised in site rehabilitation. Further to the above this document both acts as supporting Information for an amendment to the existing mining authority and as a Site Environmental Management Plan

(SEMP) for creating compost and conditioned soils, inclusive of the waste streams being proposed.

From a legislative perspective, the waste management hierarchy as shown in section 10 of the *Environmental Protection (Waste Management) Policy 2000* sets the objectives for sustainable waste management which are relevant to the making of certain environmental decisions concerning waste. The hierarchy represents a framework for prioritising waste management practices to achieve the best environmental outcomes. In the absence of waste avoidance, composting various waste streams represents a waste management practice second on the preferred order of adoption in the waste management hierarchy.

Differing waste materials require unique blends to efficiently compost. Whilst innovation is the key to a successful operation, the following SEMP details control methods that are to be adopted at the Helidon facility to generate soil conditioners. Adherence to this plan will assist site personnel in the generation of soil conditioners for use in site rehabilitation.

The SEMP details how the acceptance of the waste items to create compost and soil conditioners will meet the aims of the Queensland Government's environmental policies and comply with exiting environmental management legislation. Practices conducive to Best Practice Environmental Management (BPEM) will be adopted, to reduce the risk of the activity causing environmental harm.

Workplace and Emergency Procedures are contained within **Appendix 1** of this SEMP with the associated forms and checklists utilised for recording contained within **Appendix 2**. Scotbar believes it demonstrates best practice environmental management (BPEM) for the composting

facility at Helidon through the use of unique Workplace Procedures located in **Appendix 1**. It is essential that onsite personnel become familiar with the information contained within.

Before describing the Workplace Procedures, focus will be directed to how the activities are conducted at the Helidon facility. As such, a better understanding of the benefits of producing "good" compost at the Helidon facility will be attained.

1.1 Environmental Commitment

Scotbar is committed to ensuring that the compost and conditioned soils that are created on ML 50185 are done so in environmentally responsible manner that prevents where possible, or minimise environmental harm (including environmental nuisance).

1.2 Best Practice Environmental Management

Today more than ever emphasis is being given to incorporate BPEM philosophy into mine site rehabilitation activities. Scotbar recognises that adopting BPEM methods means that financial resources are spent efficiently to gain beneficial environmental outcomes in any given situation. Scotbar is committed to installing fit-for-purpose machinery and equipment that achieves the objectives of effective rehabilitation. Scotbar understands that the adoption of BPEM will result in a fully compliant facility. As part of achieving full compliance with the rehabilitation plan, the Workplace Procedures detailed in **Appendix 1** have been designed as an easily accessible and easy to understand guide to assist Employees conduct daily duties in accordance with the principles of BPEM.

2 Composting and Soil Blending Methods

Scotbar proposes to conduct open windrow composting and soil blending at the Helidon facility. These methods are briefly described below, with further explanation detailed throughout the following sections:

- **Open windrow composting:** Wastes will be selected, homogenously mixed & formed into a windrow. Open windrows will be turned in accordance with the temperature limit of 62 degrees Celsius.
- **Soil blending:** The soil blending method will involve mixing soil (such as sandy clays/weathered sandstone) with matured compost and wastes such as biosolids and manures. The blends will be allowed to stand to become stabilised.

The sandy clays/weathered sandstone proposed to be used in the composting methods described above are generated through the mining activity & are currently used to create road base under an associated development approval for extraction. It is valuable to the composting process, as the soil is high in silica & contains up to 28% smectite. It is commonly known that smectite (a group of silicate clays), has a 2:1 lattice structure & a high Cation Exchange Capacity (CEC), which is highly beneficial for soil health and plant growth.

2.1 Waste Types Required

The following waste types and resources are proposed to be accepted for the creation of compost & conditioned soils:

Waste Description	Process
Dewatered bacterial (sewage) sludge	Composting/Soil Blending
Solid food processing waste	Composting

Treatment Tank Sludges (excluding heavy metal contaminated sludges)	Composting/Soil Blending
Lime	Composting
Vegetable waste	Composting
Filter cake and presses (excluding heavy metal contaminated sludges)	Composting/Soil Blending
Fish processing waste	Composting
Poultry processing waste	Composting
Animal manures	Composting/Soil Blending
Paunch	Composting
Mushroom substrate waste	Composting/Soil Blending
Molasses	Composting/Soil Blending
Septic tank waste	Composting/Soil Blending

Table 1: Wastes Proposed to be accepted

The above wastes will be effectively managed by site personnel throughout the composting & maturing process to facilitate the degradation of wastes & the creation of good quality compost. The methods of managing these wastes are described in detail in the sections below.

2.2 Fundamentals of Composting

It is important that site personnel become familiar with the fundamentals of composting so as to create a stable and useable product. The following sections introduce the reader to these fundamental principles.

2.2.1 Homogeneous Mixing

When creating a windrow for composting, it is essential that a homogeneous mixture is created to assist in the consistent degradation of wastes in the windrow. All site personnel must be aware of the adverse affects of failing to create a homogenous blend including creating a windrow that is mature in parts & immature in other areas. This is cost prohibitive & does not assist in creating a quality product, therefore this practice will be avoided.

In order to achieve a homogenous blend of wastes for placement into a windrow, all wastes received will be deposited into a three-sided bund & mixed to achieve the desired carbon to nitrogen (C:N) ratio. The mixing bay & the hardstand pad where compost will be stored will be constructed of highly impermeable clay. Further information in relation to the impermeability of the mixing bay & hardstand pad is detailed in the following sections.

2.2.2 Carbon: Nitrogen Ratio

It is essential to create compost with a C: N ratio range of 25-30:1 and greater for fungi dominated compost. This range will ensure that the compost will not release offensive odour and maximises the degradation of wastes. Greenwaste from cleared areas of the mining lease will tub

ground for use in blends. Scotbar will also receive greenwaste externally to ensure that enough greenwaste is available for mixtures. It is essential that one understands that the greenwaste material must be able to absorb free liquid and must incorporate readily degradable organic matter. As nitrogen sources for the compost, Scotbar will use any of the nitrogen-containing wastes listed in the above *Table 1* titled, "Wastes to be accepted", including animal manures and or biosolids.

2.2.3 Temperature and Turning

Ensuring that an effective temperature profile occurs & turning open windrows based on the temperature achieved is of paramount importance. Allowing compost to generate excessive heat can initiate subsequent chemical heating reactions that are a precursor to spontaneous combustion. Attention will therefore be given to temperature profiles throughout the compost to prevent this occurring. In particular, temperatures will not be allowed to increase above 62^{o} Celsius (C) or at temperatures where contaminants could ignite (refer to **Part B Appendix 2 - Form 3 - Temperature Profile Recording** of **Appendix 2).** Maintaining the temperature below 62^{o} C will also ensure that beneficial micro-organisms do not encyst for an extended period of time, or die.

The following information details the procedures to be followed for temperature monitoring, including when returned temperature values are above 62^{o}C.

- Temperature profiles will be taken at four equidistant places, along the length of the windrow.
- When a returned temperature of 62^{o}C is obtained, turning will occur in the open windrows. Temperatures will be recorded on **Part B Appendix 2 - Form 3 - Temperature Profile Recording**.
- If temperatures are excessively high and anaerobic activity occurs, there is an increased likelihood of spontaneous combustion occurring due to smouldering conditions igniting

when oxygen is added. To reduce the risk of this occurring, prior to turning the windrows, water will be added to suppress the heat potential. The additional moisture will present an anaerobic potential for the future and must be addressed by reforming the windrow. This can be achieved by the addition of inert material or additional compost to absorb excess moisture to ensure a return value of no greater than 45 % w/w.

- Raw addendums may also be added to stimulate the composting process as the excessive heat may have destroyed micro-organisms (such as beneficial bacteria, fungi, protozoa and nematodes) which are beneficial to the composting process.

2.2.4 Moisture Content

Whilst moisture is essential for creating an environment that is beneficial for micro-organisms to grow, excess moisture can cause anaerobic conditions which may result in a release of offensive odours. In open windrows and soil windrows, it is reasonably expected that small pockets of anaerobic activity will occur in the windrows however aerobic activity will be encouraged.

A moisture content of approximately 50% is desirable during the initial mixing stage of the composting process. When wastes are placed in the three-sided bund to be homogenously mixed, the moisture content can be determined by site personnel by sequentially adding volumes of liquid to the wastes to obtain the appropriate moisture content.

On other occasions, unique biological inoculums may be applied to inoculate the compost with beneficial micro-organisms. To maintain 50% moisture content throughout the composting process, compost tea or water may be added to the windrow, via a light sprinkler spray over the windrows, or alternatively, moisture may be added while the windrow is being turned. The addition of high quality compost tea is beneficial to the composting process, as beneficial micro-

organisms inoculate the compost & growth is encouraged, thereby increasing the rate & effectiveness of the decomposition of wastes to create the final mature product, high in microbiological diversity.

Excessive amounts of moisture to induce leachate production will not occur (during the initial homogenous mixing stage or during maintaining moisture in the compost windrow), however on some occasions, due to preferential pathways, leaching may occur. If leachate is produced, prompt attention will be given to placing effective absorbing material on the leachate identified on the pad. The leachate absorbed & the material used to absorb the leachate can then be placed into the mixing bay for inclusion into a new windrow of compost. Although any leachate produced will migrate to the stormwater collection dam associated with the composting pad (due to the 1% fall of the pad).

2.2.5 Odour Management

If odorous loads are encountered, bio stimulants or inoculums to minimise the putrefaction of the material coupled with immediate mixing and/or covering will occur. In addition to this, the Site Manager will also determine why such a load was delivered in a putrefying state by discussions with the waste generator. If putrefying loads continue to be delivered & it is determined that there is a risk to sensitive receptors, the material will no longer be received at the facility, to minimise the likelihood of environmental nuisance occurring and any associated adverse affects on the Helidon community.

To minimise odours that may be generated, when wastes are received at the facility they will immediately be homogenously mixed (taking into account the C: N ratio & moisture content), for placement into windrows. Wastes will not be left to putrefy at the facility. This practice is

invaluable in minimising the likelihood of environmental nuisance occurring. All site personnel must be aware of this aspect.

All personnel must understand that during the composting and soil blending process, offensive odours are predominantly generated by anaerobic conditions. As such, it is unlikely that the open windrows (which will be predominantly aerobic & turned regularly) will liberate offensive odours. To minimise the liberation of odours from windrows, all site personnel must adhere the measures detailed **Part B Appendix 1 – Section 2 - Workplace Procedures 8 - Odour Management**. Compliance with the procedures outlined within will ensure that odour will be effectively managed at the facility.

Of particular importance to note however is that site personnel will monitor odours generated from all compost windrows closely & if any offensive odours are detected, the source will be identified & prompt attention will be given to ameliorating the odours (refer to **Part B Appendix 2 - Form 13 – Odour Monitoring** of **Appendix 2**).

Scotbar is committed to the effective management of the composting activity to ensure the protection, or enhancement where possible, of environmental values. As such, the following sections detail how Scotbar will protect the values of the receiving environment.

2.2.6 Stormwater & Leachate Management

Stormwater generated on the composting pad will be collected in the associated stormwater dam which is located at the lower end of the hardstand pad. The water contained within this stormwater dam will be used for make-up water &/or moisture control for the windrows of compost and for dust suppression on trafficable areas throughout the site.

During dry periods, leachate generation will be absorbed with either greenwaste or soil and then placed into the mixing bay to be incorporated into another mixture. All leachate and stormwater generated on the composting pad will flow to the associated stormwater dam, facilitated by the gradient of the pad, which has a 1% fall. The associated stormwater dam will be constructed to a size adequate to cater for 9.6 ML of water. This equates to 10 mm / hour of rainfall falling on 4 Ha for 24 hours (classified as a 1 in 100 year 24 hour duration rainfall event).

However it should be noted that the leachate and stormwater collected in the dam will be kept to a minimum quantity through the use of water as a dust suppressant on trafficable areas and for moisture control in windrows. Further to this contained stormwater and leachate may be used from time to time to irrigate revegetated areas. A freeboard of no less than 0.5 metres will be maintained at all times in the dam to prevent the release of contaminated stormwater during heavy rainfall events.

Preventing cross contamination is also of paramount importance to the proposed operation. To minimise this potential, clean and contaminated stormwater will be separated by diverting clean stormwater away from the pad by constructing bunds and diversion drains. Furthermore, all leachate and stormwater generated on the composting pad will be directed to the associated stormwater collection dam by the gradient of the pad. Preventing cross contamination through

these measures will also assist in minimising the quantity of contaminated stormwater generated onsite.

Further to the control measures for stormwater and leachate management mentioned above, further measures are highlighted in the relevant workplace procedures (**Part B Appendix 1 – Section 2 Workplace Procedure 2 – Stormwater Management** and **Workplace Procedure 7 – Leachate and Stormwater Dam Management**). Compliance with the procedures outlined within will ensure that stormwater and leachate will be effectively managed at the facility.

Effective management of the stormwater dam is of paramount importance, to ensure the dam operates in an aerobic or facultative state at all times, which dramatically reduces the likelihood of causing environmental nuisance from the release of offensive odour. The effective management of the dam will be achieved by external consultants or site personnel regularly monitoring the following field parameters in the dam:

- **Dissolved Oxygen (DO):** The dissolved oxygen (DO) of the dam will be regularly measured to ensure the DO is maintained at >4ppm. With this dissolved oxygen level, the likelihood of offensive odour liberation is dramatically reduced. To reduce the likelihood of creating offensive odours, Scotbar may alternatively use biological inoculums in the dam to ensure a fermentive environment is maintained.
- **pH:** The pH of the associated stormwater dam will be maintained between pH 6.5 - 7.5. The pH of the dam will be regularly monitored, particularly following a rain event. In a healthy dam, the pH should not vary significantly, even following a rain event.
- **Electrical Conductivity (EC):** The EC of the dam will be monitored regularly to ensure it is operating in a healthy state. A high EC may indicate that large quantities of wastes high in salts have entered the dam, which should be prevented.

- **Redox:** The Redox of the dam will be monitored regularly, to ensure a positive value is obtained. A negative Redox potential may indicate a large amount of organics entering the dam, therefore reducing the effectiveness of the dam to operate in an aerobic or facultative state, whereby offensive odour liberation is not likely. Refer to **Part B Appendix 2 - Form 2 – Dissolved Oxygen, pH, EC + Redox,** for the recording of dam parameters.

2.2.7 Noise Management

Whilst heavy machinery will be used at the mine site composting and soil conditioner activity, it is not expected that the daytime background LA_{10}, adj, 10 mins and or LA_1, adj, 10 mins will be exceeded. Impulsive noise will be kept to a minimum. Tonal noise will be recorded daily (refer to **Part B Appendix 2 – Form 8 – Daily Equipment / Machinery Start up Checklist**). Unusual or tonal noise emitted from machinery will be attended to immediately as there is a possibility that something is mechanically wrong with the machine. It is important to note wind speed and direction and other factors such as traffic or other significant noise if required to perform noise monitoring by the DERM. If requested by the DERM, the Mine Site Compost Manager (MSCM) is responsible for ensuring that noise monitoring is conducted.

Daily start up checks will be conducted to ensure machinery is not emitting excessive noise utilising **Form 8 – Daily Equipment / Machinery Start up Checklist** from **Part B Appendix 2** as mention previously. Scotbar will not use excessively noisy equipment unless it is essential that something has to occur such as the movement of a windrow to prevent the release of offensive odours, extinguish a fire or to prevent a release.

All control measures for noise management are highlighted in **Part B Appendix 1 – Section 2 - Workplace Procedure 3 –Noise Management**. Compliance with the procedures outlined within will ensure that noise will be effectively managed at the facility.

2.2.8 Dust and Particulate Management

If mismanaged, composting activities have the potential to cause environmental harm, particularly environmental nuisance via releases to air. Particulate and disease vectors are also associated with problems that may occur when composting process are not properly managed. The time of day or prevailing wind conditions can play a major factor in whether or not these problems cause environmental harm or nuisance at sensitive receivers. Some of these issues that may arise are listed below in following sections.

Preventative approaches to the above conditions will be adopted on site to the greatest possible extent. A water cart will be used regularly onsite to minimise dust generation. Scotbar will take into account the daily evaporation that occurs so that adequate amounts of water are used. As mentioned earlier, water from the various onsite containment dams will be used for this purpose. If necessary, dusty loads will be subjected to gentle spraying with water to suppress dust. Hardstand areas will be maintained so that traffic does not create a surface that is overly dusty and liberating excessive dust. This may require resurfacing some trafficable areas with fresh road base from time to time. Consideration will be given to using proprietary products to stabilise hardstand surfaces.

All above mentioned control measure and others for the management of dust and particulate management at the facility are outlined in **Part B Appendix 1 – Section 2 Workplace Procedure 4 – Dust and Particulate Management.** Compliance with the procedures outlined

within will ensure that the air environment will be effectively managed whilst carrying out composting and soil conditioning for the mining activity.

2.2.9 Spontaneous Combustion Management

Spontaneous combustion is the most frequent cause of fires at composting facilities. It occurs when materials self-heat to a temperature high enough to cause ignition and an external energy source is not needed. The temperature increases because more heat is generated internally than the amount lost to the surrounding environment. This creates smouldering & when mixed with oxygen, ignition is likely to occur.

Key conditions that lead to spontaneous combustion are biological activity, relatively dry materials or dry pockets, large, well-insulated windrows, limited air flow, and time for temperature to increase. In addition, there may be other contributing factors such as short circuiting of air flow, a non-uniform mix of materials, poor moisture distribution, a difficulty in knowing temperatures throughout a windrow pile & sometimes a lapse or oversight in temperature monitoring.

Temperature also rises to high levels when the moisture content is low because evaporation (the primary means of heat loss), is reduced. In a small or well-ventilated windrow, cooling takes place even at low moisture levels. Scotbar is aware of the precursors that initiate spontaneous combustion and is committed to minimising the likelihood of an onset at the Helidon facility. . All preventative approaches and control measures for spontaneous combustion fires are highlighted in **Part B Appendix 1 – Section 2 - Workplace Procedure 5 – Prevention of Spontaneous Combustion.**

3 Identification of Environmental Issues and Potential Impacts

As an overview, potential environmental impacts are described below as a way of introducing the control measures contained in the Workplace Procedures.

3.1 Air (Odour & Particulates)

If mismanaged, compost facilities have the potential to cause environmental harm, particularly environmental nuisance via the air medium. Offensive gases, particulate and vectors are also associated with problems that may occur. The time of day or prevailing wind conditions can play a major factor in whether or not these problems cause environmental harm or nuisance. It should be noted however that due to the large buffer distance, any adverse affects on the community are unlikely to occur.

The types of issues that may arise from time to time are listed below. Scotbar recognises that it is the responsibility of all employees to ensure these conditions do not occur.

- Offensive odour liberated from dams tending anaerobic;
- Offensive odour liberated from windrows;
- Dust liberation arising from the movement of compost;
- Dust liberation arising from site traffic;
- Offensive odour liberated by trucks entering or leaving the site; or
- Smoke and particulate liberated from spontaneous combustion.

These issues are addressed in the relevant Workplace Procedures. Readers will find overlap between procedures as quite often one issue is related to another or can be the precursor for another issue to arise. Potentially following complaints about the air environment the DERM may request that monitoring of the air environment be carried out. If this is requested by the DERM it is the responsibility of the compost facility manager to ensure that this monitoring is carried out. With all types of monitoring of the air environment for the DERM it is important to note wind speed and direction and any other factors such as traffic or other significant noise.

3.2 Water

Scotbar recognises that, if mismanaged, the types of waste materials received for composting may cause detrimental affects to the receiving environment. Releases of contaminants to receiving waters for example, can cause fish kills due to oxygen depletion to an extent that does not sustain fish and invertebrate life. It is therefore of paramount importance for Scotbar employees to adhere to the information provided in this plan, as this information provides a framework for BPEM which minimises the likelihood of any adverse impacts to the receiving environment from occurring.

Similarly, groundwater may be affected by contaminants such as ammonia and nitrate due to uncontrolled releases of contaminants through the bed and banks of the dams or through the hardstand pad. It is extremely unlikely that contaminants will be released to groundwater as a result of the operation of activities at the Helidon facility, as the hardstand pad and stormwater dams are integral. If an employee makes an observation that the integrity of the dams or hardstand pad is compromised, the Site Manager must be notified. The Site Manager will then ensure necessary steps are taken to rectify the issue and ensure the integrity of the dams and pad is maintained.

Further to the above, a healthy dam is one where the environment is in an oxidised state. In this state, fugitive offensive gases are considered unlikely. If dams operate in an oxygen-rich state, the chance of offensive odour release is minimal. Typically, aeration is adopted to allow for the transfer of oxygen into the water column to provide aerobic bacteria the ability to consume organic matter. Facultative micro-organisms can also mitigate offensive odour. As such the composting stormwater containment dam will either be maintained in an aerobic or facultative state.

Essentially dam health is heavily dependent upon the load that is transferred to it. The materials that are received at the site for composting as mentioned above can import huge loads to the stormwater dam. Once in the water column, these wastes are a food source for air loving micro-organisms. Quite often stormwater or leachate collection dams contain high levels of biological oxygen demanding (BOD) substances. Whilst being digested, oxygen within the water column is used for the breakdown of these wastes. The wastes maybe comprised of proteins, fats, oils, organic matter, and ammonia contained in animal manures or human biosolids. These waste streams are typically classed as high biological oxygen demanding (BOD) substances. What is meant by BOD is that BOD substances require oxygen for aerobic bacteria to digest the particular contaminant.

Typically dams that do not have an appreciable load may have a dissolved oxygen content of greater than six parts per million (>75 % sat) dissolved oxygen (DO). When a dam is severely overloaded DO levels can be as low as 0.1 ppm. The way to avoid this occurring is to

- Prevent generating excessive leachate at the windrows therefore preventing excessive leachate entering the dams.

- Preventing organic matter or green waste from entering drains and ultimately dams. Sulphur type odours that are commonly experienced from dams that have turned sour are a direct result of organic matter breaking down in an oxygen deficient environment; and
- Preventing direct discharges of high BOD waste to dams such as biosolid waste or septic tank waste.

Due to oxygen depletion in the water column whilst contaminants are being digested by organisms, oxygen has to be returned to the system. The most common way to do this is by utilising an aerator. Optimally, the aerator should be providing a dissolved oxygen (DO) content of greater than 2-3 ppm throughout the depth of the water column and 4 – 6 ppm at the surface. This will keep the dams in a state referred to as, "oxidated". A key point to remember is that the longer aeration is required to maintain oxidised states, the more valuable nutrients or simple sugars, proteins or amino acids are being digested in the dam and not in the compost. The compost blend therefore loses the benefit of these wastes.

Reducing the volume of the dam sequentially via pumping to provide moisture for windrows/cells is another way in which organic matter or dissolved nutrients can be removed from the water column.

If in the unfortunate event that aeration is halted or Sulphur type odours become pronounced, aeration must be returned promptly. If aeration cannot start straight away, short term solutions such as adding $CaNO_3$ to increase the Redox Potential of the dam can be undertaken. However this is only a temporary measure, as the NO_3^- will eventually be consumed. $CaNO_3$ should only be added at 20% of the BOD requirement. It is recommended that Redox be measured whilst adding the $CaNO_3$ to observe an increase in Redox potential. This will assist in not overloading the dam with Nitrogen.

For example a 5 million litre dam @ BOD = 1 000 mg / L would require 5 000 kg of O_2 to digest the load. If in the event $CaNO_3$ is required, one could add 1 000 kg $CaNO_3$ to increase the redox potential in order to obtain some time from creating offensive odour due to sulphate reducing and being released as a gas similar in characteristics to "rotten eggs".

If the load is too excessive then the use of stronger oxidising agents such as hydrogen peroxide will be required. Specialist help will be required with the use of these materials. pH adjustment can also cause the sulphidic odours to stay in solution. The pH of any dam should not be allowed to fall below 6.5 pH.

If large doses are required, magnesium hydroxide should be utilised as it is far safer to handle than concentrated sodium hydroxide. Whilst it may not be as rapid as sodium hydroxide at changing pH, it presents a magnesium source that is better for compost than sodium. All employees should wear appropriate Personal Protective Equipment (PPE) such as safety glasses, long sleeved shirt, pants and safety gloves when dealing with reagents for dam correction. Moreover before any employee handles such reagents, training in their application must be given.

Before the addition of chemicals to assist in dam rectification, the following parameters must be measured and recorded:

1) Redox Potential
2) DO; and
3) pH.

Part B Appendix 2 – Forms and Checklists contains **Form 2 –Dissolved Oxygen, Redox potential, EC + pH** which must be **completed monthly;** however DO, Redox and pH should be determined more frequently if dams have received significant loading.

The above parameters allow employees to familiarise themselves with the nature of the dams, particularly after rain events or when unplanned loads enter the system. This will allow employees to gain an understanding of how dams can recover.

3.3 Waste

Effective waste management is essential for a composting site to be classed as one that operates in accordance with BPEM. The types of waste highlighted previously in this SEMP have the ability to putrefy and create odour nuisance. They can be indirectly attributable to other parts of the composting activity releasing offensive odours. The Workplace Procedures ensure that the site remains in a state where offensive odours are not generated therefore the risk of offensive odours causing environmental nuisance is unlikely. The Site Manager is responsible for the duties that prevent the generation and release of offensive odours.

Of paramount importance in effective waste management is keeping records to ensure the quality of the final compost is desirable. For this reason, recording of composting inputs must occur. To facilitate this, **Part B Appendix 2** - **Form 11 - Starting Recipe and any Adjustments Performed to Windrows** provides for the recording of waste types in the making of discreet windrow blends. By doing this, employees can identify problematic waste types and procedures, to ensure continual improvement is occurring.

It is essential that waste types that are toxic or antagonistic to the composting process are not received at the Helidon facility. No prohibited wastes such as poly aromatic hydrocarbons, polychlorinated biphenyls and related substances are to be accepted. Therefore accurate descriptions of wastes provided must occur to ensure that the facility does not receive unwanted or undesirable waste streams. If regulated waste is removed from the facility (i.e. when it becomes apparent a load contains such a waste as described above), details will be recorded and kept onsite and forwarded to the DERM. It is the responsibility of the Site Manager to record this information. Facility staff must be aware that regulated waste must only be transported to a facility permitted to accept such wastes under the *Environmental Protection Act 1994* and its subordinate legislation. In summary, all members of Scotbar must be committed to ensuring that the above requirements are adhered to.

3.4 Noise

Noise may be generated from the following activities conducted for the proposed activity:

- Vehicles delivering waste to the facility;
- Front end loaders used to:
    - Mix raw ingredients in the three-sided bund;
    - Move windrows around the site from time-to-time;
    - Turn windrows; &
    - Place compost &/or soil blends on vehicles to be moved around the site.
- A water truck to spray water on trafficable areas for dust suppression & to spray compost tea on windrows of compost.

It should be noted that the quantity of trucks entering the facility for the proposed activity will not pose any material increase in the quantity of vehicles currently entering the site for access to the mine and extraction activities. Therefore the noise generated from the proposed activities with

respect to traffic is unlikely to substantially increase the noise level currently emitted from traffic entering the site.

It should also be noted that it is unlikely that the noise generated from the above vehicles/machinery for the purpose of composting will materially increase the noise currently emitted from the facility (such as through the use of rock saws). It should also be noted that all vehicles & machinery used onsite will be maintained in accordance with manufacturer specifications to ensure that noise emitted is kept to a minimum, with the operation of effectively maintained vehicles & machinery.

All these control measures for noise management are highlighted in **Part B Appendix 1 – Section 2 Workplace Procedure 3 – Noise Management**. Compliance with the procedures outlined within will ensure that noise is effectively managed at the facility.

Scotbar intend to operate the proposed composting and soil blending activity to ensure that the local noise environment is not compromised. However, if the administering authority receives an environmental nuisance complaint regarding noise emitted from the Helidon facility & the complaints are found to be substantiated, Scotbar will ensure the source of the noise causing environmental nuisance is identified & the issue(s) rectified. Further, if the noise emission limits are exceeded due to the composting operation conducted by Scotbar, noise monitoring will be conducted if required & the source will be rectified.

It should also be noted that a sufficient buffer distance to sensitive receiver(s) is provided at the proposed facility, as the composting pad is surrounded by the mine & bushland, with the nearest resident well screened from the activity.

4 Control Measures for Routine Operations to Minimise Environmental Harm.

4.1 Routine Operating Procedures

Scotbar is committed to:

- ***Provide routine operating procedures to prevent or minimise environmental harm, however occasioned or caused during normal operation.***

In order to operate the composting and soil conditioner activity effectively, it is essential that daily routine operations are carried out in accordance with the Workplace Procedures shown in Part B Appendix 1.

Further to the general information provided in this SEMP, the Workplace Procedures contain detailed information that will assist in minimising or preventing environmental harm. Given the nature of the wastes handled at the facility, it is expected that environmental issues may arise from time to time. This SEMP and in particular, the Workplace Procedures, ensure that in the event of an environmental issue, appropriate management techniques will be employed. In order to make *good* compost, it is imperative that minor routine tasks are conducted. The routine daily operating procedures are shown in the following table. As a quick reference to the Procedures, the relative Procedure number is quoted.

Daily Operating Procedure:	Workplace Procedure Number
Receival of Solid Waste	1
Stormwater Management	2
Noise Management	3
Dust and Particulate Management	4
Prevention of Spontaneous Combustion	5
Soil Blending With Solid Wastes	6
Leachate and Stormwater Dam Management	7
Odour Management	8
Temperature Monitoring	9
Truck Washing	10
Open Windrow Construction	11
Quality Limits Sampling Procedure	12

Table 2: Workplace Procedures

The Site Manager will ensure that all facility employees read and understand the Workplace Procedures before engaging in activities. As a commitment to ensuring that routine daily activities are carried out, Scotbar will provide a copy of the SEMP to all facility employees engaged in creating compost and conditioned soil. Workplace Procedures will also be easily accessible to all facility employees, as they will be laminated and placed in or on machinery so as to be a quick reference point.

The Workplace Procedures will facilitate site employees to become aware of the daily, weekly and monthly cycles of composting that can occur. Employees will gain an appreciation for the importance of temperature monitoring, moisture content, choice of inputs, when turning is required and how to determine when compost is stable and mature. At any time, facility staff members are encouraged to ask the Site Manager questions about an activity if they are unsure.

4.1 Maintenance Practices and Procedures

Good compost cannot be made with ineffective machinery or equipment. First and foremost, Scotbar is committed to providing machinery and equipment that is fit-for-purpose and safe. There will be no comprimisation on quality due to machinery and equipment not operating properly. All machinery and equipment will operate in accordance with manufacturer specifications. Scheduled services for machinery and calibration for equipment will be adhered to. The Site Manger is responsible for ensuring maintenance is carried out.

As no one person is expected to remember everything, a Daily Checklist for equipment and machinery has been created (refer to **Part B Appendix 2 - Form 8 – Daily Equipment / Machinery Start up Checklist**) to facilitate the recording of any observations made regarding faulty equipment or machinery on a daily basis.

The use of the checklist will assist Scotbar in continually maintaining and improving equipment and machinery. It will also provide protection of facility staff and visitors from machinery or equipment that is operating dangerously. Apart from machinery and equipment maintenance, attention will also be given to maintenance of other key components of the composting facility such as:

- Maintenance of stormwater and leachate drains to prevent solids from obstructing liquids from entering the drains;
- Maintenance of the hardstand pad to ensure the integrity is maintained;
- Maintenance of any outer perimeter bunds and diversion drainage channels to ensure that their integrity is maintained; and
- Maintenance of the proposed fresh water dam and the stormwater dam associated with the composting pad, to ensure their integrity and that aerobic conditions are maintained at all times.

A Daily Running Sheet is provided in **Part B Appendix 2 – Form 10 - Daily Running Sheet**. The running sheet is to be filled in as a record of any observations made regarding extraordinary events such as emergencies or non compliance with the environmental authority. All facility employees are required to report any observations made to the Site Manager for attention for necessary action. Detailed examples of observations that could be made by employees are provided below.

- **Stormwater and Leachate Drains**

Stormwater and leachate drains are important for the clearance of incidental rainfall that falls onto hardstand areas of the site. Stormwater and leachate drains should be checked regularly (particularly after rainfall events) for evidence of cracking or blocking due to objects. This should be recorded utilising **Form 9 – Stormwater Performance Checklist** of **Part B Appendix 2 - Forms and Checklists**. Vegetation should not be allowed to proliferate to the extent that contaminated stormwater pools or ponds. Cracks should be repaired with clay stored onsite for incidental repair work.

- **Hardstand Pad**

A functional hardstand pad is essential for *good* composting. Without an integral pad, offsite contamination is likely albeit through the ground. Maintaining a gradient that effectively

facilitates the movement of stormwater to the associated stormwater dam over the surface of the pad is essential. Problems such as anaerobic activity at the base of windrows, vermin attraction and further destruction of the hardstand pad can occur if the pad contains undulations and pot-holes.

Proper operation of the front end loader (FEL) is essential to minimise the likelihood of compromising the integrity of the hardstand pad. It is more desirable to leave minor amounts of compost on the hardstand surface to be removed by hand or an onsite bob-cat than to remove with the FEL and risk compromising the integrity of the hardstand pad. The Site Manger will be responsible for ensuring that the FEL operator is proficient in the operation of such equipment. If the integrity of the pad is continually compromised it will need to be repaired. Whilst general housekeeping such as clean up of leachate, suppressing dust, cleaning and repairing drains and minor cracks and depressions in the hardstand pad is routine, having to continually repair a damaged pad becomes time consuming and may even compromise the facility's environmental performance.

- **Diversion Drains & Outer Perimeter Bund**

Scotbar will maintain diversion channels and implement perimeter bunding wherever necessary to prevent the ingress of stormwater that is generated external to the composting area. Attention is to be given to ensure that stormwater generated external to the composting pad is diverted. Similarly the remaining boundaries whilst on a slope will have diversion drains and bunds implemented where required. It is essential that any perimeter bunds do not develop cracks or gaps that compromise the integrity of the bund.

- **Leachate & Stormwater Collection Dams**

It is equally important to maintain the integrity of the composting stormwater containment dam as it is to maintain the integrity of the pad. The dam can become a point source of pollution to groundwater and surface water. If the dam contains contaminated stormwater, due regard for the daily evaporation rate is to be given so that the loss of water over an above the amount that is taken for utilisation on site is not greater than the evaporation rate. This observation can help with the early detection of leakage. Any cracks observed in the base and side walls of dams should be repaired using onsite clay. All observations of cracks or leaks must be reported to the Site Manager promptly and recorded on **Form 10 - Daily Running Sheet** of **Part B Appendix 2.**

The Workplace Procedures encompass information that helps facility employees complete their work so that unplanned for maintenance does not arise. Facility employees are encouraged to discuss any facet of the operation with the Site Manager in order to gain efficiency. If more efficient practices can be obtained, routine maintenance for certain aspects of the activity may be lessened.

5 Contingency Plans and Emergency Procedures for Non-Routine Situations.

Scotbar is committed to implementing the following:

- ***Contingency plans and emergency response procedures to deal with foreseeable risks and hazards, including corrective responses to prevent and mitigate environmental harm.***

The potential environmental impacts described below introduce the possible scenarios that may arise from time to time at the facility. A common theme that will resonate from now and

throughout the Workplace Procedures is that predominant anaerobic activity generates offensive odour and may contribute to incidences of spontaneous combustion, which may cause environmental nuisance. Apart from the fact that work conditions can become less than ideal to work under, coupled with the associated health risk of a site displaying a dominance of anaerobic activity, odour nuisance may be caused from a number of sources such as windrows, the stormwater containment dam, drains and the hardstand pad. This is not a situation that Scotbar wish to operate under. It is the responsibility of every member of the Scotbar team to adhere to the contingency and emergency procedures.

Contingency plans have been developed in the form of Workplace Procedures, which contain control measures that manage foreseeable risks and hazards associated with the environmental issues identified. Similarly Emergency Procedures have been developed for unforeseeable events such as a lightning strike or a deliberate ignition of a fire, a rainfall period that causes windrows to turn anaerobic and in the unlikely event of a release from the stormwater containment dam. As a quick reference, they are listed below in Table 3 as is their associated procedure number.

Daily Operating Procedure:	Emergency Procedure Number
Spill of Solid Waste(s)	1
Fire Incident	2
Release to Waters	3
Rain-Induced Anaerobic Windrows	4

Table 3: Emergency Procedures

As a special mention, organic materials that typically are composted contain chemical energy and therefore they can provide fuel for a fire. Although the composting process has diminished its

energy content, even finished compost contains plenty of energy to sustain a fire. Therefore no smoking is permitted on any hardstand pad (particularly near windrows). No welding or grinding is to be performed near or upwind of windrows or unless wind conditions are still and it is critical that works be performed in close proximity. As highlighted above, **Workplace Procedure 5 – Prevention of Spontaneous Combustion** details measures to prevent the onset of spontaneous combustion. Coupled with Workplace Procedures detailing the construction and management of windrows created at the facility, a spontaneous combustion incident should not occur.

5.1 Response Resources

- ***resources to be used in response to a release;***

The Workplace Procedures highlight the equipment that will be utilised at the Helidon facility. Daily checks will occur to ensure equipment and machinery used onsite is maintained (refer to **Part B Appendix 2 - Form 8 – Daily Equipment / Machinery Start up Checklist**). In response to a release all equipment required will be utilised. Moreover Emergency Procedures will be followed.

5.2 Procedures to be Implemented

Scotbar is committed to providing:

- ***Procedures to be implemented to deal with any noxious odour emanating from the activities, any fire, any spills of raw material, partially processed material or final product in a manner that means it is likely to be released to waters and any accidental release of leachate or contaminated stormwater;***

Routine procedures have been developed and these are included in the workplace procedures detailed in **Part B Appendix 1 Section 2**. Contingency Plans and Emergency Procedures have also been developed and are detailed in **Part B Appendix 1 Section 3** of this SEMP.

The Site Manager is responsible for the implementation of all procedures. All employees are encouraged to discuss any facet of the operation where they see possible improvements could be made. However before amendments to control measures are implemented, the Site Manager is responsible for ensuring current control measures are carried out until a review is performed by the DERM which considers likely impacts. If urgent change is required as a result of an unforeseen circumstance, immediate discussion will occur with the DERM to discuss changes. The Workplace Procedures adequately provide contingency measures for managing issues such as noxious and offensive odour release.

5.3 Release Investigation

Scotbar is committed to providing:

- ***Procedures to investigate the cause of any release and where necessary, implement remedial actions to reduce the likelihood of recurrence of a similar event:***

Scotbar is committed to identifying the cause of any nuisance complaint that may be caused by an activity conducted at the Helidon facility. As an example, the following should be considered:

- What has caused the release;
- Can it be stopped immediately and safely;
- Collect background samples and record observations from upstream;

- Collect downstream samples and record observations if possible;
- Collect a sample at the point of release if possible; and
- Calculate the estimated or actual volume or mass released.

Daily and weekly site checks will assist in ensuring that there are no weak points in the integrity of the diversion channels and or the perimeter bund system or that there are no discernable drops in water levels contained in dams above the daily evaporation rate for the area in addition to what is utilised for the activities conducted on site. Scotbar will measure off site water quality of Sheep Station Creek quarterly or in time of a release for pH, dissolved oxygen, electrical conductivity, redox potential and suspended solids. Nutrients and TOC will be measured if there is a release from the composting activity (unlikely as the stormwater dam will cater for a 1 in 100 year 24 hour event).

As part of **Part B Appendix 1 – Section 3 - Emergency Procedure 3 – Release to Waters**, control measures and procedures are provided to ensure timely advice is available to employees. The Site Manager is responsible for reporting any releases from the site that actually or potentially causes environmental harm (including environmental nuisance). All facility employees are responsible for ensuring that stated measures described in **Emergency Procedures 3 of Part B Appendix 1** are performed.

5.4 Mitigation of Further Release

Scotbar is committed to providing:

- ***Practices and procedures to prevent any further release.***

If a release occurs, new procedures and practices will be implemented to prevent any future release. An assessment of the cause of such a release must be undertaken and recorded. The results of such an assessment may be used to update this SEMP. Prior to implementation, the proposed new procedures and practices will be submitted to the DERM for review and subsequent approval.

5.5 Monitoring of Contaminant Releases

Scotbar is committed to:

- ***Ensuring that monitoring is performed to accurately describe the nature and extent of the release.***

In the unlikely event that a release to water (including groundwater) occurs, an evaluation of the actual or potential adverse affects should be obtained. This includes extending monitoring to establish the extent of the release. In the unfortunate event a release occurs, knowing its potential affects and finding ways to prevent a similar situation occurring in the future is crucial. **Part B Appendix 1 – Section 3 - Emergency Procedure 3 – Release to Waters** is to be followed in the event of a release of contaminants to water. It provides guidance on how to respond in such an event and what is required.

Similarly the same principles highlighted in **Emergency Procedure 3 of Part B Appendix 1** can be adopted if there is a release to the air environment for example that may cause nuisance or environmental harm. However it must be emphasized that if all Workplace Procedures are followed, then the chances of a release occurring under normal operating conditions is minimal to non-existent.

In some instances professional help in monitoring may be required. Scotbar is committed to engaging with people that can assist in this regard. All determinations made from monitoring would be made by a person appropriately qualified to do so.

Part B Appendix 2 - Form 13 – Odour Monitoring contains an **Odour Monitoring – Reference Points Recording Sheet** and associated map showing monitoring locations for times when proactive odour monitoring occurs.

5.6 Staff Training for a Release

Scotbar is committed to providing:

- ***The training of staff that will be called upon to respond to a release.***

The Emergency Procedures and contingency methods outlined in the Workplace Procedures are to be used as training guides for facility employees. As a general rule, the following items must be adhered to:

- Operating manuals or instructions will be given to the facility staff members by the Site Manager prior to any equipment or machinery being operated;

- The facility staff member must demonstrate a sound understanding and/or working knowledge before the use of any machinery is to occur. This must be recorded; and

- Appropriate approvals, registration or certification must be attained before operation of any machinery or equipment that is required to have such an approval.

Whilst it is the responsibility of the Site Manager to ensure the above is carried out, every staff member is required to observe activities onsite and not allow fellow colleagues to operate in an environment where they have a lack of knowledge about the process or issue. Moreover, unsafe work practices are not supported. In the event of an actual or potential release to the environment, the **Emergency Procedures and Workplace Procedures** located in **Part B Appendix 1** outline responsibilities for all employees.

Onsite toolbox meetings will be the forum where Emergency and Workplace procedures are discussed. The important thing to remember is how well you respond if there is a release. At these meetings, discussions will be held in relation to how well the team is achieving minimisation of any adverse impacts associated with the activities conducted onsite.

The Site Manager is responsible for designating key areas of responsibility for individual employees to ensure mitigatory measures are implemented as soon as practicable in order to minimise the likelihood of causing environmental harm (including environmental nuisance).

6 Effective Communication

It is essential that effective communication occurs at every level of Scotbar.

Scotbar is committed to:

- ***Implementing technology and systems that ensure effective communication occurs.***

6.1 Availability of Procedures

Scotbar is committed to:

- ***The provision and availability of documented procedures to staff attending a release to enable them to effectively respond.***

All Workplace and Emergency Procedures will be located in strategic positions or displayed on or in particular equipment or machinery for the purpose of ease of accessibility for employees. It is the responsibility of the Site Manager to ensure suitable locations are provided and that machinery and equipment are appropriately stocked and or labelled with the relevant procedures.

6.2 Record keeping

It is essential that record keeping occurs and that it is effective.

6.3 Timely and Accurate Reporting

Scotbar is committed to:

- ***Timely and accurate reporting of circumstances and nature of release events to the administering authority.***

As soon as practicable after becoming aware of any release of contaminants Scotbar must notify the DERM. Scotbar is committed to compliance with this requirement. It is the responsibility of the Site Manager to ensure that all facility staff members are aware of this.

Scotbar employees can call the following telephone numbers for assistance:

- The Manager of the composting facility can be contacted on **……**
- The Site Manager can be contacted on **……..**

- The DERM's Pollution Hotline can be contacted on **1300 130 372** (this telephone number may be updated from time to time and therefore should be checked regularly for accuracy).
- For general matters, the DERM/Ipswich office can be contacted on **1300 130 372**
- The Lockyer Valley Regional Council can be contacted on **1300005872**

To assist in timely and accurate reporting, Scotbar is committed to:

- Reporting on records when required by the DERM;
- Keeping records for 5 years;
- Performing timely and accurate reporting;
- Reporting and the recording of any release of contaminants not in accordance with DA conditions or release limits;
- Perform dust monitoring if required by the DERM;
- Conduct noise monitoring if directed by the DERM and record results;
- Obtaining Quality Characteristic Limits of final compost and recording results;
- Recording any off-site movement of regulated waste; and
- Recording of all complaints.

7 Conducting Environmental Impact Assessments

In proposing the increases to the activities conducted at the facility possible impacts on the receiving environment have been considered, with the development of Workplace and Emergency Procedures aimed at avoiding such impacts.

7.1 Periodic Review of Environmental Performance and Continual Improvement

Scotbar will periodically review workplace and emergency procedures to ensure that BPEM is being undertaken. This will occur yearly or earlier if warranted.

8 Waste Management

Scotbar is committed to:

- **Implementing procedures and practices to minimise, reuse and appropriately dispose of waste generated;**

Workplace Procedures 1 - Receival of Solid Waste, provides stated measures that are to be adopted onsite for effectively managing solid wastes.

It is not expected that the facility will generate large volumes of waste for disposal at a landfill, apart from incidental amounts of general industrial or commercial waste generated at the facility from time to time. Appropriate facilities are to be used, particularly if prohibited waste has been incidentally accepted at the site.

9 Stormwater Management

Further to section **3.2. - Water** above, an important factor in the efficient operation of a composting facility is the management of incidental stormwater. Contaminated stormwater will migrate to the associated stormwater dam. Drains utilised for the transport of contaminated stormwater must be kept free of vegetation and debris. **Part B Appendix 1 – Section 2 - Workplace Procedure 2 – Stormwater Management** stipulates actions that need to be performed by employees in relation to the management of stormwater.

Information provided in section **4.1 Maintenance Practices and Procedures** regarding the maintenance of stormwater drains, hardstand pad areas and the bed and banks of respective stormwater dams, illustrates the importance of early observation and the need for the efficient operation of equipment and machinery to minimise damage to the hardstand pad. As a special note, on site clay will be used for minor repair work that may need to occur from time to time to drains, pads or respective dams.

Once collected, stormwater needs to be managed in the dam so that offensive odours do not predominate. Aerobic or facultative conditions within the stormwater containment dam are essential for its health and will minimise the likelihood of offensive odour being generated. **Part B Appendix 1 - Workplace Procedure 7 – Leachate and Stormwater Dam Management** details procedures that are to be implemented in order to maintain dams in an aerobic or facultative state. As an assurance of quality, **Part B - Appendix 2** contains **Form 2 – Dissolved Oxygen, Redox potential, EC + pH**, which is to be utilised monthly or more frequently if dams are subjected to increasing loads or stormwater events.

In summary, the above combined with **Part B Appendix 1 - Workplace Procedure 2 – Stormwater Management** demonstrates that stormwater is effectively managed at the Helidon facility. This will be demonstrated by the following stormwater management objectives being practiced onsite:

- The quantity of leachate produced within the windrows is always kept to a minimum;
- That all contaminated stormwater is directed to the associated stormwater collection dam;
- That the perimeter bund and or diversion channels divert storm waters from the facility; and
- Wherever possible, contaminated stormwater is minimised by implementing dry cleaning procedures such as sweeping and picking up larger solid waste with a shovel and wheel barrow, bobcat or front end loader.

It should also be noted that in the unlikely event that a release of contaminants occurs, adequate procedures are in place to obtain samples during the release. Appropriate expertise will also be made available for the assessment of any release.

10 Staff Training

Scotbar is committed to the following:

- ***Staff training and awareness of environmental issues related to the operation of rehabilitation activities conducted at the facility, including responsibilities under the Environmental Protection Act 1994.***

This SEMP has been constructed so that information can be easily accessed. Familiarisation with the SEMP will assist employees in becoming aware of any environmental issues that could arise when activities are not conducted correctly and of the heavy penalties associated with non-

compliance with the *Environmental Protection Act 1994.* This section outlines the legislative requirements of the *Environmental Protection Act 1994* and subordinate legislation. In addition, as a reference, relevant legislation is displayed at the end of each Workplace Procedure.

The aim(s) of various pieces of relevant legislation are detailed below:

- ***Environmental Protection Act 1994*** **(the Act);**

The overall objective of the Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. The objective is achieved in part by establishing environmental values that need to be protected or enhanced. Policy is then generated to ensure these values are protected, especially when development occurs. The state of the environment is regularly reported on and this is where evaluation occurs to see if the strategies put in place have achieved protection of the environment.

It is important to understand that there are penalties for causing environmental harm (including environmental nuisance) and wilful acts are treated as very serious matters where custodial sentences can be handed down by the courts. It is therefore absolutely imperative that the Workplace Procedures are adhered to at all times.

In situations where non-compliance with the Act is identified by the administering authority, at the DERM's discretion, several enforcement tools may be used to secure compliance with various pieces of legislation. These enforcement tools include:

- **Environmental Protection Order (EPO):** When an EPO is issued, requirements are listed which must be complied with. These requirements are ordered to secure

compliance any approval conditions and the Act. As a special mention, the DERM has special powers to give emergency directions in such situations of non-compliance;

- **Transitional Environmental Program (TEP):** This is similar to a contract where by Scotbar would have to commit to do certain things by certain dates in order to secure compliance with the environmental authority and the Act.

- **Environmental Evaluation (EE):** This is a situation where the DERM could ask Scotbar to evaluate a method or procedure conducted onsite as more information is required to determine if the practice is the cause of, for example, non-compliance with the environmental authority, and variance from the plan of operations or the Act.

Heavy penalties exist if breaches to the above management enforcement tools occur. The Act also ties in the following pieces of legislation. Some important provisions are discussed as a way to introduce a person's obligations under the Act.

- ***Environmental Protection (Water) Policy 2009*** **(the Water Policy)*;***

The purpose of the Water Policy is to achieve the object of the Act mentioned above. The identification of environmental values assists in setting water quality guidelines and objectives to protect Queensland waters. It provides a framework whereby decisions regarding activities can be made in an informed manner. The Water Policy sets water quality objectives for Queensland Waters in schedule 1 whereby these objectives are reported against.

- ***Environmental Protection (Air) Policy 2008*** **(the Air Policy)*;***

The purpose of the Air Policy is to achieve the object of the Act mentioned above. This is achieved by identifying the environmental values associated with the air environment that need to

be enhanced or protected. Schedule 1 provides a list of air quality objectives and goals that assist the assessment of the air environment.

- ***Environmental Protection (Noise) Policy 2008*** **(the Noise Policy)*;***

The object of the Noise Policy is to achieve the objective of the Act. As discussed above, environmental values are identified to assist in setting guidelines on acoustic quality objectives for the environment. It also provides a framework for making consistent decisions that best protect Queensland's acoustic environment.

- ***Environmental Protection (Waste Management) Regulation 2000*** **(the Waste Regulation)*;***

The key provisions of the Waste Regulation include Division 3 – Obligations of Waste Handlers. This provision details responsibilities for waste generators, waste transporters and waste receivers, when handling trackable wastes. Trackable wastes are Regulated Wastes listed in Schedule 1 of the Waste Regulation. In Schedule 1, codes associated with the individual regulated wastes are listed. These codes have to be displayed on the waste tracking documentation submitted to the administering authority. All employees are required to become familiar with the trackable wastes listed in Schedule 1.

Scotbar is predominantly a waste receiver and therefore, it is absolutely essential that when a waste transporter delivers waste to Scotbar's facility employees who authorise the acceptance of such material record the prescribed information as required by section 25 of the Waste Regulation. The prescribed information is detailed in Schedule 2 – Prescribed Information for Waste Tracking of the Waste Regulation. In particular, as a receiver, Scotbar must record the

disposal or treatment code. These codes are shown in Schedule 6 of the Waste Regulation. The Site manager must ensure that prescribed information is recorded appropriately

Section 25 also includes a requirement for companies to provide a copy of the prescribed waste to the DERM. This assists the DERM in managing the risks associated with the large volumes of potentially harmful wastes that are generated in society. If a discrepancy occurs, the DERM must be advised in writing as soon as practicable after becoming aware of the discrepancy regarding waste. The Site Manager is responsible for advising the DERM about the discrepancy. The prescribed information must be recorded and kept for at least 5 years.

Appendix 1
Workplace and Emergency Procedures

1.0 Introduction

Part B below details Workplace & Emergency Procedures for various day-to-day activities that will be conducted at the facility at Helidon. Stated measures contained within the respective procedures detail information for site personnel to use as a guide when conducting various activities onsite that have the potential to cause environmental harm (including environmental nuisance).

Emergency Procedures are highlighted in section 2.0 of this document for responding to incidents. These procedures will assist site personnel in responding to incidents in an environmentally responsible manner.

The following Workplace & Emergency Procedures are intended as a guide for Scotbar employees when conducting specific tasks while having due regard for the receiving environment. For the purpose of accessibility to site personnel, Workplace & Emergency Procedures will be laminated & positioned in various locations throughout the facility, including inside vehicles at the facility. The Workplace Procedures are listed as follows:

Daily Operating Procedure:	Workplace Procedure Number
Receival of Solid Waste	1
Stormwater Management	2
Noise Management	3
Dust and Particulate Management	4
Prevention of Spontaneous Combustion	5
Soil Blending With Solid Wastes	6
Leachate and Stormwater Dam Management	7
Odour Management	8
Temperature Monitoring	9
Truck Washing	10
Open Windrow Construction	11
Quality Limits Sampling Procedure	12

Table 1: Workplace Procedures

Daily Operating Procedure:	Emergency Procedure Number
Spills of Solid Waste(s)	1
Fire Incident	2
Release to Waters	3
Rain-Induced Anaerobic Windrows	4

Table 2: Emergency Procedures

2.0 Workplace Procedures

Workplace Procedure # 1 **Receival of Solid Waste:**	
Environmental Commitment: The receival of solid waste must not cause environmental harm or nuisance.	
Identification of Issues: • Allowing odorous waste to sit on the hardstand pad and not to be mixed straight away.	**Possible Impact:** • Nuisance complaints regarding offensive or noxious odours at odour sensitive places.
• Allowing solid waste to sit, putrefy and release leachate.	• Nuisance complaints regarding offensive or noxious odours at odour sensitive places. • Stormwater could become unnecessarily contaminated, thereby imparting a load to the associated dam and thus creating conditions for offensive odours to be released. • Attraction and proliferation of vectors or vermin.
• Non - homogeneous mixing of solid waste.	• The onset of anaerobic activity. • A non even distribution of the C/N ratio resulting in an uneven composting regime. • Leachate releases that could subsequently contaminate stormwater, attract vermin or release offensive or noxious odour resulting in nuisance complaints.
• Receival of liquid or prohibited solid waste to the facility.	• Antagonism or toxicity to composting process. • Contravention of a Environmental Authority, possible enforcement action by DERM • Spillage of the prohibited waste contaminates land or water. • Environmental nuisance (e.g. odour nuisance) is caused. • Workplace health & safety of site personnel may be compromised by the acceptance of prohibited waste.

Control Measures:

- Ensure solid wastes that have the potential to be odorous are mixed homogenously straight away.
- Ensure that nitrogenous solid waste such as animal manures and septic wastes are mixed so as to attain a C/N ratio of 25:1 or greater.
- If the addition of carbon (as green waste/sawdust) is added in the amount to attain a C/N ratio of 25:1 and the mixture is still releasing offensive odour, add more green waste or utilise a proprietary product to eliminate odour.

Record Keeping:

- All solid waste accepted at the composting facility are to be recorded (refer to **Part B Appendix 2 – Form 1-Authorsed Waste Acceptance Checklist)**.
- All regulated waste accepted at the facility for the use in soil conditioner manufacturing must be recorded (refer to **Part B Appendix 2 – Form 1-Authorsed Waste Acceptance Checklist)**.

Responsibility and Communication:

- All facility employees that are engaged in the above mentioned activities are responsible for ensuring control measures are met.
- All incidents should be reported to the Site Manager for action (if necessary).
- If a transport company is found to be in non compliance with directions given by employees, it is the responsibility of the Site Manager to take further action.

Relevant Legislation:

- Environmental Protection Act 1994
- Environmental Protection (Waste Management) Regulation 2000

Workplace Procedure # 2 **Stormwater Management**	
Environmental Commitment • To ensure that a release of contaminants to the receiving environment does not occur; & • To effectively manage stormwater generated onsite to minimise the likelihood of environmental harm occurring.	
Identification of Issues • The development of cracks in the hardstand pad internal drains or perimeter bund.	**Possible Impact** • Release of contaminants to land and surface water potentially causing environmental harm. • Release of contaminants to land with the possible overloading of proposed fresh water dam, creating anaerobic conditions in the dam. If released to the receiving environment, environmental harm may result.
• Windrows of compost are created with > 50% moisture, causing leachate to migrate onto the hardstand pad.	• Excessive leachate may eventually cause overloading of the stormwater containment dam, creating anaerobic conditions in the dam. If released to the receiving environment, environmental harm may result.
• Damage to pad caused by vehicles continually travelling over pad.	• Damage to the pad is likely to cause contaminated stormwater & leachate to settle in crevices in the pad, potentially causing offensive odour liberation and further damage to the hardstand pads.
• Heavy rainfall causes a significant quantity of contaminated stormwater to enter the associated stormwater dam.	• If a 0.5 meter freeboard is not maintained at all times, the dam may overtop, causing contaminants to be released to the receiving environment.
• The allowance of gross solids to be transported via stormwater to the dams.	• Possible overloading creating anaerobic conditions that if released to the receiving environment could cause environmental harm.
• The blocking or obstruction of internal drains.	• Ponding or pooling of stormwater, which may result in the redirection of contaminated stormwater.

• External stormwater sources allowed to enter the facility.	• Possible overloading both in strength and volume of stormwater.
• The gradient of the hardstand pad has not been maintained.	• Ponding and Pooling of stormwater around the base of windrows, creating anaerobic activity.

Control Measures

- Ensure the initial compost created contains no greater than 50% moisture, to prevent excessive leachate generation.
- Ensure stormwater dam can contain a 1-in-100-year, 24-hour storm event, approximately 240 mm / 24 hour.
- Ensure a 0.5 meter freeboard is maintained in stormwater containment dam at all times (unless there is an emergency), to prevent the dam overtopping & contaminated stormwater being released to the receiving environment.
- The integrity of the pad must be visually inspected on a regular basis by site personnel.
- If the integrity of the pad is found to be compromised, the Site Manager must be informed immediately.
- If the integrity of the pad is found to be compromised, it must be repaired immediately, by placing clay in the affected areas & compacting to an adequate impermeability.
- In the event that leachate is ponding or pooling on the hardstand pad, clean-up action must be initiated immediately to effectively remove the leachate.
- The leachate may be returned to an immature composting windrow.
- In the event the dam becomes overloaded, an aerator may be used to increase the dissolved oxygen or alternatively, biological inoculums may be used to allow beneficial organisms to outcompete less beneficial organisms, thereby reducing the likelihood of offensive odour liberation.

Record Keeping

- Record any repairs or maintenance undertaken to the pad.
- Record all observations in relation to the performance of the stormwater containment system during & after rainfall events (refer to **Part B Appendix 2.- From 9 – Stormwater Performance Checklist**).
- Record details of any release of liquid from the proposed fresh water dam.
- Record parameters (including the dissolved oxygen (DO) and pH) of the proposed fresh water dam every quarter (Refer to **Part B Appendix 2 –Form 2 – Dissolved Oxygen, pH, EC +Redox**) for the recording of stormwater parameters.

Responsibility and Communication

- All facility employees must report any release to the receiving environment immediately to the Site Manager for attention and any necessary subsequent action.
- The Site Manager is responsible for ensuring any repairs to any bund walls or leachate containment dam walls are completed in a timely manner.
- The Site Manager is responsible for the collection and recording of any observations made in relation to the performance of the associated stormwater dam.

Relevant Legislation

- Environmental Protection Act 1994; &
- Environmental Protection (Water) Policy 2009.

<table>
<tr><td colspan="2"><u>Workplace Procedure # 3</u>

<u>Noise Management</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment</u>

• To ensure that noise generated during operations at the facility do not cause environmental nuisance.</td></tr>
<tr><td><u>Identification of Issues</u>

• Noisy equipment/machinery is used that has not been maintained in accordance with manufacturer specifications.</td><td><u>Possible Impact</u>

• Noise generated by faulty equipment/machinery causes environmental nuisance.
• Contravention of Environmental Authority possible enforcement action by DERM</td></tr>
<tr><td>• Trucks delivering waste have defective mufflers/silencers.
• Trucks delivering waste to the facility are unnecessarily using air brakes.</td><td>• Noise complaint from a noise sensitive place.
• Possible enforcement action from the DERM</td></tr>
<tr><td colspan="2"><u>Control Measures</u>

• Ensure all vehicles/machinery are maintained in accordance with manufacturer specifications.
• The Daily Machinery Start up Checklist should be filled in. (Refer to Part B Appendix 2 – Form 8 -Daily Equipment/Machinery Start up Checklist).
• If noise not ordinarily present is experienced to be emanating from any machinery or equipment that is likely to cause environmental nuisance at any time, prompt attention should be given to rectifying the noise. The noise should cease until rectification has occurred.
• Defective plant and equipment should not be used until repaired.
• Delivery trucks should not use air brakes unnecessarily.
• Ensure that deliveries do not occur before 6 am & after 6 pm.
• Ensure deliveries do not occur on Sundays.
• The Site Manager will regularly conduct noise observations outside the perimeter of the soil manufacturing boundary to determine any excessive noise sources.</td></tr>
<tr><td colspan="2"><u>Record Keeping</u>

• Daily start up records must be taken. (Refer to Part B Appendix 2– Form 8 -Daily Equipment/Machinery Start up Checklist).
• Keep records of all maintenance/repairs of vehicles/machinery.
• Record all complaints received regarding noise, including any actions taken to mitigate the noise emitted.
• Record all noise data that is requested by the administering authority (DERM).</td></tr>
<tr><td colspan="2"><u>Responsibility and Communication</u></td></tr>
</table>

- The Site Manager is to ensure that all plant and equipment operates in accordance with manufacturers specifications.
- The Site Manager is responsible for ensuring that the Daily Machinery Start up Checklist is filled in.
- The Site Foreman is responsible for the prompt notification to the Site Manager if noise is released that is likely to cause environmental nuisance.
- It is the responsibility of the Site Manager to investigate any complaints received regarding noise nuisance and report all findings to the DERM when required (refer to **Part B Form 14 – Complaint Investigation Form**) for the recording of information.

Relevant Legislation

- Environmental Protection Act 1994; &
- Environmental Protection (Air) Policy 2008.

<table>
<tr><td colspan="2"><u>Workplace Procedure # 4</u>

<u>Dust & Particulate Management:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that activities at the facility do not cause environmental harm or nuisance.</td></tr>
<tr><td><u>Identification of Issues:</u>

• Dust liberation from moving traffic.</td><td><u>Possible Impact:</u>

• Releases that cause environmental nuisance. On site impact to facility employees such as to their eyes and lungs.</td></tr>
<tr><td>• Dust and particulate release from the turning, mixing and moving of compost.</td><td>• Releases that cause environmental nuisance.
• On site impact to facility employees such as to their eyes and lungs.</td></tr>
<tr><td>• Complaint received regarding nuisance at a dust sensitive place.</td><td>• If serious enough, enforcement action may be taken by the DERM.
• The DERM may request that monitoring be performed at a dust sensitive place to determine if compliant with:
o Dust deposition = 120 mg/m^2 /day –AS 3580.10 of 1991;
o PM10 = 50 ug/m^3 - 24 hour average (air policy 2008).</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• Ensure that hardstand pad is regularly wet down with water to suppress dust. This can be achieved by utilising collected stormwater.
• If utilised, ensure that the sprinkler system is effective and is maintained in good working order. The Site Manger is to be promptly told of when the system is ineffective or not in working order.
• Limit traffic to designated internal road ways. This will lessen the amount of dust that is created. Keep this area regularly moist. Consider using sprinklers.
• Ensure moisture content of windrows is such that dust is not liberated when turning, mixing or movement occurs.
• Do not turn, mix or move windrows in excessive wind speed.</td></tr>
<tr><td colspan="2"><u>Record Keeping:</u>

• Record when sprinklers are turned on. Note the duration of use and keep a record of any maintenance performed. (Refer to Part B Appendix 2– Form 6 – Sprinkler Usage Form).
• Record daily weather conditions. (Refer to Part B Appendix 2 – Form 7 – Daily Weather Conditions).
• Record when significant earthworks are occurring (refer to Part B Appendix 2 - Form 10 - Daily Running Sheet</td></tr>
<tr><td colspan="2"><u>Responsibility and Communication:</u></td></tr>
</table>

- It is the responsibility of all facility employees engaged in the above activities to ensure that the above controls are carried out.
- It is the responsibility of the Site Manager to allocate tasks and to ensure that activities on the site do not result in the release of particulate or dust that causes environmental nuisance.
- The Site Manager must be promptly informed of any incident that is likely to cause environmental harm or nuisance.

Relevant Legislation:

- Environmental Protection Act 1994
- Environmental Protection (Air) Policy 2008

<table>
<tr><td colspan="2"><u>Workplace Procedure # 5</u>

<u>Prevention of Spontaneous Combustion</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment</u>

• To ensure that materials present within the compost windrow (all types) do not self heat to the point of spontaneously combusting.</td></tr>
<tr><td><u>Identification of Issues</u>

• Moisture content of compost should not be > 50% w/w</td><td><u>Possible Impact</u>

• Anaerobic activity may predominate, creating methane and other flammable gases. Once mixed with oxygen, the heat from chemical reactions set off by excessive microbial heat could ignite a fire, releasing particulate, ash and smoke thus creating environmental nuisance.</td></tr>
<tr><td>• Opening of a static windrow too early.</td><td>• Exposing smouldering activity to oxygen creating an ignitable mixture.</td></tr>
<tr><td>• Non-thorough extinguishment of fire.</td><td>• Re-ignition of fire causing environmental nuisance.</td></tr>
<tr><td>• Non-homogeneous mixing of green waste, sawdust and solid wastes.</td><td>• Anaerobic activity may predominate creating methane and alcohols. Once mixed with oxygen, the heat from chemical reactions could ignite a fire.</td></tr>
<tr><td>• Open windrow has a distinct smell of charring or smouldering.</td><td>• Mixture is anaerobic and heat from microbial activity has been excessive to the point of initiating chemical reactions thus creating a chain reaction of chemical oxidation that creates a fire. If unattended the likelihood of a larger fire occurring will increase.</td></tr>
<tr><td colspan="2"><u>Control Measures</u>

• Do not allow unsupervised releases to windrow bunds/dams.
• Ensure that water added to static &/or open windrows does not exceed 50 % w/w.
• Do not allow windrows to dry out from the top. However ensure that any subsequent introduction of water to windrows (i.e. sprinklers) does not result in the moisture % becoming > 50 % w/w.
• Ensure that enough green waste/sawdust is mixed to effectively absorb free leachate.
• Do not sandwich or compress composting material.
• Turn windrows when a temperature of 62 degrees Celsius is attained.
• Ensure windrows are not opened when temperature is greater than 80^{o} Celsius until liberal watering has occurred to dissipate heat. The introduction of oxygen could catalyse the ignition of potential smouldering that is occurring and hence methane generated in the centre of the static windrow could ignite.
• Ensure windrow has sufficient greenwaste coverage to minimise the liberal mixing of methane and</td></tr>
</table>

oxygen and to minimise the loss of nutrients such as nitrogen, phosphorous and sulphur.

- Monitor temperature of windrows daily. This is particularly important in the initial stages of the composting process. It will allow for an understanding of how vigorous microbial activity is, which may require recipe adjustment.
- Monitor to identify any smoke liberation, characteristic odour pertaining to smouldering or charring daily, especially when turning windrows.
- If in the event of smouldering or a fire, the windrow must be doused with water &/or soil to extinguish the flames. The windrow must then be pulled apart. If weather conditions are such that the pulling apart of the windrows will ignite other windrows or internal or external property, dousing with water and soil will occur so as to smother the fire. When weather stabilises, particularly wind conditions, the windrow can be pulled apart and sequentially inundated with water to effectively extinguish the fire.
- Cool down open windrow by turning and mixing. Adjust moisture content at this time if needed.
- Ensure temperature is monitored daily in compost windrows (refer to **Part B Appendix 2 – Form 3 – Temperature Profile Recording**).
- If excessive heat is encountered (>80 ^{o} Celsius) sprinkle water over the windrow to dissipate heat before opening to cool and aerate.
- Re-look at initial recipe. Either too much readily digestible material has been introduced to the starting mixture. 62 ^{o} Celsius is the desirable figure.

Record Keeping

- Ensure that Temperature readings are recorded as set out in **Workplace Procedure 9 – Temperature Monitoring**. (Refer to **Part B Appendix 2– Form 3 - Temperature Profile Recording**)..
- Record initial moisture addition + any subsequent additions (Refer to **Part B Appendix 2 –Form 4 – Moisture Content Form**).
- Record all observations of any evidence of spontaneous combustion. (Refer to **Part B Appendix 2 - Form 5– Daily Windrow Observation Form**).

Responsibility and Communication

- It is the responsibility of all site personnel to report any evidence or incidence of spontaneous combustion to the Site Manager for attention & necessary action.
- All site personnel engaged in the construction of windrows is responsible for the correct addition of liquid waste and or water to obtain the appropriate moisture content of 50 % w/w.

Relevant Legislation:

- Environmental Protection Act 1994; &
- Environmental Protection (Air) Policy 2008.

<table>
<tr><td colspan="2"><u>Workplace Procedure # 6</u>

<u>Soil Blending With Solid Wastes</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment</u>

• To ensure that insitu soil blending with solid wastes during operation of the composting & soil conditioner activity does not cause environmental nuisance.</td></tr>
<tr><td><u>Identification of Issues</u>

• Solid wastes have not been homogenously mixed with insitu soil & waste putrefies.</td><td><u>Possible Impact</u>

• Exposed waste releases offensive odour that may create environmental nuisance.</td></tr>
<tr><td>• Soil blends have been opened on mass before maturity has occurred.</td><td>• Offensive odour is released along the perimeter of the mine site and is creating environmental nuisance.
• Death of any vegetation planted due to toxicity.</td></tr>
<tr><td colspan="2"><u>Control Measures</u>

• Ensure that homogenous mixing of solid wastes and insitu soil occurs. This may require a final sprinkling of soil across the surface of the stacked blended soil with dry insitu soil or green waste to suppress any odour or to absorb excess moisture.
• Consideration to the use of greenwaste to absorb excess leachate should occur.
• Ensure that prior to opening soil blend stockpiles on mass; an odour assessment is conducted on the material. This is to occur via the displacement of one front end loader bucket away from the stockpile. Any evidence of offensive odour indicates the blend is not ready to use for rehabilitation. The displaced material is to be placed back into the stockpile & the use of extra soil or greenwaste should occur to suppress odour.
• The remixing of blended soil with solid wastes should not occur if the blended soil is releasing offensive odour.</td></tr>
<tr><td colspan="2"><u>Record Keeping</u>

• Record the amount of solid waste mixed with soil.</td></tr>
<tr><td colspan="2"><u>Responsibility and Communication</u>

• The Site Manager is to ensure that all site personnel engaged in the blending of soil with solid wastes adhere to the stated control measures.</td></tr>
<tr><td colspan="2"><u>Relevant Legislation</u>

• Environmental Protection Act 1994;
• Environmental Protection (Water) Policy 2009; &
• Environmental Protection (Air) Policy 2008.</td></tr>
</table>

<table>
<tr><td colspan="2"><u>Workplace Procedure # 7</u>

<u>Leachate and Stormwater Dam Management:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• That the functioning of the associated stormwater dams (including mine site stormwater dam) do not result in the release of offensive and noxious odour that creates environmental nuisance at an odour sensitive place.
• That the dams do not release to the receiving environment (particularly waters, including ground water).</td></tr>
<tr><td><u>Identification of Issues:</u>

• Overloading the dams with high strength (High Biological Oxygen Demand (BOD)) & (Chemical Oxygen Demand (COD)) substances, in liquid or solid forms.
• Overloading of the dams with excessive amounts of organic matter, such as green waste/sawdust.</td><td><u>Possible Impact:</u>

• A reduction in dissolved oxygen and resulting in anaerobic conditions, which results in the liberation of offensive or noxious odour from the dam.
• A reduction in Redox potential which results in the liberation of offensive or noxious odour.</td></tr>
<tr><td>• Discharging toxic and hazardous wastes to the dams.</td><td>• The killing of beneficial aerobic bacteria and the introduction of toxicants to the composting process.</td></tr>
<tr><td>• Increase in the amount of sediment/sludge at the bottom of the dams.</td><td>• Reduced capacity of the dams.</td></tr>
<tr><td>• Incident stormwater coming into contact with raw solid waste (accept green waste).</td><td>• Unnecessary contamination of stormwater resulting in dams becoming overloaded.
• Offensive odour release and enforcement action taken by the DERM.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• Empty the dams for use as dust suppression or composting moisture control if required.
• Mop up leachate that has emanated from windrows.
• Do not allow high BOD/COD wastes to directly discharge to the dams.
• Do not allow solid waste to be discharged to the associated stormwater containment dam.
• Do not allow raw solid waste (i.e. manures, biosolids, filter presses, putrescible waste) to sit on hardstand pad so that incidental stormwater carries it to the stormwater containment dam or other dams.
• Filter out organic matter in stormwater runoff to minimise the amount that enters the dams.
• Ensure that the top half of the dam is aerobic or facultative. Do not allow dissolved oxygen (DO) < 2 ppm or mg/l if ponds are to operate aerobically.
• If DO falls below 2 ppm activate aeration if pond is to function as an aerobic system.
• Do not allow pH of the water column to fall below 6.5.
• Do not allow toxic or hazardous substance to enter the dams. If a release or discharge occurs to the dams that results in the souring of the dam and hence the liberation of noxious or offensive odour</td></tr>
</table>

• Maintain site perimeter bund and drainage channels to prevent water external to the site to enter.
Record Keeping: • Record incidental rainfall (refer to **Part B Appendix 2 – Form- 7 – Daily Weather Conditions**).. • Record DO, Redox, EC and pH monthly or at least daily, in the event of a release of offensive or noxious odour. Continue monitoring until DO & pH stabilises. (Refer to **Part B Appendix 2 - Form 2 – Dissolved Oxygen, Redox potential, EC + pH** to record water quality parameters).
Responsibility and Communication: • It is the responsibility of all facility employees to report any variance from the control measures stated above to the Site Manager. • The Site Manager is responsible for the collection of DO, Redox potential, EC and pH data from the dams weekly, if water is present to measure. • The Site Manager is to promptly inform the DERM any variance from the control measures that result in environmental harm or nuisance.
Relevant Legislation: • Environmental Protection Act 1994 • Environmental Protection (water) Policy 2009.

<table>
<tr><td colspan="2"><u>Workplace Procedure # 8</u>

<u>Odour Management:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that the activities undertaken at the facility do not cause environmental nuisance.</td></tr>
<tr><td><u>Identification of Issues:</u>

• The overloading of the associated stormwater dam with contaminated stormwater.</td><td><u>Possible Impact:</u>

• The onset of anaerobic activity and the release of offensive and noxious odour.
• Enforcement action taken by the DERM.</td></tr>
<tr><td>• C/N ratio of compost mixes is < 25:1.</td><td>• The release of ammonia and amines, which results in a net loss of nitrogen from the mixture.</td></tr>
<tr><td>• Too much liquid is introduced to the open windrows resulting in a moisture content > 50 % w/w.</td><td>• Oxygen diffusion through the compost is restricted, hence anaerobic activity predominates. This results in the release of offensive and noxious odours (volatile fatty acids (VFA) and sulphidic type odours).</td></tr>
<tr><td>• The receival of highly odorous wastes.</td><td>• The release of offensive and noxious odour that results in environmental nuisance at an odour sensitive place.
• Possible complaint made from odour sensitive place</td></tr>
<tr><td>• Premature movement or turning of static windrow that is anaerobic.</td><td>• The release of offensive and noxious odour that results in environmental nuisance at an odour sensitive place.</td></tr>
<tr><td>• Open windrows have turned anaerobic.</td><td>• The release of offensive and noxious odour that results in environmental nuisance at an odour sensitive place.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• Refer to Workplace Procedure 7 - Leachate, and Stormwater Dam Management, for the management of the dams in an aerobic or facultative state.
• Ensure that the addition of moisture to the open windrow mixtures does not result in the onset of anaerobic activity.
• Mix odorous waste straight away. Do not allow to sit in compost mixing bay or on the hardstand pad to putrefy. Use EM in this instance.
• If required cover received solid waste loads with green waste / sawdust immediately. Then start to construct the windrow. Spray EM whilst this occurs.
• Consider the use of other proprietary products that eliminate or minimise offensive odour to</td></tr>
</table>

ensure a back supply is available.

- Ensure that windrows have enough green waste added so that carbon: nitrogen ratios are within the desired range of 30-25: 1 or greater.
- Do not sandwich or compress the green waste into the windrow.
- Ensure homogenous mixing occurs.
- If open windrows are releasing offensive or noxious odours, turn windrow to increase oxygen. Do not allow open windrow to continue anaerobic breakdown. Consider the use of proprietary products to eliminate or minimise offensive odour. Adjust moisture content by adding inert material or green waste if compost is less than two weeks old. If compost is greater than two weeks in age, re-mix and re-start the composting process.

In the Event of an Odour Release, perform odour monitoring at known monitoring points (refer to Part B Appendix 2 – Form 13 - Odour Monitoring). Be sure to go up and down wind of the source and ensure that the characteristic of the odour experienced off site is similar to what is being released on site.

Record Keeping:

- Record all observations made of windrows pertaining to odour generation. (Refer to **Part B Appendix 2– Form 5 – Daily Windrow Observation Form**).
- Record; DO, Redox potential, EC and pH in the dam. (Refer to **Part B Appendix 2 – Form 2 - Dissolved Oxygen, Redox potential, EC + pH).**
- Record temperature in all windrows. (Refer to **Part B Appendix 2 – Form 3 - Temperature Profile Recording**).

Responsibility and Communication:

- The Site Manager is responsible for ensuring that records are collected and maintained.
- The Site Manager is responsible for ensuring that all control measures are carried out.
- It is the responsibility of the Site Manager to investigate any complaints received regarding odour nuisance and report all findings to the DERM when required. Refer to **Part B Appendix 2 - Form 14 – Complaint Investigation Form** for the recording of information.
- The Site Foreman must inform the DERM of any findings when the Site Manager is unable to do so.
- All site personnel are responsible for carrying out allocated tasks.

Relevant Legislation:

- Environmental Protection Act 1994
- Environmental Protection (Air) Policy 2008

Workplace Procedure # 9 **Temperature Monitoring:**	
Environmental Commitment: • To ensure that temperature monitoring occurs to demonstrate efficient composting. • To ensure that temperatures greater than 62^{o} Celsius do not occur.	
Identification of Issues: • Improper temperature profiling.	**Possible Impact:** • A lack of understanding as to where the composting cycle is at, possibly resulting in unfinished compost being utilised.
• Addition of Nitrogen and bacteria that does not result in significant microbial activity and an increase in temperature.	• Likely that compost has become contaminated with an antagonist or a toxicant.
• Addition of nutrient rich waste that creates rampant temperature increases above 67 - 80 ^{o} Celsius.	• The killing of beneficial microorganisms resulting in the reduced quality of compost. • The initiation of chemical reactions that create self heating conditions that could subsequently lead to spontaneous combustion.
• Non-regular maintenance or calibration of temperature probe.	• Incorrect obtained temperature values and detrimental to compost health.
• Incorrect temperature parameter set (i.e. Fahrenheit instead of Celsius).	• Inappropriate time to turn windrow resulting in the release of offensive odour that could result in odour complaints.
• Temperatures exceeding 67^{o} Celsius.	• The killing of beneficial microorganisms resulting in the reduced quality of compost.
• Inappropriate Nitrogen amount and or adequate moisture.	• Composting process not initiated.
Control Measures: • Ensure that temperature probe and meter are in good working order by adhering to manufacturer specifications for calibration and maintenance. • Ensure C/N is not < 25:1. • Ensure temperature probe is set on degrees Celsius. • Ensure that temperatures are taken from 4 equidistant points along the length of the windrow. At each point obtain three temperature readings equidistant from the centre of the windrow to 4 inches inside the perimeter of the outer layer of the windrow.	

• Record all temperatures on **Form 3 – Temperature Profile Recording** of **Part B Appendix 2 – Forms and Checklists**. • If excessive steam or heat is experienced to be emanating from a certain point in the windrow, increase and concentrate temperature monitoring in this area. • Ensure that all respective windrows are not too large so that an accurate temperature profile can be obtained. • Ensure that mixtures are homogenously mixed for open windrows to obtain an even rate of composting. • Ensure that enough green waste/sawdust is present to absorb free liquid in windrow. Ensure moisture content is not greater than 50 % w/w. • Monitor temperature daily until confidence is given that temperatures will not exceed 62^{o} Celsius. If temperatures increase rapidly redefine initial mixture (possibly too much Nitrogen) as to not reach temperatures > 62^{o} Celsius. An attainment of 62^{o} Celsius should be the target. • Refer to **Workplace Procedure 11 – Open Windrow Construction** for construction and management of respective windrow types.
Record Keeping: • Record all temperatures obtained from windrows (refer to **Part B Appendix 2– Form 3 - Temperature Profile Recording**). • Record all maintenance, calibration and replacement of temperature monitor and probe.
Responsibility and Communication: • The Site Manager is responsible for the gathering of temperature profiles within windrows. • The Site Manager is responsible for the recording of temperature profiles.
Relevant Legislation: • Environmental Protection Act 1994

Workplace Procedure # 10 **Truck Washing:**	
Environmental Commitment: • To ensure that truck trailers, wheels and undercarriage are washed and are free of any contaminants (particularly odorous contaminants) before exiting the facility.	
Identification of Issues: • Trailers that have contained odorous waste leave the facility unclean.	**Possible Impact:** • A complaint regarding odour nuisance is received.
• Trucks have been driven through mud and or contaminants and leave the facility	• Mud or contaminants are trucked out and deposited onto the road leading to the facility. Possible breach of Environmental Authority and enforcement action taken by the DERM. • Complaint regarding offensive odour is received.
Control Measures: • Ensure that trucks delivering waste drive on designated internal roadways. • Ensure that internal roadways are kept fee of contaminants. • Ensure that stormwater can flow easily from internal roadways and that there is no ponding or pooling of stormwater. • Ensure that trailers that have contained odorous wastes are cleaned before leaving the facility. • Ensure that wash waters are collected and absorbed into a green waste bund that has been purposely built for the truck washing. • Ensure that the wheels and undercarriage of the trailer is free of any mud and or contaminants.	
Record Keeping: • Record all trucks that have been washed on the Daily Running Sheet form (refer to **Part B Appendix 2 – Form 10 – Daily Running Sheet**).	
Responsibility and Communication: • It is the responsibility of all employees engaged in the receival of odorous waste to either direct or supervise the cleaning out of trailers, wheels and the undercarriage before trucks leave the facility. • The Site Manager is to ensure that no trucks that have contained odorous waste leave the site unclean.	
Relevant Legislation: • Environmental Protection Act 1994 • Environmental Protection (Water) Policy 2009 • Environmental Protection (Air) Policy 2008	

<table>
<tr><td colspan="2"><u>Workplace Procedure # 11</u>

<u>Open Windrow Construction:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that the construction of an Open Windrow does not cause environmental harm (particularly nuisance).</td></tr>
<tr><td><u>Identification of Issues:</u>

• Green waste bund not constructed tight enough.</td><td><u>Possible Impact:</u>

• Release of leachate to the hardstand pad that could possibly lead to odour nuisance.
• Destruction of the hardstand pad.</td></tr>
<tr><td>• The introduction of nitrogenous based waste that results in minimal heat production.</td><td>• Possible toxicant introduced to the starting mixture.</td></tr>
<tr><td>• Non homogeneous mixing of waste and green waste and or sawdust.</td><td>• Anaerobic activity predominates.
• Loss of nutrients N, P and S.
• Leachate escape.
• Odour nuisance occurs.
• Vector attraction.
• Spontaneous combustion.</td></tr>
<tr><td>• Introduction of water that results in a moisture content > 50 % w/w.</td><td>• Anaerobic activity predominates.
• Loss of nutrients N, P and S
• Leachate escape.
• Odour nuisance occurs.
• Vector attraction.
• Spontaneous combustion.</td></tr>
<tr><td>• The addition of lime to high nitrogenous based waste such as biosolids.</td><td>• Release of ammonia resulting in odour nuisance and a loss of nutrients.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• Ensure green waste is suitable at absorbing free liquid.
• The amount of liquid delivered to the open windrow bund must not exceed an amount that creates a moisture percentage of > 50 % w/w. It is essential that enough green waste is incorporated into the bund so that leachate does not come into contact with the hardstand pad. It is better to approach 50 % w/w moisture from sprinkling water on to the finished windrow than trying to cut it back from a higher percentage. It is far less messy.
• Nitrogenous based waste should be added to obtain a C/N ratio of 25: 1.
• Do not add lime at the beginning of an open windrow cycle that contains high nitrogenous based waste as ammonia could volatilise.
• If windrow is leaking leachate, add sawdust to absorb free liquid.
• Open windrows should be no greater than 3 metres wide and 2 metres high. Be aware the higher one goes with a windrow, the greater the potential exists for the restriction of airflow.</td></tr>
</table>

Post Construction:

- Each completed open windrow must be monitored daily to ensure leachate breakout does not occur. If observed, the site manager or the FEL operator must be notified to provide prompt attention.
- Temperature must be recorded throughout the open windrow to indicate the stage at which the composting process is at. A Temperature of 62 ^{o} C is what should be strived for. (**Refer to Workplace Procedure 9).**
- When an open windrow reaches 67 ^{o} C, the windrow must be opened to cool.
- A light sprinkling of water to dissipate heat maybe required.
- Once reformed the temperature of the windrow must be closely monitored. Temperatures > than 67 ^{o} C may indicate that the starting mixture is too rich in nutrient such as nitrogen.

Record Keeping:

- Record the volume or weight of the individual inputs that have gone to create the initial mix and any extra inputs added to the windrow post construction on **Form 11 - Starting Recipe and any Adjustments Performed to Windrows** located in **Part B Appendix 2**.
- Record any daily observations made for the windrow (refer to **Part B Appendix 2 – Form 5 – Daily Windrow Observation Form**).
- Windrow temperatures must be recorded daily.

Responsibility and Communication:

- All employees engaged in the construction of open windrows must ensure the above measures are noted.
- The Site Manager must ensure that the FEL operator is proficient to create a tight bund.
- Any release that has caused or is likely to cause environmental nuisance must be immediately reported to the Site Manager.
- The DERM must be notified if a release occurs.

Relevant Legislation:

- Environmental Protection Act 1994

Workplace Procedure # 12

Quality Limits Sampling Procedure:

Environmental Commitment:

- To ensure that the obtaining of samples to determine the quality characteristics of final compost blends is undertaken to ensure quality.

Identification of Issues:	**Possible Impact:**
• 1000 dry weight tones of finished soil conditioning product is not sampled.	• Unknown quality of final product. • Breach of Environmental Authority. • Enforcement action taken by the DERM.

Control Measures:

- Ensure that finished blends that contained septic waste and or animal manures are sampled at the 1000 dry weight tonnes.
- The sample must be representative of a composite sample.
- The composite sample must be made from obtaining five individual samples. These samples are to be taken at equidistant places along the length or around the circumference of the finished stockpile and taken from equidistant points within the finished stockpile determined by measuring from the outer perimeter to the inside of the finished stockpile to obtain the point.
- The following parameters must be analysed for, to determine on site restrictive or unrestrictive use when biosolids, septic tank waste and animal manures have been composted via either composting method. This method of sampling should be conducted utilising **Form 12 - Quality Limits Sampling Checklist** located in **Appendix 2** to ensure that sampling is conducted correctly.

Quality Characteristics Limits

QUALITY CHARCATERISTIC (mg/kg)	**QUALITY CHARACTERISTIC LIMIT**	
	FOR ON-SITE UNRESTRICTED USE	**FOR ON –SITE RESTRICTED USE**
Arsenic	20	20
Cadmium	3	5
Chromium	100	250
Copper	100	375
Lead	150	150
Mercury	1	4

Nickel	60	125
Selenium	5	8
Zinc	200	700
E.coli (MPN/gram)	<100	
Faecal coliforms (MPN/gram)	<1000	
Salmonella sp.	Not Detecetd/50 grams of final product	

Unrestricted use – for use on outward facing batters.

Restricted use – for use on inward facing batters.

Record Keeping:

- Records must be kept of how many samples are obtained. This should correspond to 1 in 1000 dry weight tones.
- Records must be kept for any new blends containing biosolids, septic tank wastes and or animal manures that have been created (refer to **Part B Appendix 2 - Form 11 - Starting Recipe and any Adjustments Performed to Windrows**).
- All quality limit composite samples for all finished products containing biosolids must satisfy the conditions of **Form 12-Quality Limit Sampling Checklist** located in **Part B Appendix 2.**

Responsibility and Communication:

- The Site Manager must ensure that the results of the samples obtained are provided to a person or a body who is suitable to make determinations as to the quality of the final blend.
- The Site Manager must ensure that the samples required are obtained.

Relevant Legislation:

- Environmental Protection Act 1994

3 0 Emergency Procedures

<table>
<tr><td colspan="2"><u>Emergency Procedure # 1</u>

<u>Spill of Solid Waste(s)</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment</u>

• To ensure that prompt attention is given to cleaning up spills, to minimise the likelihood of causing environmental harm.</td></tr>
<tr><td><u>Identification of Issues</u>

• Solid waste(s) have been spilt such that it is impeding stormwater flow paths.</td><td><u>Possible Impact</u>

• Stormwater can no longer traverse along its natural path into associated stormwater dam, resulting in ponding and pooling and indiscriminate flow paths
• The release of contaminated liquid to the associated stormwater dam(s), potentially causing the dam to tend anaerobic.</td></tr>
<tr><td>• Solid wastes have been spilt and allowed to directly or indirectly enter the associated stormwater dam(s).</td><td>• Waste entering the associated stormwater dam could cause the dam to turn anaerobic
• Reduce storage capacity of the dams.
• If contaminants overtopped the bund wall, the extent of contamination would be greater & require more resources to clean up.</td></tr>
<tr><td colspan="2"><u>Control Measures</u>

• Ensure all vehicles obey speed limits while onsite and unload correctly; &
• Ensure all rainfall is collected & removed promptly.

Cleaning Up Spills of Solid Waste
• Only dry methods of clean up will be utilised.
• Spilt material should be contained as necessary so as it does not spread
• The following is a typical list of materials and equipment to be utilised by site personnel in the event of a spill of Solid waste:
o Shovels;
o Yard brooms;
o Booms (on-ground)
o Drain covers and drain plugs.
o FEL (front end loader)
o Screens/temporary fencing

Spills Resulting in a release to associated stormwater dams
• Test for pH, dissolved oxygen (DO), electrical conductivity (EC) and Redox (mV).
• If pH adjustment is required, introduce dilute solutions to neutralise. This can be determined by performing a jar or bucket test, whereby solutions of sodium bisulphate or dilute solutions of either sulphuric acid or sodium hydroxide can be added to a sample of contaminated water to</td></tr>
</table>

determine the volume required. **However, since both sulphuric acid and sodium hydroxide represent a strong acid and alkali respectively, consideration should be given to the use of weaker acids and bases if a significant adjustment is not required. Contact should be made with a person who is appropriately qualified to make this determination.** • Ensure that an aerator is operated to efficiently aerate contaminated water if required. • If rapid oxidation is required above what the aerator can induce, then consideration should be given to introducing ozone or hydrogen peroxide. If initially ozone or hydrogen peroxide cannot be introduced, calcium nitrate should be utilised to increase the redox potential. **Given the hazardous nature of hydrogen peroxide, specialist help will be required when introducing it to the dam.** • As an alternative to the above, ensure microbial inoculums are regularly dosed to the leachate containment system to suppress odour. • Continue monitoring pH, DO, EC and Redox after addition of agents.
Record Keeping • Record all volumes spilt. • Record actions taken to remedy the spill. • If release to on site to stormwater dams occurs, record parameters contained on **Form 2 – Dissolved Oxygen, pH, EC + Redox** of **Part B Appendix 2.**
Responsibilities and Communication • All site personnel that are engaged in the abovementioned activities are responsible for ensuring control measures are met. • The Site Manager is responsible for advising the administering authority about a release to the receiving environment.
Relevant Legislation • *Environmental Protection Act 1994.*

Emergency Procedure # 2 **Fire Incident**	
Environmental Commitment • To ensure that in the event of fire ignition, all reasonable and practicable measures are taken to minimise or prevent environmental harm (including environmental nuisance).	
Identification of Issues • Temperatures of windrows have not been regularly monitored & anaerobic activity is prevalent.	**Possible Impact** • A fire ignites and if this occurs after hours, it may migrate to other windrows of compost, potentially causing a significant sized fire and large expense to extinguish & repair damage.
• A person is smoking in & around compost windrows.	• A fire ignites causing risks to persons, property & the environment. • Release of particulate, ash and noxious vapours potentially causing environmental nuisance.
• Someone has broken into the site and tries to ignite a fire in the compost windrows.	• A fire ignites causing risks to persons, property & the environment. • Release of particulate, ash and noxious vapours potentially causing environmental nuisance. • A fire ignites and if this occurs after hours, fire may migrate to windrows of compost, potentially causing a significant sized fire and large expense to rectify.
• Allowing windrow to increase in heat excessively without any attempt to cool.	• Eventual spontaneous combustion. If occurs after hours fire could predominate and jump from windrow to windrow. • Release of particulate, ash and noxious vapours. • Enforcement action taken by the DERM.
• Lightning strike onto windrow (particularly on an anaerobic windrow).	• A fire starts in compost windrow. Release of smoke and flame. • If occurred after hours, fire may predominate and jump from windrow to windrow.
Control Measures • No flammable liquids are to be stored onsite (in quantities that require licensing by the Local Authority). • No smoking is to occur in or around compost windrows. • All water collection points need to be checked regularly to determine ability to access.	

- The moisture content of the compost windrows must be kept above 30- 40 % w/w. This will retard burning.
- Fire extinguishers are to be positioned in readily accessible points so that use in an emergency is not restricted.
- In the event of a fire within a windrow the affected windrow must first be suppressed with either the use of excessive water and/or dirt. There may be a requirement to utilise fire retardant. Once weather conditions are suitable, the windrow can be pulled apart to ensure fire is extinguished.
- Regular temperature testing of compost windrows is to occur in accordance with **Form 3 – Temperature Profile Recording** of **Part B Appendix 2**. If temperature throughout the compost is **> 80** degrees Celsius, then sprinkling should be initiated to dissipate heat.

Record Keeping

- If applicable material safety data sheets (MSDSs), describing the properties of the solid wastes being kept or handled on site and the appropriate first aid measures for them must be kept onsite and readily accessible to all site personnel.
- Any release to air from fire is to be reported to the DERM via telephone as soon a practicable after becoming aware a release has occurred that is likely to result in environmental harm (including environmental nuisance at any odour or dust sensitive place).
- All releases to the air are to be recorded (refer to **Part B Appendix 2** - **Form 13 – Odour Monitoring**) for the recording of any release.
- Air sensitive receptors must be monitored after an incident to determine if nuisance is occurring or likely to occur.
- If a complaint is received, utilise **Form 14 – Complaint Investigation Form** located in **Part B Appendix 2** for recording.

Responsibility and Communication

- All site personnel that are engaged in the abovementioned activities are responsible for ensuring control measures are met.
- The Site Manager is responsible for advising the DERM of any event/incident that requires notification.
- The Site Manager is responsible for controlling the incident unless an administering authority, such as the Queensland Fire and Rescue or the DERM takes control of an incident.
- The Site Manager is responsible for ensuring that all employees carry out appropriate measures as assigned.
- The Site Manager is responsible for carrying out any necessary action to minimise the affect of a release to air.
- The Site Manager is responsible for providing the DERM with a written report detailing the incident, measures taken to prevent where possible or minimise environmental harm and the measure(s) that will be taken to minimise or prevent a recurrence of such an incident.

Relevant Legislation

- Environmental Protection Act 1994.

<table>
<tr><td colspan="2"><u>Emergency Procedure # 3</u>

<u>Release to Waters:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that any release to surface waters is minimised or prevented from causing environmental harm.</td></tr>
<tr><td><u>Identification of Issues:</u>

• Release through a crack in the stormwater dam wall that allows a release from the dam.</td><td><u>Possible Impact:</u>

• Release of nutrient rich waters that may cause environmental harm.
• Enforcement action taken by the DERM.</td></tr>
<tr><td>• Aerator has not operated in dam and there is a release of anaerobic, high BOD waters has occurred.</td><td>• Release of anaerobic water that may cause environmental harm.</td></tr>
<tr><td>• Rainfall has been excessive resulting in a release over the dam wall.</td><td>• Release of nutrient rich waters.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• Ensure that a freeboard of 0.5 metres is maintained at all times except in emergencies.
• Ensure that extended weather forecasts are consulted to ensure that containment dam freeboard is catered for.
• If freeboard is exceeded, ensure that it is established within 48 hours of the exceedance.
• Ensure associated stormwater dams are integral and that no cracks, gaps or erosion occurs.
• Immediately try to plug the crack or gap in the dam wall safely.</td></tr>
<tr><td colspan="2"><u>Record Keeping:</u>

• Record all volumes of any release to waters.
• Obtain DO, EC, Redox potential and pH of the dam where the release is occurring from and at the release point on the perimeter of the site. Ensure metres are calibrated (refer to Part B Form 2 - Dissolved Oxygen, pH, EC + Redox of Appendix 2).
• Obtain a sample for BOD, Total Nitrogen, Ammonia, Total Phosphorous and Electrical conductivity.
• Go upstream of the release point and try to obtain a sample (for the above described contaminants) from a water course that the release is discharging to. This point may not be directly adjacent to the site but may in fact meander across the ground surface to a water way or body.
• Go down stream of the release point and obtain a sample (for the above described contaminants). If you follow the release and it does not make its way to water, try and obtain a sample of the release at a point where ponding and pooling occurs. N.B. upstream and downstream sample will help determine the likelihood of environmental harm.
• Note any observations whilst collecting samples (such as fish kills, offensive odour, or gross contaminants).</td></tr>
</table>

Responsibility and Communication: • All facility staff members that are engaged in the above mentioned activities are responsible for ensuring control measures are met. • All releases of contaminants to waters must be brought to the attention of the DERM via the telephone as soon as practicable after becoming aware that there has been a release or there is likely to be a release. • The Site Manager is responsible for notifying the DERM in the first instance.
Relevant Legislation: • Environmental Protection Act 1994 • Environmental Protection (Water) Policy 2009

<table>
<tr><td colspan="2"><u>Emergency Procedure # 4</u>

<u>Rain-induced Anaerobic Windrows:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that windrows are dried so as to minimise a predominance of anaerobic activity.</td></tr>
<tr><td><u>Identification of Issues:</u>

• Windrows have become saturated and no attention has been given.</td><td><u>Possible Impact:</u>

• Windrows have become anaerobic and the subsequent release of offensive odours has created nuisance.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>
• Apply sawdust, green waste or dirt to mop up any leachate that has been released to hardstand pad.
• Once excess moisture has been absorbed, the opening of windrows can proceed. If excess moisture is experienced, apply saw dust and green waste to absorb excess moisture.
• Use EM to minimise or eliminate odour.
• Consider the use of windrow covers.

N.B. In some instance windrows will have to be reformed as too much sawdust and green waste has been added which will change the C/N ratio. Adjustments for nitrogen can be performed after reforming. Ensure that windrow is at sufficient moisture content so that the respective maximum moisture contents for the different windrows are not exceeded by the addition of the nitrogen source if it is a liquid.</td></tr>
<tr><td colspan="2"><u>Record Keeping:</u>

• Record all windrows that need to be dried out (refer to Part B Form 5 – Daily Windrow Observation Form of Appendix 2).
• Record the amount of green waste, sawdust and or dirt (minor amounts) utilised to mop up leachate.
• Record all observations such as windrows expelling leachate (refer to Part B Form 5 – Daily Windrow Observation Form of Appendix 2).
• Record the stabilised moisture content. This becomes the starting moisture percentage for the moisture content form (refer to Part B Form 4 – Moisture Content Form of Appendix 2). Record the amount of EM utilised to eliminate or suppress odour (refer to Part B Form 11 - Starting Recipe and any Adjustments Performed to Windrows of Appendix 2).</td></tr>
<tr><td colspan="2"><u>Responsibility and Communication:</u>

• All facility staff members that are engaged in the above mentioned activities are responsible for ensuring control measures are met.
• All incidents should be reported to the Site Manager for action (if necessary).
• The Site Manager must inform the DERM if it is likely that offsite impacts will occur.
• The Site Manager is responsible for ensuring that attention is given to saturated windrows promptly in order for them to be dried out.</td></tr>
<tr><td colspan="2"><u>Relevant Legislation:</u>
• Environmental Protection Act 1994</td></tr>
</table>

Appendix 2
Forms and Checklist

Form 1 – Authorised Waste Acceptance Checklist

Form 2 – Dissolved Oxygen, Redox potential, EC + pH

Form 3 – Temperature Profile Recording

Form 4 – Moisture Content Form

Form 5 – Daily Windrow Observation Form

Form 6 – Sprinkler Usage Form

Form 7 – Daily Weather Conditions

Form 8 – Daily Equipment / Machinery Start up Checklist

Form 9 – Stormwater Performance Checklist

Form 10 – Daily Running Sheet

Form 11 - Starting Recipe and any Adjustments Performed to Windrows

Form 12 – Quality Limits Sampling Checklist

Form 13 – Odour Monitoring

Form 14 – Complaint Investigation Form

Form 1: Authorised Waste Acceptance Checklist

Waste Type & Process	Other Waste Present	Odour Present	Reactions taking place

Note: Waste Type and Process must be one or more of the wastes types and process listed below in *Table 1.* Other categories to above table must read as follows if wastes are to be unloaded

Example:

Waste Type	Other Waste Present (y/n)	Odour Present (y/n)	Reactions taking place (y/n)
	No		No

Table 1: Acceptable Waste Types for Composting and Soil Blending

Waste Type	Process
Dewatered bacterial (sewage) sludge	Composting/Soil Blending
Solid food processing waste	Composting
Treatment Tank Sludges (excluding heavy metal contaminated sludges)	Composting/Soil Blending
Lime	Composting
Vegetable waste	Composting
Filter cake and presses (excluding heavy metal contaminated sludges)	Composting/Soil Blending
Fish processing waste	Composting
Poultry processing waste	Composting
Animal manures	Composting/Soil Blending
Paunch	Composting
Mushroom substrate waste	Composting/Soil Blending
Molasses	Composting/Soil Blending
Septic tank waste	Composting/Soil Blending

Form 2 – Dissolved Oxygen, Redox potential, EC + pH

Date & Which Pond	Dissolved oxygen (DO) ppm or mg/l + Redox potential + EC		pH	
	Top ½ of water column: DO: Redox: EC: Bottom ½ of water column: DO: Redox: EC:	Corrective action – if so what?	Top ½ of water column: Bottom ½ of water column:	Corrective action – if so what?
	Top ½ of water column: DO: Redox: EC: Bottom ½ of water column: DO: Redox: EC:	Corrective action – if so what?	Top ½ of water column: Bottom ½ of water column:	Corrective action – if so what?
	Top ½ of water column: DO: Redox: EC Bottom ½ of water column: DO: Redox: EC:	Corrective action – if so what?	Top ½ of water column: Bottom ½ of water column:	Corrective action – if so what?

Form 3 – Temperature Profile Recording

Compost Identification # E.g. Open/Fermentive – date - person	Point 1. Temperature – Degrees °C	Point 2. Temperature - Degrees °C	Point 3. Temperature - Degrees °C	Point 4. Temperature - Degrees °C
	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.
	1.	1.	1.	1.
	2.	2.	2.	2.
	3.	3.	3.	3.

N.B. Unique classification # will change if different person performs the task.

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Form 4: Moisture Content Form:

Compost Identification # – date - person	Initial Moisture Content %	Added Moisture % + date of addition	Added Moisture% + date of addition	Added Moisture% + date of addition	Added Moisture% + date of addition	Added Moisture% + date of addition

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Form 5 – Daily Windrow Observation

Compost Identification – date - person	#	Releasing Leachate		Releasing Offensive odour		Releasing Smoke/Fire		Any Vector Attraction (describe).	
		(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action
		(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action
		(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action
		(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action	(y/n)	Corrective Action

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Form 6 – Sprinkler Usage

Date	Area Covered	Duration of Sprinkling

Form 7 – Daily Weather Conditions

Date	Description of Weather. N.B Incorporate any changes throughout the working day (i.e. mm rainfall) and include previous night time conditions.

Form 8 – Daily Equipment / Machinery Start up Checklist

Date	Item	Any change in apparent noise output. If so what?	Any broken or loose fitting items.	Next service or calibration date.	Any fuel or liquid leakage.

Form 9 – Stormwater Performance Checklist

Date	Amount of Rainfall (mm)	Performance of Internal Drains. (Any cracks or blockages evident).	Performance of ponds at collecting and containing liquid.	Performance of hardstand pad. (Any ponding or pooling evident).	Any erosion on site or to the perimeter bund.

Form 10 – Daily Running Sheet

Date	Time	Description of daily events. Include extraordinary events such as non compliances or emergencies. This should link with information contained in other forms.

Form 11 - Starting Recipe and any Adjustments Performed to Windrows

Compost Identification # Eg. Static – date - person	Amount of green waste and or saw dust added. (approx weight in tonnes)	Amount of liquid added. Provide source and type as well. (litres)	Amount of solid waste added. Provide source and type as well. (tonnes)	Amount of any subsequent additions (liquid or solid). Provide source and type as well. (litres or tonnes)

Form 12 – Quality Limits Sampling Checklist

Item	Yes/No
• Have five individual grab samples been collected for 1000 dry tones of finished soil conditioner manufactured from biosolids and or paunch?	
• Was each sample obtained from locations that were equally spaced apart, along the length or around the circumference of the finished soil conditioner stockpile?	
• Were they each obtained from equidistant points at the equally spaced locations from the perimeter of the compost to within the finished soil conditioner stockpile?	
• Did the five individual grab samples make up the 1 composite sample.	

Form 13 - Odour Monitoring

Date & Time	Location	Intensity (1- 6)	Characteristics	Hedonic Tone	Duration (Seconds / Minutes)
Monday					
Tuesday					
Wednesday					
Thursday					
Friday					
Saturday					

Note:
Intensity:

0 = not perceptible;1 = very weak;2 = weak;3 = distinct;4 = strong;5 = very strong; &6 = extremely strong.
Characteristics: The character of the odour e.g. describing the odour as similar to rotten eggs or putrescible waste etc.
Hedonic tone: The degree to which the odour is perceived as pleasant or unpleasant rated on a scale of -50 to +50 see below (after T.Hummer *et al* (1996):

-50------- -40------ -30-------- -20-------- -10---------0-------+10---------+20---------+30--------+40---------+50
Absolutely Unpleasant unpleasant slightly unpleasant neutral slightly pleasant pleasant Absolutely pleasant

The following picture is to be used when conducting odour monitoring as it highlights the discrete points at which monitoring should occur.

Figure 1: Discrete odour monitoring points

Form 14 – Complaint Investigation Form

N.B. The information on this form must be completed as soon as possible following a complaint. All details must be completed and the form filed and any necessary actions about resolution of the complaint must be filed with it.

Date & time of complaint: **……../……./…….. …….. am/pm**	**Approximate volume of any releases? e.g. how many wheelie bin loads (1 bin = 240 litres)?** **…….. litres**
Is the cause of the complaint presenting any immediate safety risk to others? e.g. other bystanders? If so has the Police or QFRS been notified? Call 000 if there is any possible safety risk. **Action/s taken?** **…….** **…….**	**Regulated Waste Transport Registration Certificate Number (if applicable)** **…….....** **Vehicle type……** **Vehicle Registration Number ……..**
Name and contact phone number of complainant, (record as "anonymous", if no contact details are provided by the complainant): **……...** **(mobile)..……..** **(landline)……..…..**	**Location of complainant:** **Street address……..** **……..** **Location description……** **…….……..**
Name and contact phone number of the Site Manager responsible: **…….** **(mobile)..……....** **(landline)……..…..**	**Suspected cause of complaint:** **……..** **……..** **……..**
Has a sample of been collected? YES / NO If a compliant involves a substance that has been released if possible, collect a sample in the sample container. Ensure sample is marked with the date, time and name of the person taking sample. Ensure sample is handed to the Site Manager responsible.	**Have any actions been taken to minimise/mitigate the environmental effects causing the complaint? e.g. activities suspended/ceased?** **…….……...** **Has this action been successful?** **Not at all / somewhat / prevented further release/s**

Part D

Site Based Management Plan (SBMP)

for

ERA 16 2(b) & 16 3(a) Extraction and Screening

Conducted by Scotbar Pty Ltd

Located at Seventeen Mile Rd, Helidon Qld , Australia

Written by

The LZ Environmental Company Pty Ltd

The LZ Environmental Company Pty Limited
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Contents

Tables & Figures

1 Introduction

This Site Based Management Plan (SBMP) has been developed in response to Development Application (DA) 3323 for a development permit for a Material Change of Use (MCU) for ERA 16 2(b) & 16 3(a) Extractive and Screening Activities, formerly known as ERA 20(b) and ERA 22(b) on Lot 154 CA311380, Lot95 CSH352 and Lot141 31173 at Seventeen Mile Road Helidon. Additionally this document can also be adopted as the SBMP for the mining activities to be conducted at the Facility on **ML50022** and **ML50218** as both ERA16 and the mining activities will be concurrently occurring at the Helidon Facility. However, in relation to the mining activities to be conducted at the Facility the information contained within this document should be considered as additional information to that supplied in the *Plan of Operations* for the Facility.

The mining activities will see sandstone removed in block or slab from for on sale, while ERA 16 activities will result in the removal of decomposed sandstone (varying particle sizes) and rock. It should be noted that the rate of removal of this type (extraction not in block form) of sandstone from the Facility is limited to between 5000 and 100000 tonnes per year. Cutting and excavation of the sandstone will be the only method of removal from the operating face whilst mining occurs. During and after mining operations, sandstone will also be removed by excavation. Blasting will not occur at the Facility in the immediate area where mining is occurring as it is prejudicial to the integrity of the rock desired in block or slab form. However, before blasting can occur from time to time to create appropriate rundown material for sale, approval from the DERM will be required. Currently **Condition Noise 2**, contained in the DERM's Conditions of Approval does not allow for blasting to occur.

The following SBMP for ERA 16 and the concurrently occurring mining activities has been prepared by the L.Z. Environmental Company Pty Ltd (Zambelli Environmental) on behalf of Scotbar Pty Ltd and details the activities being carried out at the Helidon Facility. This SBMP follows on from Part C of the overall management system for the facility and is referred to as ***Part D - Site Based Management Plan (SBMP) for ERA 16 2(b) & 16 3(a) Extraction and Screening Conducted By Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia.***

Moreover Part D (this SBMP) details the activities related to ERA 16, any potential environmental issues associated and how Scotbar intends to meet the aims of the Queensland Government's environmental protection policies and legislation.

Workplace Procedures are contained within **Appendix 1 – Workplace Procedures** of this SBMP, with the associated forms and checklists utilised for recording contained within **Appendix 2 – Forms and Checklist**. Scotbar believes it demonstrates best practice environmental management (BPEM) for the extraction and screening operations to be conducted at the Helidon Facility through the implementation of the unique workplace procedure located in **Appendix 1**.

It should however be noted that it is intended that this document be read injunction with the following documents:

- ***Part A Rehabilitation Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*;**
- ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia****;* and
- ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***.
- ***Part E Weed Management Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia.***
- ***Part F Fire Management Plan for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Queensland, Qld, Australia***

Readers will find reference to specific sections of the above mentioned documentation within this document to ensure BPEM is achieved at the Facility

It is essential that Scotbar employees become familiar with the information contained within this SBMP.

2 Environmental Commitment

Scotbar is committed to operating ERA 16 extractive and screening activities with little to zero impact on the receiving environment. Excessive air and/or noise emissions will not be liberated during onsite activities and stormwater will be managed effectively such that any environmental harm or nuisance is avoided. Furthermore the specific objectives associated with this SBMP are as follows;

- Prevent and/or minimise likelihood of environmental harm, and ensure that;
- All measures, plant and equipment necessary to ensure compliance with conditions of the DA are installed; and
- Be consistent with the conditions of the Lockyer Valley Regional Council put forward in the ***Decision Application (DA3323) Decision Notice*** and the condition of approval from the **Concurrence Agency Response** (ERA Conditions of Approval).

Section 3 below, shows the organisational structure that will be in place to manage ERA 16. It should be noted that all Facility employees will be trained in the procedures highlighted in **Part D** and will be familiar with this document and the environmental commitments made within.

Additionally Scotbar is committed to achieving the goals of complying with all environmental limits outlined in the DA, achieving the lowest possible levels of emission to the air and water environments while maintaining the lowest possible level of offsite complaints about onsite activities.

It should be noted that all Facility employees are required to inform their closest supervisor of any environmental risks, issues or incidents immediately once they occur (refer to the organisational structure below). Any major incidents that could cause environmental harm will be reported to the Department of Environment and Resource Management (DERM) by the Extraction Facility Manger.

3. Organisational Structure

Scotbar is committed to the implementation of BPEM via the information contained within this SBMP. The organisation structure and associated responsibilities for each tier of management are outlined below. The Workplace Procedures contained in **Part D Appendix 1 – Workplace Procedures** also identify particular responsibilities for each tier.

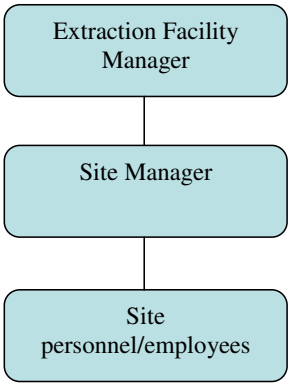

Figure 1: Organisational Structure.

- The Extraction Facility Manager has the overall responsibility of the extraction and screening process conducted at the Facility. The Extraction Facility Manager must ensure that all employees are trained and have a sound knowledge in relation to the contents of this SBMP. The Extraction Facility Manager must ensure that all employees engaged in activities at the Facility have been appropriately trained before commencement of the activity. The Extraction Facility Manager is responsible for making decisions regarding the efficient operation of the Facility, including but not limited to daily employee safety and environmental control measures. The Extraction

Facility Manager is responsible in the first instance to notify the DERM of any potential or actual environmental harm or nuisance.

- The Site Manager is responsible for the daily operational management of the extraction and screening activities conducted at the Facility. The Site Manager must ensure that the Extraction Facility Manager is promptly notified of any issues that could cause environmental harm. The Site Manager must ensure that all contingency measures are in place in the event an emergency occurs. The Site Manager is responsible for ensuring all records are collected at appropriate times and kept in an orderly fashion for observation by a representative from the DERM of local council upon request.

- Site personnel are required to implement workplace and emergency procedures to ensure effective management of the various extraction and screening activities conducted at the Facility. Furthermore where it is envisaged by an employee that a current workplace procedure could be improved it is the responsibility of the employee to inform the Site Manager of this utilising **Form 5 - Continuous Improvement** contained in **Part D - Appendix 2 – Forms and Checklist.** However, before amendments to control measures are implemented, the Site Manager is responsible for ensuring current control measures are carried out until a review is performed by the DERM which considers likely impacts. If urgent change is required as a result of an unforeseen circumstance, immediate discussion will occur with the DERM to discuss changes.

4 Description of Extraction Activity

Scotbar will undertake ERA 16 activities on Lot 95 CSH352, Lot 141 CA311273 and Lot 154 CA311380 (refer to **Part D -Appendix 3 Figure 1 – Location of the Activity**). ERA 16 will be conducted concurrently and following the mining activities at the Facility as ERA 16 activities will only be implemented on overburden or excess rock material leftover following the completion of mining activities. Once mined or extracted material is removed from the operating face, in most instances it will be necessary that the rock undergoes some type of further

processing before movement offsite. This additional processing of the extracted material will involve the use of a trommel to screen the material extracted. It is intended that this screening will occur either at the base of the extraction pit or at the hardstand area located behind the site office (refer to **Part D Appendix 3 Figure 2 – Site Overview**). In relation to any material mined in block or slab form, any additional processing of the rock that needs to be conducted (shaping / trimming) before its movement offsite, will also occur at the above mentioned locations.

Once extracted material has been processed and appropriately sized it will then either be loaded onto a truck at the hardstand area or stockpiled for later sale. Any excess material that is stockpiled will be managed in a manner that minimises and or prevents releases of windblown particulates to the atmosphere. In achieving this Scotbar will consider wetting down stockpiles when weather conditions become unfavourable or covering the stockpile or erecting windbreaks or screens to prevent any such release, satisfying **Condition Air 5** depicted in the ERA Conditions of Approval.

With regard to activities associated with ERA 16, it is not expected that any sensitive receiver will experience noise impacts associated with these activities. This noise attenuation is largely achieved by the topography of land located between the source and the receiver, the density of flora existing on this land and maintaining operating hours between 6am and 6pm Monday to Saturday excluding public holidays, satisfying **Extractive Industry Whole of Site Condition 4 (WOS4)** of the Development Application (DA3323) Decision Notice and **Condition Noise 3** from the ERA Conditions of Approval. Furthermore, the location of the activity also aids in the attenuation of noise emitted and is explained in more detail in **Section 6.3** below.

It is possible however; that activities associated with ERA 16 could liberate dust and particulate matter on occasion. Therefore the use of windbreaks, screens or sprinkler systems will be considered to minimise the liberation of these particulates as necessary. Regular haulage road watering will occur, taking into account the daily evaporation rate. Furthermore when wind speeds are seen to be excessive and operations are inhibited or resulting in substantial particulate liberation consideration will be given to the temporary cessation of the activity.

Further detail on the general control measures implemented at the Facility to reduce the risk of any environmental harm or nuisance form occurring are provided in **Section 6** below.

5 General Requirements

The list of issues below has been identified as significant and of primary concern for ERA 16 and will therefore be addressed as a priority while conducting the activity.

- Safe access to and egress from all working locations will be provided.
- Appropriate safety and environmental training for all site personnel.
- Stormwater protection.
- Sediment and erosion control.
- Dust generation.

Each of the abovementioned issues are addressed in respective sections further on in this document. It is essential that all site employees become aware of the above listed issues.

6.1 Operational & Personal Safety

Safe access to all areas of work will be provided for. All haulage roads will be regularly maintained to ensure that no dangerous situations present themselves.

Safe systems of work, including procedures commensurate with the quality and nature of the Facility will be adhered to. **Part D Appendix 1 - Workplace Procedures** provide an immediate reference point for site employees when undertaking their respective duties. Similarly appropriate first aid measures will be readily accessible, while all site personnel will be trained in procedures to manage risks associated with health and safety.

Scotbar will require all personnel to become familiar with this SBMP in its entirety including the workplace procedures located in **Part D Appendix 1 – Workplace Procedures**.

6.2 Emergency Management

In order to appropriately manage emergencies, the Site Manager or relevant Supervisor will be responsible for notifying any emergency departments as determined necessary. The Site Manager or relevant Supervisor will ensure that the respective incident controller will have ultimate control. The Site Manager will ensure that all site personnel will adhere to any directions given.

6.3 Stormwater Protection

As stated in ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia,*** it is not expected that stormwater associated with ERA 16 will be heavily contaminated. However, the level of contamination of the stormwater associated with ERA 16 and the severity of the possible environmental impact will substantially increase if stormwater associated with ERA 16 is allowed to become comingled with contaminated stormwater generated form other areas of the Facility such as the composting area associated with manufacturing soil and compost for the site's rehabilitation.

It is important to note that stormwater management is achieved through a combined approach to managing stormwater from the different environmental aspects being carried out. In particular the following documents should be read in unison to achieve effective stormwater management at the Facility.

- ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia,*** particularly **Section 9 – Stormwater Management** and **Part B Appendix 1, Section 2 - Workplace Procedure 1, 2, 7** and **8;** and

- ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***.

The above documents if read in conjunction will ensure that contaminated stormwater generated from other areas of the Facility associated with different activities (i.e. rehabilitation and composting areas) are isolated from one another where applicable.

6.4 Sediment and Erosion Control

Sedimentation and erosion control measures will be used as necessary to reduce erosion and any sediment loads transported in stormwater. There are a number of control measures in relation to sediment and erosion prevention that will be implemented on the areas of the Facility associated with ERA 16 including; appropriately positioned drainage channels and velocity controls in the form of check dams, rip rap and silt fences and vegetation planting regimes.

For detailed explanation of these control measures and the criteria for which their implementation and location will be based in order to satisfy conditions of the Development Application Decision Notice and the ERA Conditions of Approval, readers should refer to.

- ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd At Seventeen Mile Rd, Helidon, Qld, Australia*** and it associated procedures located in **Part C Appendix 1 – Workplace and Emergency Procedures.**

6.5 Dust Generation

Dust generation will be minimised to the greatest extent possible. Contained stormwater water will be used onsite for dust suppression. The onsite water cart will be utilised regularly to minimise dust generation on the haulage roads. Scotbar will take into account the daily evaporation that occurs so that adequate amounts of water are used. Water from the main

Stormwater Containment Dam (Main Dam) will be used for this purpose. The haulage roads will be maintained so that traffic does not cause excessive dust re-entrainment and liberation. Speed signs will be erected on haulage roads utilised by transport companies for the pick up or drop off of products so as to minimise the liberation of dust and particulate matter. Consideration will also be given to the resurfacing of these roads with fresh road base from time to time to ensure the surface is not significantly degraded.

Roads will be kept clean of any excess dust and the use of wind breaks will be considered where deemed necessary to minimise the liberation of dust, all of which is consistent with satisfying **Condition Air 3** from the ERA Conditions of Approval. If there is a possibility that material exhibits a dust potential whilst in transit, loads to be transported will either be wet down prior to this transport or covered with a tarpaulin or similar material. Simile any spillages to the side rails, tail gates and draw bars of vehicles will be removed to eliminate the liberation of any dust produced during transport, satisfying **General Condition M15** from the Development Application (DA3323) Decision Notice and **Condition Air 1** from the ERA Conditions of Approval. All trucks will also have to pass through a wheel wash before being allowed to exit the Facility as per **Air Condition 3** of the ERA Conditions of Approval.

With regard to the extraction and screening processes, where it is seen that the removal of material from the operating face is liberating excessive dust or particulate matter that maybe released off site, the use of water sprays, earthen wind shields or breaks will be considered. These attenuation techniques will also be considered where further processing of the extracted material (i.e. Screening) is resulting in dust and particulate release, satisfying **Condition Air 4** from the ERA Conditions of Approval.

Finally it should be noted that when wind speeds are seen to be excessive and operations are inhibited or resulting in substantial particulate liberation consideration will be given to the temporary cessation of the activity. All of the above remediation techniques that could possibly be adopted by Scotbar at the facility are concerned with achieving their individual conditions such that **Condition Air 1** of the ERA Conditions of Approval is achieved.

7 Best Practice Environmental Management (BPEM)

Today more than ever emphasis is being given to incorporate BPEM philosophy into extraction and screening activities. Scotbar recognises that adopting BPEM methods means that financial resources are spent efficiently to gain beneficial environmental outcomes in any given situation. Scotbar is committed to installing fit-for-purpose machinery and equipment that achieves the objectives of BPEM.

Scotbar understands that the adoption of BPEM will result in a fully compliant Facility. As part of achieving full compliance with the DA, the workplace procedures detailed in **Part D Appendix 1** have been designed as an easily accessible and easy to understand guide to assist employees conduct daily duties in accordance with the principles of BPEM such that any associated environmental issues are prevented or minimised.

8 Applicable Environmental Protection Policies (EPP's)

The purpose of the respective EPP's is to achieve the object of the *Environmental Protection Act 1994* (*EP Act*) which is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. Scotbar is committed to providing an environmental service that recognises the objectives and requirements of the relevant EPP's.

Each relevant EPP is detailed below with particular attention given to the environmental issues that may arise in relation to the carrying out of ERA 16. Coupled with this overview, **Part D Appendix 1 - Sections 2 – Workplace Procedures** provide detailed direction that will be followed by employees when conducting the various activities associated with ERA 16 in order to prevent, where possible, or otherwise minimise the potential for causing environmental harm (including environmental nuisance).

8.1 Environmental Protection (Air) Policy 2008 (EPP Air)

The purpose of the *EPP Air* is to achieve the object of the EP Act as mentioned above. This is done by identifying the environmental values associated with the air environment that need to be enhanced or protected.

Schedule 1 of the *EPP Air* provides a list of air quality indicators and goals that assist with the assessment of the air environment. Scotbar is aware of the particular contaminants referenced in Schedule 1 for the aesthetic enjoyment of places and visual and local amenity. In particular Scotbar is aware of the air quality indicators for particulates as indicated in Sections 8(2) and 8(3) of Schedule 1 of the EPP Air. The indicators are $PM_{10,}$ $PM_{2.5}$ and Total Suspended Particulate (TSP). The goals identified are: for PM_{10} to equal to 50 ug/m^3, $PM_{2.5}$ = 25 ug/m^3 averaged over 24 hours and for TSP, 90 ug/m^3 averaged over 1 year for health and well being respectively

Scotbar will ensure that the activity will not generate levels above those prescribed for any of the contaminants listed. The onsite water cart will be utilised regularly to minimise dust generation on the haulage roads. Scotbar will take into account seasonal variations in the evaporation rate and will explore the use of proprietary products to suppress dust.

Dust suppression water could either be delivered from a fixed sprinkler system or from the above mentioned water cart that collects water from the Main Dam. Records of sprinkler or water cart usage should be attained. (Refer to **Part D Appendix 2 - Form 1 – Sprinkler or Water Cart Usage Form**).

8.2 Environmental Protection (Water) Policy 2009(EPP Water)

Scotbar is aware that the purpose of the *EPP Water* is to achieve the object of the *EP Act*. It is further understood that the identification of environmental values assists in setting water quality guidelines to protect Queensland waters.

Scotbar will continue to operate as a non-release site up to a 1in 100 year 24hour rainfall event. Moreover stormwater will be managed through processes and procedures located in the following documents, as listed in **Section 6.3** above.

- ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd at Seventeen Mile Rd, Helidon, Qld, Australia.***
- ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd At Seventeen Mile Rd, Helidon, Qld, Australia***.

The above listed document should be consulted for all issues relating to stormwater as it details the proposed activities and potential environmental impacts pertaining to the water environment. Moreover stated measures have been provided for Facility personnel to comply with when conducting stormwater management at the Facility.

8.3 Environmental Protection (Noise) Policy 2008 (EPP Noise)

The objective of the *EPP Noise* is to achieve the objective of the EP Act. Scotbar is aware of the ambient noise levels that are experienced in the area. The activity involves the use of, but is not limited to, the following plant and equipment:

- Trucks transporting rock from the site.
- Trucks moving rock around site.
- Water tanker.
- Excavator (lifting or cutting).
- Screening activities from screening plant.

As such the equipment installed will not result in noise levels that will adversely affect the local acoustic environment. Attenuation of some of the noise produced from ERA 16 will result from the orientation of the operating face at the Facility. The operating face at the Facility is relatively high and faces back towards open bushland located to the west of the Facility. As such significant

amounts of noise generated will bounce of these faces and dissipate back out into the open bushland reducing sound transmission to sensitive receptors. Furthermore trucks collecting sandstone will be required to be appropriately silenced. It should be noted here that the operation of loading and the operation of delivery truck is restricted to occurring between 7am and 6pm Monday to Friday and 7am to 1pm on Saturdays, satisfying **Extractive Industry Whole of Site Condition 5 (WOS5**) of the Development Application (DA3323) Decision.

It is therefore expected that noise attenuation by the intervening land between the source and receiver and the onsite landscape will result in a low level of noise emissions and an imperceptible rise in noise level at the location of any sensitive receivers. Furthermore as previously mentioned, at no time will blasting be adopted as a method of extraction at the Facility, satisfying **Extractive Industry Whole of Site Condition 12 (WOS12)** of the Development Application (DA3323) Decision Notice and **Condition Noise 2** from the ERA Conditions of Approval. As per **Condition WOS4**, operating hours will be limited to 6am-6pm Monday to Saturday, excluding public holidays and Sunday.

Scotbar will generate noise to a level no greater than background + 5 dB(A) during daytime hours of operation experienced at any noise sensitive place. The parameter of background + 5 dB(A) is appropriate for the steady-state noise that will be generated. Noise will be monitored by personnel, in particular when the activity begins during the daily start-up. Details of this monitoring will be recorded on **Form 3 - Daily Equipment / Machinery Start up Checklist** located in **Part D Appendix 2**. Particular attention will be given to not allowing the generation of tonal noise onsite because dependent upon frequency, noise nuisance can occur. Noise level meters will only be used when required by the DERM (administrating authority).

8.4 Environmental Protection (Waste Management) Policy 2000 (EPP Waste)

An important aspect of the *EPP Waste* is the waste management hierarchy detailed in **Section 10**. The waste management hierarchy sets the objectives for sustainable waste management which is

relevant to the making of certain environmental decisions concerning waste. Scotbar acknowledges that the hierarchy represents a framework for prioritising waste management practices to achieve the best environmental outcomes. In the absence of waste avoidance, wastes that are generated at the Facility should be recycled (e.g. Stormwater used as dust suppressant), which represents a waste management practice second on the preferred order of adoption in the waste management hierarchy. Furthermore wastes unable to be avoided or recycled will be stored, handled and transferred in a proper and efficient manner and so that the disposal of such wastes is at a Facility lawfully allowed to do so. It should also be noted here that that no waste or vegetation will be burned or buried on site, satisfying **Condition Waste 1, Waste 2** and **Waste 3**from the ERA Conditions of Approval

Section 11 of the EPP waste describes the "*polluter pays principle*", which is recognised. Scotbar is committed to meeting the costs associated with the efficient operation of the activity, rather than spending money on poor or neglectful practices.

9 Requirements of SBMP

The Decision Notice supplied by the Lockyer Valley Shire Council states that Scotbar must;

- Comply with the Site Based Environmental Management Plan at all times.

This document has been developed as the SBMP for ERA 16 2(b) & 16 3(a) extraction and screening activities as well as the concurrently occurring mining activities as previously stated. This SBMP identifies all possible causes of environmental harm and provides for the review of and improvement in the overall environmental performance of the Facility.

In particular the requirements that must be addressed within this SBMP in order to meet the objectives stated in **Section 2** of this document are as follows:

- Environmental commitments;
- Identification of environmental issues and potential impacts;

- Control measures for routine operations to minimise the likelihood of environmental harm;
- Organisational Structure and Responsibility;
- Effective Communication;
- Monitoring of contaminant releases;
- Staff training; and
- Periodic review of environmental performance and continual improvement.

It is important that all employees have confidence in being able to identify all sources of environmental harm, including the actual and potential release of all contaminants and their potential impact on the receiving environment. The workplace procedures provided in **Appendix 1**, detail control measures that need to be adhered to while conducting operations at the Facility associated with ERA 16. Moreover, it is essential that Scotbar provides for the effective environmental management of the extraction and screening activities conducted at the Facility for which these procedures provide detailed actions that will be taken to either prevent or minimise the likelihood of environmental harm or nuisance.

Additionally, it is essential that all employees at the Helidon Facility comply with this SBMP, as it sets clear direction for BPEM at the Facility. Scotbar is committed to this aspect of business. The SBMP incorporates clear and concise workplace procedures (refer to **Part D Appendix 1 – Section 2 - Workplace Procedures**) for daily routine operating procedures and guidance in emergency situations. Amongst other things the procedures encourage hands-on, visual inspections to ensure the conditions of the Development Application Decision Notice and the Concurrence Agency Response are not breached so that systemic issues do not arise.

It is recommended that a copy of **Appendix 1** of this SBMP be stored in a location readily accessible to Scotbar employees. Additionally key workplace procedures will be located on or in integral pieces of machinery for ease of accessibility.

This SBMP also introduces to the reader the importance of obtaining records. **Part D Appendix 2 – Forms and Checklists**, contains the relevant forms and checklists that will be required to be

filled out as part of daily operations at the Facility. Records help isolate any environmental issues that may arise. If no records were to be kept providing evidence of avoidance, identification, management and cause of environmental issues, overall management may prove difficult. The various forms provided in **Appendix 2** ensure that all relevant operations and any changes in the normal conditions of the Facility or environment are recorded.

Further to the above, this SBMP provides Scotbar employees with training and awareness of all possible environmental issues. Regular toolbox meetings will be a means of training staff in relation to safety and environmental management. It is the Site Manager's responsibility to ensure that all new staff are trained in the contents of this SBMP and attached workplace procedures prior to commencing any activity associated with the ERA at the Facility.

As mentioned previously the SBMP must include mechanisms to review and continually improve the levels of environmental performance offered by Scotbar at the Facility. To this end continual improvement is always encouraged by Scotbar and it is this ethic that allows changes to occur relatively easily. No one person will be deterred from making suggestions that bring about improvements in efficiency, safety or the level of protection provided to the environment. Scotbar recognises that all employees may add valuable comment on occasion. In this instance it is intended that employees utilise **Form 5 – Continuous Improvement** of **Part D Appendix 2** for the purpose of recording such suggestions.

In summary this SBMP provides awareness to employees of the possible environmental issues that may arise on occasion, that has the potential to cause environmental harm or nuisance under the provisions of the *Environmental Protection Act 1994* and provides a basis to any subsequent amendments that may occur in the future. A complete copy of this SBMP and any subsequent amendment of the SBMP will be kept in a location at the Helidon Facility that allows it to be readily available for examination by an authorised person on request.

9.1 Routine Procedures

Scotbar is committed to:

- ***Providing for routine operating procedures to prevent or minimise environmental harm, however occasioned or caused during normal operation.***

Further to the general information provided in this SBMP, the workplace procedures of **Appendix 1** contain detailed information that will assist in minimising or preventing environmental harm. Given the nature of operations at the Facility, it is expected that environmental issues may arise from time to time. This SBMP and in particular, the workplace procedures ensure that in the event of an environmental issue, appropriate management techniques will be employed.

In order to effectively manage extraction and screening activities, it is imperative that minor routine tasks are conducted. Examples of routine daily operating procedures are shown in the following table. As a quick reference to workplace procedures, the workplace procedure number is quoted.

Daily Workplace Procedure:	Workplace Procedure Number:
Dust and Particulate Management	1
Noise Management	2
Truck Washing	3

Table 1: Workplace Procedures

The Extraction Facility Manager will ensure that all Facility employees read and understand the workplace procedures they will be expected to perform, before engaging in the activity.

As a commitment to ensuring that routine daily activities are conducted, Scotbar will make available an onsite copy of this SBMP for all Facility employees to refer to. Furthermore the

workplace procedure of **Appendix 1** will also be easily accessible with relevant workplace procedures laminated and placed in or on machinery as a quick reference guide to the management of key issues.

The workplace procedures will enable site employees to become aware of daily requirements. At any time however, Facility employees are encouraged to ask the Site Manager or relevant Supervisor, questions about an activity, if the employee is unsure of how to conduct a task. Additionally, all employees will be encouraged to provide suggestions for improvements in any aspect of the procedures they follow, so that the continuous improvement process becomes an ongoing and key aspect of the working ethic.

9.2 Maintenance Practices and Procedures

Safe and efficient extraction and screening cannot be done with ineffective machinery or equipment. First and foremost, Scotbar is committed to providing machinery and equipment that is fit-for-purpose and safe. There will be no compromisation on quality due to machinery and equipment not operating properly. All machinery and equipment will operate in accordance with manufacturer specifications. Scheduled services for machinery and calibration for equipment will be adhered to. The Site Manger is responsible for ensuring maintenance is carried out.

As no one person is expected to remember everything, a Daily Checklist for equipment and machinery, bulleted below has been created and is provided in **Part D Appendix 2** to facilitate the recording of any observations made regarding faulty equipment or machinery.

- **Form 3 - Daily Equipment / Machinery Start up Checklist**

The use of this checklist will assist Scotbar in continually maintaining and improving equipment and machinery. It will also provide for the protection of Facility employees and visitors from machinery or equipment that may be operating dangerously.

Apart from machinery and equipment maintenance, attention will also be given to maintenance of other key components of the composting Facility such as:

- Maintenance of haulage roads to prevent excessive dust liberation.
- Maintenance of diversion drains to prevent solids from obstructing or contaminating stormwater entering the drains or containment dams.
- Maintenance of perimeter bunds; and
- Maintenance of the proposed stormwater containment dam(s)

Form 4 – Daily Running Sheet is provided in **Part D Appendix 2.** The running sheet is to be filled in as a record of any observations made regarding extraordinary events such as non-compliances with the approval conditions or emergencies. All Facility employees are required to report any observations made to the Site Manager for attention and necessary action. Detailed examples of observations that could be made by employees are provided below.

- **Haulage Roads**

Haulage roads are important trafficable areas that traverse the Facility to areas where regular access will be needed. These roads should be visually inspected, regularly, for evidence of dust or particulate accumulation. Excess dust and particulate matter should not be allowed to accumulate on these roads and should be managed through a combination of sweeping/scraping/grading and wetting down of such roads. When a sprinkler system or water cart is utilised for dust suppression on haulage roads this should be recorded utilising **Form 1 – Sprinkler or Water Cart Usage Form** contained in **Part D Appendix 2.** The above remediation methods should be implemented quickly when excessive particulate build-up is noticed. Furthermore information regarding daily weather conditions will be recorded (refer to **Part D Appendix 2 - Form 2 – Daily Weather Conditions** of **Appendix 2**) and used to maintain the position of any wind breaks in the form of screens positioned along haulage roads to help minimise the liberation of dust and to ensure adequate remediation has taken place.

All matters concerning when dust and particulate inspections are carried out and the erection of windbreaks for example should be recorded utilising, **Form 4 – Daily Running Sheet** of **Part D Appendix 2.**

- **Daily Weather Conditions**

Part D Appendix 2 - Form 2 – Daily Weather Conditions should be used to record weather conditions onsite. This is an extremely useful data set that can be used for example, to predict when runoff will occur under certain rainfall conditions and to schedule repair and maintenance of trafficable areas after certain weather conditions are experienced.

- **Diversion Drains, Bunding and Stormwater Containment Dam(s)**

For all information relating the maintenance practices and procedure as well as the types of observation that could be made by employees in relation to the above bullet readers should refer to **Section 8 – Maintenance Practices and Procedure** of ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***.

9.3 Contingency Plans & Emergency Response Procedures

Monitoring of contaminant releases will be conducted if there has been a known contaminant release or after a complaint and the complaint investigation reveals that there was a contaminant release, i.e. noise, dust, contaminated water.

Scotbar is aware that the effectiveness of a response to an incident is to a large extent dependent upon adequate contingency plans and emergency procedures being in place. Additionally it is considered just as important to implement the respective plans and procedures. To this end, Scotbar is committed to:

- ***The implementation of contingency plans and emergency response procedures to deal with foreseeable risks and hazards, including corrective responses to prevent and mitigate environmental harm.***

The potential environmental impacts described below introduce the possible scenarios that may arise from time to time. It is to be noted that contingency plans have also been developed in the form of workplace procedures, and have detailed control measures that manage foreseeable risks and hazards associated with the environmental issues identified (refer to ***Table 1*** of **Section 9.1**, above). Adherence with these procedures will ensure that the environmental issues identified do not arise.

Emergency Procedures have been developed for unforeseeable events such as a spill incident or a release to water. These procedure have not been included in this document however as they already exist in supporting documentation associated with the management of the Helidon Facility. Scotbar Employees should refer to ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*** and ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*** for these emergency procedures when needed. Furthermore **Part D Appendix 1 – Workplace Procedure** lists the exact sections of these documents that should be referred to and brief instructions on how they should be implemented.

As an overview, potential environmental impacts are described in the next sections as a way of introducing the control measures contained in the workplace procedures.

9.3(a) Air (Dust & Particulates)

The extraction and screening activities could become a source of dust and particulate emissions resulting in loss of aesthetic value, health impacts on employees and other environmental impacts at sensitive receptors. Adherence to workplace procedures will ensure that the above scenarios do not occur. The time of day and prevailing wind conditions can play a role in the severity of these problems and the level of environmental harm or nuisance they cause.

The types of issues that may arise in relation to the air environment are listed below. Scotbar recognises that all employees engaged in the activity must act as a team and collectively be responsible for ensuring these conditions do not occur, namely:

- Dust liberation arising from loading/unloading activities;
- Dust liberation arising from traffic movements at the Facility;
- Dust liberation resulting from extraction and screening activities; and
- Dust liberation resulting from a lack of maintenance and favourable weather conditions.

These issues are addressed in the relevant workplace procedures; refer to **Part D Appendix 1 Section 2 – Workplace Procedure 1 - Dust and Particulate Management**.

As mentioned earlier daily weather conditions will be monitored at the Facility (refer to **Part D Appendix 2 - Form 2 – Daily Weather Conditions**). The recording of such information will help verify and validate if and when a complaint regarding dust or particulate matter is received as well as ensuring adequate remediation has taken place.

9.3(b) Water

Further to ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*** the following information is provided to assist staff in becoming familiar with the control measures and procedures that will be implemented to eliminate or minimise any potential environmental impacts on the surrounding aquatic environment. Readers should refer to **Figure 1 - Storm Water Flow Path Diagram** of **Part C Appendix 3 – Figures**).

Scotbar recognises that the various activities conducted at the Facility will utilise and generate different contaminants and generate different types of contaminated stormwater, which if mismanaged could cause detrimental effects to the receiving environment. Releases of certain oxygen demanding contaminants to water for example, can cause fish kills due to oxygen

depletion and if continued could threaten the sustainability of fish and invertebrate life in an aquatic system. It is therefore of paramount importance for Scotbar employees to consider all the relevant information from this document ***Part D - Site Based Management Plan (SBMP) for ERA 16 2(b) & 3(a) Extraction and Screening Conducted By Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*** and the following documents listed:

- ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located At Seventeen Mile Rd, Helidon, Qld, Australia;*** and
- ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia.***

This will ensure that a holistic approach to stormwater management is adopted at the Facility that prevents the cross contamination of differing types of contaminated stormwater effectively protecting the receiving aquatic environment.

9.3(c) Waste

The only wastes to be accepted at the Facility are those that have the ability to be utilised in the site rehabilitation activities. Readers should refer to ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*** for details of these wastes in terms of a description of them and the process (composting or soil blending) for which they are intended. Additionally the above listed documents also highlight that wastes received at the Facility need to be recorded, such that certain prohibited wastes are excluded. Furthermore in relation to waste associated with the extraction and screening activities, as stated in **Section 8.4** of this document, in the absences of waste avoidance waste that are generated at the Facility will be recycled. Where wastes are unable to be avoided or recycled they will be transported to a Facility lawfully allowed to disposal of such wastes. It is the responsibility of the Site Manager to ensure this occurs.

9.3(d) Noise

Whilst heavy machinery will be used at the Facility, it is not expected that the daytime background for the area will be exceeded by anymore than 5 db(A). Any excessive and obviously audible tonal noise (e.g. screeching, high or low frequency hums or whines) emitted from machinery will be attended to immediately by Scotbar because this type of noise emission is often a result of mechanical problems with machinery (e.g. failed bearings).

Scotbar is aware that in the event of a noise complaint, the DERM may ask for noise monitoring to occur. It is important to note wind speed and direction, cloud cover and other factors such as traffic or other significant noise sources that could affect noise monitoring results. If requested by the DERM, the Site Manager is responsible for ensuring that noise monitoring is conducted. Daily start up checks will be conducted to ensure machinery is not emitting excessive noise (refer to **Part D Appendix 1 –Section 2 - Workplace Procedure 2** – **Noise Management** and **Part D Appendix 2 – Form 3 - Daily Equipment / Machinery Start up Checklist**). Noise attenuation barriers will be constructed where required if excessive audible noise is heard. Scotbar will not use excessively noisy equipment, unless it is at a time of an onsite emergency, and it is essential that something has to occur, such as the movement of waste from a stormwater flow path or to extinguish a fire.

9.3.1 Procedures to be implemented

Routine procedures have been developed and are included in the workplace procedures detailed in **Appendix 1, Section 2**. Emergency procedures have also been developed although they are not reproduced for this document (refer to **Part D Appendix 1 – Section 2 Workplace Procedure** for direction to the relevant emergency procedures provided in other site specific documentation). Scotbar is committed to the following:

- ***Procedures are to be implemented to minimise or prevent any releases to the receiving environment and to deal with any releases such as a release of dust, particulate or noise to the air or liquid or solid contaminants to the soil or water environments. To this end, procedures are to be implemented to deal with any fire, any malfunction of equipment, any spills of raw material, partially processed material or final product, in a manner that means it's likelihood at being released to the air, soil or waters is minimised or eliminated.***

The Site Manager or relevant Supervisor is responsible for the implementation of all procedures. All employees are encouraged to discuss any facet of the operation where they see the potential for possible improvements. However, before amendments to control measures are implemented, the Site Manager or relevant Supervisor is responsible for ensuring current control measures are conducted until such time that a review is performed by the DERM which considers likely impacts. If urgent change is required as a result of an unforeseen circumstance, immediate discussion will occur with the DERM to ensure appropriate changes are made. The workplace procedures adequately provide contingency measures for managing issues such as dust liberation or noise generation.

9.3.2 Response Resources

The workplace procedures highlight the equipment that will be utilized at the Helidon Facility. The Site Manager will ensure that all equipment required for a response to a specific environmental issue, will be maintained in good working order through conducting daily checks to ensure machinery is maintained. In response to a release all equipment required will be utilised. Moreover emergency procedures will be followed.

9.3.3 Staff Training for a Release

Scotbar is committed to:

- ***The training of staff that will be called upon to respond to a release to the environment.***

The emergency procedures and contingency methods outlined in the workplace procedures are to be used as training guides for Facility employees. As a general rule, the following items must be adhered to:

- Operating manuals or instructions will be given to the Facility employees by the Site Manager prior to any equipment or machinery being operated;

- The Facility staff member must demonstrate a sound understanding and/or working knowledge before the use of any machinery is to occur. This must be recorded; and

- Appropriate approvals, registration or certification must be attained before operation of any machinery or equipment that is required to have such an approval.

Whilst it is the responsibility of the Site Manager to ensure the above is carried out, every staff member is required to observe activities onsite and not allow fellow colleagues to operate in an environment where they have a lack of knowledge about the process or issue. Moreover, unsafe work practices will not be supported.

In the event of an actual or potential release to the environment, the workplace procedure provided in **Section 2** of **Part D Appendix 1** and the emergency procedures highlighted in other respective documents outline responsibilities for all employees.

Onsite toolbox meetings will be the forum where workplace and emergency procedures are discussed. Employees will be encouraged to make suggestions for improvements to workplace procedures by using the appropriate form (refer to **Part D Appendix 2 Form 6 – Continuous Improvement**). One important consideration is how employees respond in the event of an environmental incident. At these meetings, discussions will be held in relation to how well the team is achieving minimisation of any adverse impacts associated with carrying out ERA16.

The Site Manager is responsible for designating key areas of responsibility for individual employees to ensure mitigation measures are implemented as soon as practicable in order to minimise the likelihood of causing environmental harm (including environmental nuisance).

9.3.4 Availability of Procedures

Scotbar is committed to:

- ***The provision and availability of documented procedures to staff attending a release to enable them to effectively respond:***

All workplace and emergency procedures will be located in strategic positions or displayed on or in particular equipment or machinery for the purpose of ease of accessibility for employees. It is the responsibility of the Site Manager to ensure suitable locations are identified and that machinery and equipment are appropriately stocked with the relevant procedures.

9.3.5 Release Investigation

Scotbar is committed to:

- ***Implementing procedures to investigate the cause of any release and where necessary, implement remedial actions to reduce the likelihood of recurrence of a similar event:***

In order to identify the cause of any release to the receiving environment, the following should be considered:

- What has caused the release;
- Could it have been stopped immediately and safely;

- Collecting background samples and recording observations if possible;
- Collecting downstream samples and recording observations if possible;
- Collecting a sample at the point of release if possible; and
- Calculating the estimated or actual volume or mass released.

In the unlikely event that a release to the environment occurs, an evaluation of the actual or potential adverse impacts will be obtained. Understanding the potential effects and finding ways to prevent a similar situation occurring in the future is essential. **Emergency Procedure 1 – Release to Waters** contained in **Part C Appendix 1 – Section 3** is to be followed in the event of a release of contaminants to waters.

Daily and weekly site checks will assist in ensuring that there have been no releases to the environment or an increase in the conditions that may act as a catalyst for a release event. Similarly, releases to air or land that are capable of causing environmental harm should be responded to in the same way as a release to waters.

As part of **Emergency Procedure 1** contained in **Part C Appendix 1 – Section 3**, control measures and procedures are provided to ensure timely advice is available to employees. The Extraction Facility Manager is responsible for reporting any releases from the site that actually or potentially causes environmental harm (including environmental nuisance).

As previously stated all Facility employees are responsible for ensuring that stated measures described in the workplace procedures are carried out in the way they are intended and when necessary in order to best prevent any releases to the surrounding environment.

10 Timely and Accurate Reporting

Scotbar is committed to:

- ***Timely and accurate reporting of circumstances and nature of release events to the administering authority.***

As soon as practicable after becoming aware of any release of contaminants Scotbar must notify the DERM. Scotbar is committed to compliance with this requirement. It is the responsibility of the Site Manager to ensure that all Facility staff members are aware of this.

Scotbar employees can call the following telephone numbers for assistance:

- The Extraction Facility Manager can be contacted on **……**
- The Site Manager can be contacted on **……..**
- The DERM's Pollution Hotline can be contacted on **1300 130 372** (this telephone number may be updated from time to time and therefore should be checked regularly for accuracy).
- For general matters, the DERM/Ipswich office can be contacted on **1300 130 372**
- The Lockyer Valley Regional Council can be contacted on **1300005872**

To assist in timely and accurate reporting, Scotbar is committed to:

- Reporting on records when required by the DERM;
- Keeping records for 5 years;
- Performing timely and accurate reporting;
- Reporting and the recording of any release of contaminants not in accordance with DA conditions or release limits;
- Perform dust monitoring if required by the DERM and record results;
- Conduct noise monitoring if directed by the DERM and record results;
- Record all complaints.

11 Mitigation for Further Release

Scotbar is committed to:

- ***Practices and procedures to prevent any further release.***

If a release occurs, new procedures and practices will be implemented to prevent any future release. An assessment of the cause of such a release must be undertaken and recorded.
The results of such an assessment may be used to update this SBMP. Prior to implementation, the proposed new procedures and practices will be submitted to the DERM for review and subsequent approval.

It should be noted here that the above mentioned mantra adopted for release events concerned with their recording, investigation, determinations and availability of this information will be adopted for all complaints received by Scotbar, satisfying **Condition Social 1** from the ERA Conditions of Approval.

12 Waste Management

Scotbar is committed to:

- **Implementing procedures and practices to minimise reuse and appropriately dispose of waste generated.**

As expressed in **Section 8.4** of this document, in the absence of waste avoidance wastes generated at the Facility will be recycled. As such, it is not expected that the Facility will generate large volumes of waste for disposal at a landfill, apart from incidental amounts of general industrial or commercial waste generated at the Facility from time to time.

Additionally as stated in **Section 9.3(c)** of this document the only wastes to be accepted at the Facility are those that have the ability to facilitate composting as part of the Facilities rehabilitation activities. For detailed explanation of the types of wastes allowed to be accepted at the Facility their purpose and management readers should refer to ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***

13 Stormwater Management

For all information relating to stormwater management in relation to the ERA 16 activities and the Facility as a whole the reader should refer to:

- ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia;*** and
- ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia*** for detail on the management of stormwater, such that, stormwater generated from the various activities conducted at the Facility is isolated from one another

14 Staff Training

Scotbar is committed to the following:

- ***Staff training and awareness of environmental issues related to the operation of extraction and screening activities conducted at the Facility, including responsibilities under the Environmental Protection Act 1994.***

This SBMP has been constructed so that information can be easily accessed. Familiarisation with the SBMP will assist employees in becoming aware of any environmental issues associated with the extraction and screening activities and of the heavy penalties associated with non-compliance

with the *Environmental Protection Act 1994.* This section outlines the legislative requirements of the *Environmental Protection Act 1994* and subordinate legislation. In addition, as a reference, relevant legislation is displayed at the end of each workplace procedure.

The aim(s) of various pieces of relevant legislation are detailed below;

- ***Environmental Protection Act 1994*** **(the Act);**

The overall objective of the Act is to protect Queensland's environment while allowing for development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. The objective is achieved in part by establishing environmental values that need to be protected or enhanced. Policy is then generated to ensure these values are protected, especially when development occurs. The state of the environment is regularly reported on and this is where evaluation occurs to see if the strategies put in place have achieved protection of the environment.

It is important to understand that there are penalties for causing environmental harm (including environmental nuisance) and wilful acts are treated as very serious matters where custodial sentences can be handed down by the courts. It is therefore absolutely imperative that the workplace procedures are adhered to at all times.

In situations where non-compliance with the Act is identified by the administering authority, at the DERM's discretion, several enforcement tools may be used to secure compliance with various pieces of legislation. These enforcement tools include:

- **Environmental Protection Order (EPO):** When an EPO is issued, requirements are listed which must be complied with. These requirements are ordered to secure compliance any approval conditions and the EP Act. As a special mention, the DERM has special powers to give emergency directions in such situations of non-compliance;

- **Transitional Environmental Program (TEP):** This is similar to a contract whereby Scotbar would have to commit to do certain things by certain dates in order to secure compliance with the environmental authority and the EP Act.

- **Environmental Evaluation (EE):** This is a situation where the DERM could ask Scotbar to evaluate a method or procedure conducted onsite as more information is required to determine if the practice is the cause of, for example, non-compliance with the environmental authority, and variance from the plan of operations or the EP Act.

Heavy penalties exist if breaches to the above management enforcement tools occur. The Act also ties in the following pieces of legislation. Some important provisions are discussed below as a way to introduce a person's obligations under the Act and subsequent legislation.

- ***Environmental Protection (Water) Policy 2009*** **(the Water Policy)*;***

The purpose of the Water Policy is to achieve the object of the Act mentioned above. The identification of environmental values assists in setting water quality guidelines and objectives to protect Queensland waters. It provides a framework whereby decisions regarding activities can be made in an informed manner. The Water Policy sets water quality objectives for Queensland Waters in schedule 1 whereby these objectives are reported against.

- ***Environmental Protection (Air) Policy 2008*** **(the Air Policy)*;***

The purpose of the Air Policy is to achieve the object of the Act mentioned above. This is achieved by identifying the environmental values associated with the air environment that need to be enhanced or protected. Schedule 1 provides a list of air quality objectives and goals that assist the assessment of the air environment.

- ***Environmental Protection (Noise) Policy 2008*** **(the Noise Policy)*;***

The object of the Noise Policy is to achieve the objective of the Act. As discussed above, environmental values are identified to assist in setting guidelines on acoustic quality objectives for the environment. It also provides a framework for making consistent decisions that best protect Queensland's acoustic environment.

- ***Environmental Protection (Waste Management) Regulation 2000*** **(the Waste Regulation)*;***

The object of the Waste Policy is to achieve the objective of the Act. The waste management hierarchy provides a framework for the production and management of wastes that best protects the environment.

Note: For further detail relating to the management of waste received at the Facility (for the purpose of composting) refer to ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***.

Appendix 1

Workplace and Emergency Procedures

The LZ Environmental Company Pty Limited
T/A Zambelli Environmental

1 Introduction

Appendix 1 below, details workplace procedures for the various day-to-day management of ERA 16 2(b) & 16 3(a) extraction and screening activities to be conducted on Lot 95 CSH 325, Lot 141 CA 311273 and Lot 154 CA 311380 at the Helidon Facility. Stated measures contained within the respective procedures details information for Facility employees to use as a guide when conducting various activities associated with ERA 16, where there is the potential to cause environmental harm (including environmental nuisance).

Emergency procedures have not been created in this document as the relevant emergency procedure already exists in the supporting documentation. Readers should refer to **Part B Appendix 1 Section 3 – Emergency Procedures 1 – Spills of Solid Waste(s)**, for the necessary instructions in the event of a spill. When implementing this procedure for spills related to the extraction and screening activities conducted at the Facility Scotbar Employees should substitute where the procedure references spills of 'solid waste' for spills of 'all waste'. Additionally for the emergency procedure relating to a release to water employees must refer to **Part C Appendix 1 Section 3 – Emergency Procedure 1 – Release to Waters** in the event of a release.

The following workplace procedures are intended as a guide for Scotbar employees when carrying out specific tasks whilst having due regard for the receiving environment. For the purpose of accessibility to Facility personnel, workplace procedure and emergency procedures will be laminated & positioned in various locations throughout the Facility, including inside vehicles. The workplace procedures are listed as follows:

Daily Workplace Procedure:	Workplace Procedure Number
Dust and Particulate Management	1
Noise Management	2
Truck Washing	3

Table 1: Workplace Procedures

Note: It is intended that this document be read in conjunction with ***Part B Site Environmental Management Plan (SEMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***. Particular attention should be given to the workplace procedures relating to stormwater/leachate and dam management and ***Part C Stormwater Management Plan (SMP) for Scotbar Pty Ltd Located at Seventeen Mile Rd, Helidon, Qld, Australia***, ensuring that stormwater management is addressed for the Facility as a whole, with the necessary considerations and control mechanisms implemented preventing the cross contamination of stormwater from different waste streams associated with the various activities conducted at the Facility.

Furthermore the workplace procedures provided below and the emergency procedure referenced above can also be adopted for the management of the mining activities to be conducted on ML 50185 and ML 50218 as both ERA 16 and the mining activities will be concurrently occurring at the Helidon Facility. However these procedures when adopted for the mining activities at the facility should only be considered in addition to the information contained within the Plan of Operations.

2 Workplace Procedures

Workplace Procedure # 1 **Dust & Particulate Management:**	
Environmental Commitment: • To ensure that activities at the facility associated with extraction and screening activities do not cause environmental harm or nuisance.	
Identification of Issues: • Dust liberation from moving traffic.	**Possible Impact:** • Releases that cause environmental nuisance. On site impact to Facility employees such as to their eyes and lungs. • Breach of DA condition, possible enforcement action taken by the DERM or Lockyer Valley Regional Council (LVRC).
• Dust and particulate release from extraction activities or from the screening plant.	• Releases that cause environmental nuisance. On site impact to Facility employees such as to their eyes and lungs. • Breach of DA conditions, possible enforcement action taken by the DERM or LVRC.
• Dust and particulate release from loading activities.	• Releases that cause environmental nuisance. • On site impact to Facility employees such as to their eyes and lungs. • Breach of DA condition, possible enforcement action taken by the DERM or LVRC.
• Dust and particulate release from build up of particulate matter and favourable wind direction.	• Releases that cause environmental nuisance. On site impact to Facility employees such as to their eyes and lungs. • Breach of DA conditions, possible enforcement action taken by the DERM or LVRC. • The DERM may request that monitoring be performed at a dust sensitive place to determine if compliant with: o Dust deposition = 120 mg/m^2 /day –AS 3580.10 of 1991; o PM10 = 50 ug/m^3 - 24 hour average (air policy 2008).
• Dust and particulate liberation from vehicles moving off site.	• Releases that cause environmental nuisance. Off site impacts at dust sensitive place. • Breach of DA, possible enforcement action taken by the DERM or LVRC.

• Direct complaint received regarding general nuisance at a dust sensitive place	• If complaints are regular and consistent, enforcement action may be taken by the DERM or the LVRC. • DERM may request that monitoring be performed at a dust sensitive place as required, to determine if compliant with relevant standards namely: o Dust deposition = 120 mg/m^2 /day –AS 3580.10, 1991; o PM_{10} = 50 ug/m^3 and $PM_{2.5}$ = 25 ug/m^3 averaged over 24 hours

Control Measures:

- Ensure water cart is functional and used on haulage roads as necessary to control dust and particulate liberation.
- Limit traffic to designated internal road ways. This will lessen the amount of dust that is created.
- All haulage roads should be inspected and cleaned regularly such that excess dust and particulate matter is not allowed to accumulate. If haulage roads are liberating substantial amounts of dust or particulate matter the roads should be resurfaced with road base as necessary.
- Ensure speed signs are erected as necessary to effectively minimise the liberation of dust and particulate matter form haulage roads.
- Consider the cessation of extraction and mining activities if wind speed is excessive.
- The use of wind breaks or shield should be considered whenever extraction and mining activities or sections of haulage roads are noticed to be emitting excessive amounts of dust and particulate matter with the movement of wind.
- Where mining and extraction operation are seen to be liberating excessive dust and particulate matter consider the use of water sprays where the use of windbreaks/shield is undesirable or ineffective.
- If utilized, ensure that the sprinkler system is effective and is maintained in good working order. The Site Manger is to be promptly told of when the system is ineffective or not in working order.
- All dusty loads being loaded or unloaded should be wet down first as necessary or be covered with a tarpaulin to limit the liberation of dust and particulate matter.

Record Keeping:

- Record when sprinklers are turned on or water cart is used. Note the duration of use and keep a record of any maintenance performed. (Refer to **Part D Appendix 2 Form 1 – Sprinkler or Water Cart Usage Form).**
- Record the use of any windbreaks or screen and their location (refer to **Part D Appendix 2 Form 4 – Daily Running Sheet**).
- Record daily weather conditions. (Refer to **Part D Appendix 2 From 2 – Daily Whether Conditions**).

Responsibility and Communication:

- It is the responsibility of all facility employees engaged in the above activities to ensure that the above controls are carried out.
- It is the responsibility of the Site Manager to allocate tasks and to ensure that activities at the Facility do not result in the release of particulate or dust that causes environmental harm, including environmental nuisance.
- The Site Manager must promptly inform the Extraction Facility Manager of any incident that is likely to cause environmental harm or nuisance.

Relevant Legislation:

- Environmental Protection Act 1994
- Environmental Protection (Air) Policy 2008

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<table>
<tr><td colspan="2"><u>Workplace Procedure # 2</u>

<u>Noise Management:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that activities conducted at the Facility associated with the extraction and screening activities does not create environmental nuisance at a noise sensitive place.</td></tr>
<tr><td><u>Identification of Issues:</u>

• On-site equipment has been fitted with ineffective muffler systems.</td><td><u>Possible Impact:</u>

• Noise complaint from noise sensitive place.
• Breach of DA condition, possible enforcement action taken by the DERM or LVRC.</td></tr>
<tr><td>• Tonal noise from the operation of cutting disks (unlikely given discordant high frequency).</td><td>• Dependant on frequency, noise nuisance could occur, which could result in possible noise complaints.
• Possible breach of DA condition, possible enforcement action taken by the DERM or LVRC.</td></tr>
<tr><td>• Impact noise from works performed on site, especially after hours.</td><td>• Could result in noise levels being emitted greater than background for the area.
• Noise complaint from noise sensitive place.
• Breach of DA condition, possible enforcement action taken by the DERM or LVRC.</td></tr>
<tr><td>• Construction of new buildings/facilities or processes.</td><td>• Could result in noise levels being emitted greater than background for the area.
• Breach of DA condition, possible enforcement action taken by the DERM or LVRC.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• If noise not ordinarily present is experienced to be emanating from any machinery or equipment that is likely to cause environmental nuisance at any time, prompt attention should be given to rectifying the noise. The noise should cease until rectification has occurred.
• The Daily Machinery Start up Checklist should be filled in. (Refer to Part D Appendix 2 Form 3 - Daily Equipment/Machinery Start up Checklist).
• Unnecessary impact noise should not occur.
• Unnecessary noise outside of normal operating hours should not occur.</td></tr>
<tr><td colspan="2"><u>Record Keeping:</u>
• Daily start up records must be taken. (Refer to Part D Appendix 2 Form 3 - Daily Equipment/Machinery Start up Checklist).
• If noise monitoring is required, record all data as per requirements of the Noise Measurement Manual (latest edition published by the administering authority -DERM).
• Report findings as per Noise Measurement Manual to the DERM.
• In the event of a complaint Form 5 – Complaint Investigation Form of Part D Appendix 2 should be utilised to record all details of the complaint and keep these records up to date as the</td></tr>
</table>

compliant is investigated.
Responsibility and Communication: • The Site Manager is responsible for the prompt notification to the Extraction Facility Manager if noise is released that is likely cause environmental nuisance. • The Extraction facility Manager is responsible for notifying the DERM if there is a release causing environmental nuisance. • It is the responsibility of the Site Manager to investigate any complaints received regarding noise nuisance and report all findings to the DERM. • The Site Manager is responsible for the ensuring that **Form 3 - Daily Machinery Start up Checklist** is filled in daily.
Relevant Legislation: • Environmental Protection Act 1994 • Environmental protection (Noise) Policy 2008.

<table>
<tr><td colspan="2"><u>Workplace Procedure # 3</u>

<u>Truck Washing:</u></td></tr>
<tr><td colspan="2"><u>Environmental Commitment:</u>

• To ensure that truck trailers, wheels and undercarriage are washed and are free of any dust or particulate matter before exiting the facility.</td></tr>
<tr><td><u>Identification of Issues:</u>

• Truck or trailers have not been washed down properly before exiting the facility.</td><td><u>Possible Impact:</u>

• A dust or particulate complaint is received due to offsite dust or particulate liberation.
• Breach of DA condition, possible enforcement action taken by the DERM or LVRC.</td></tr>
<tr><td>• Trucks have been driven through mud and or contaminants and leave the Facility.</td><td>• Mud or contaminants are tracked out and deposited onto the road leading to the Facility. Possible breach of the DA and enforcement action taken by the DERM.
• Complaint regarding offensive odour is received.</td></tr>
<tr><td>• Wash waters are improperly disposed off</td><td>• Contaminants are released to unsaturated ground zone
• Contamination of stormwater and or receiving environment.
• Enforcement action taken by the DERM.</td></tr>
<tr><td colspan="2"><u>Control Measures:</u>

• Ensure that internal roadways are kept free of contaminants.
• Ensure that stormwater can flow easily from internal roadways and that there is no damming or pooling of stormwater.
• Consideration should be given to installing an effective truck body and wheel wash facility.
• Ensure that wash waters are collected and absorbed into a green waste bund that has been purposely built for the truck washing.
• Ensure that the wheels and undercarriage of the trailer is free of any mud and or contaminants prior to exiting the facility.
• If wheel wash is installed, ensure all trucks exiting the Facility do so via passing through the wheel wash.</td></tr>
<tr><td colspan="2"><u>Record Keeping:</u>
• When required, record all trucks that have been washed on the Daily Running Sheet form. (Refer to Part D Appendix 2 - Form 4 – Daily Running Sheet).</td></tr>
<tr><td colspan="2"><u>Responsibility and Communication:</u>

• The Site Manager is to ensure that no trucks are allowed to exit the facility without first removing and or washing mud from truck bodies and vehicle wheels.</td></tr>
<tr><td colspan="2"><u>Relevant Legislation:</u>

• Environmental Protection Act 1994
• Environmental Protection (Water) Policy 2009</td></tr>
</table>

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Appendix 2
Forms and Checklists

Form 1 – Sprinkler or Water Cart Usage Form

Form 2 – Daily Weather Conditions

Form 3 – Daily Equipment / Machinery Start up Checklist

Form 4 – Daily Running Sheet

Form 5 – Complaint Investigation Form

Form 6 – Continuous Improvement

Form 1 – Sprinkler or Water Cart Usage Form

Date	Area Covered	Duration of Sprinkling/passes with water cart

Form 2 – Daily Weather Conditions

Date	Description of Weather. N.B Incorporate any changes throughout the working day and include previous night time conditions.

Form 3 – Daily Equipment / Machinery Start up Checklist

Date	Item	Any change in apparent noise output. If so what?	Any broken or loose fitting items.	Next service or calibration date.	Any fuel or liquid leakage.

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Form 4 – Daily Running Sheet

Date	Time	Description of daily events. Include extraordinary events such as non compliances or emergencies. This should link with information contained in other forms.

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Form 5 – Complaint Investigation Form

N.B. The information on this form must be completed as soon as possible following a complaint. All details must be completed and the form filed and any necessary actions about resolution of the complaint must be filed with it.

Date & time of complaint: **……../……./…….. …….. am/pm**	**Approximate volume of any releases? e.g. how many wheelie bin loads (1 bin = 240 litres)?** **…….. litres**
Is the cause of the complaint presenting any immediate safety risk to others? e.g. other bystanders? If so has the Police or QFRS been notified? Call 000 if there is any possible safety risk. **Action/s taken?** **…….** **…….**	**Regulated Waste Transport Registration Certificate Number (if applicable)** **…….....** **Vehicle type……** **Vehicle Registration Number ……..**
Name and contact phone number of complainant, (record as "anonymous", if no contact details are provided by the complainant): **……...** **(mobile)..……..** **(landline)……..…..**	**Location of complainant:** **Street address……..** **……..** **Location description……** **…….……..**
Name and contact phone number of the Phoenix Manager responsible: **…….** **(mobile)..……...** **(landline)……..…..**	**Suspected cause of complaint:** **……..** **……..** **……..**
Has a sample of been collected? YES / NO If a compliant involves a substance that has been released if possible, collect a sample in the sample container. Ensure sample is marked with the date, time and name of the person taking sample. Ensure sample is handed to the Bassett Barks Manager responsible.	**Have any actions been taken to minimise/mitigate the environmental effects causing the complaint? e.g. activities suspended/ceased?** **…….……...** **Has this action been successful?** **Not at all / somewhat / prevented further release/s**

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Form 6 - Continuous Improvement
(see reverse for instructions on how to complete)

DATE:	**ACTIVITY:**
IDENTIFIED BY:	**IDENTIFIED TO:**
ISSUE: **RATIONALE:**	
PROPOSED RESOLUTION:	
SUPERVISOR'S COMMENTS:	
FOLLOW-UP/RESOLUTION (please date):	
SIGNATURE OF IDENTIFIER	**SIGNED (Site Manager)** **DATE ISSUE RESOLVED**

Copies:
Original to staff member who lodged form.
Copy to supervisor for personnel file.
Copy to be brought forward as agenda item for staff meetings.

CONTINUOUS IMPROVEMENT FORM INSTRUCTIONS

DATE: Date that staff member completed form	**ACTIVITY:** onsite activity/work area
IDENTIFIED BY: Name of staff member	**IDENTIFIED TO:** Supervisor or Manager (Supervisor would bring this to weekly/monthly meeting, and discuss as part of agenda)
ISSUE: Staff member succinctly identifies issue (what, how, when, who, where), giving sufficient details of the concern **RATIONALE:** Staff member identifies why he/she feels it is an issue. Provides some detail regarding history, implications, consequences	
PROPOSED RESOLUTION: Staff member identifies his/her suggestions to resolve this issue. Provides details regarding benefits, costs, implications, time lines, responsibility, and accountability to enact recommendation.	
SUPERVISOR/MANAGER'S COMMENTS: **Supervisor could make comments to support or endorse idea, or may note other opinions. May provide details regarding benefits, costs, implications, time lines, responsibility, and accountability to enact recommendation.**	
FOLLOW-UP/RESOLUTION (please date); Leadership team reviews the issue and resolution. May direct issue and recommendations to other work areas (i.e. Building facilities, OH&S, HR, Admin) who would then be responsible to follow up with investigation of issue and possible changes) In this area the leadership or those assigned would respond to issue, noting action taken, or not taken and rationale.	
SIGNATURE OF IDENTIFIER(s)	**SIGNED (Site Manager)** **DATE ISSUE RESOLVED:** *Note that there should be a set timeline to respond to the issue

Copies:
Original to staff member who lodged form.
Copy to supervisor for personnel file.
Copy to be brought forward as agenda item for staff meetings.

Appendix 3

Figures

Figure 1: Location of the Activity

Figure 2: Site Overview

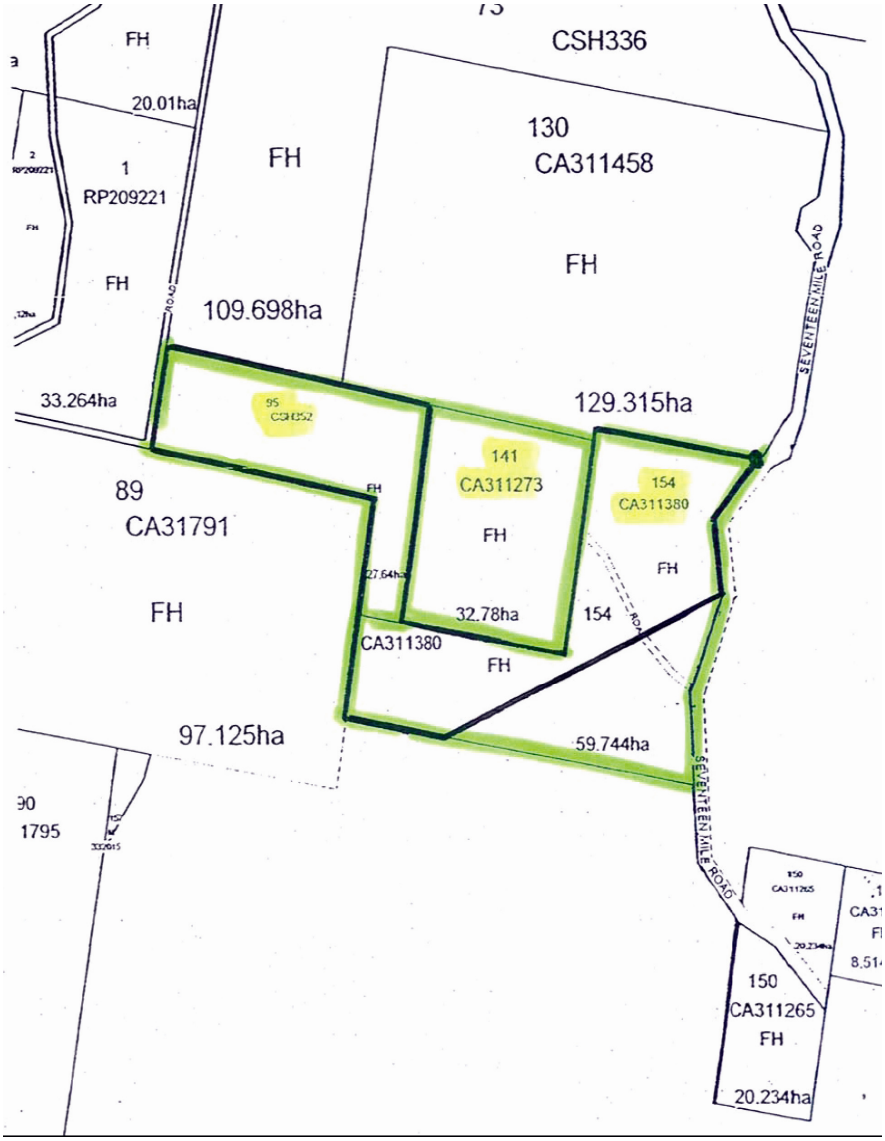

Figure 1: Location of the Activity

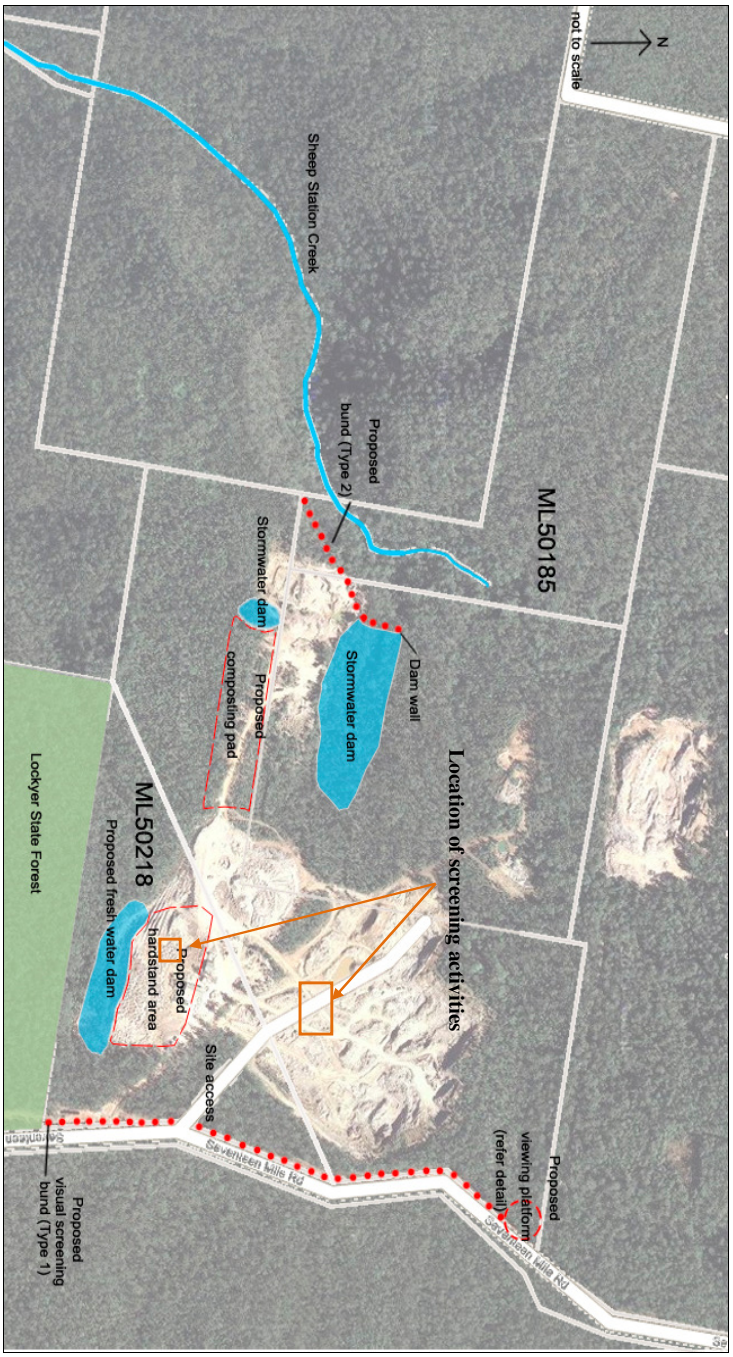

Figure 2: Site Overview

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T/A Zambelli Environmental

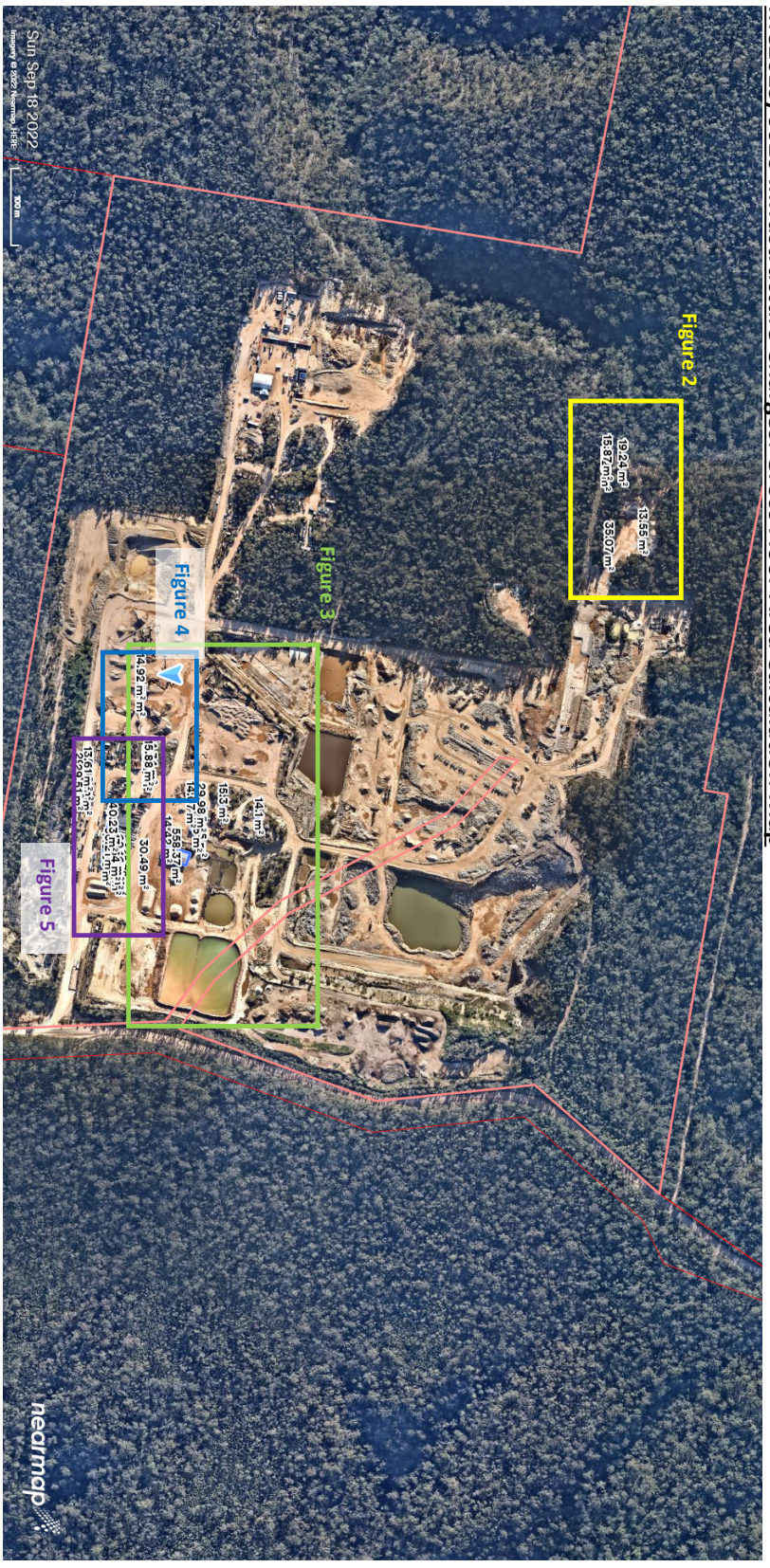

Figure 1: Overall Image identifying existing buildings Source: nearmap

Figure 2: Inset of existing buildings Source: nearmap

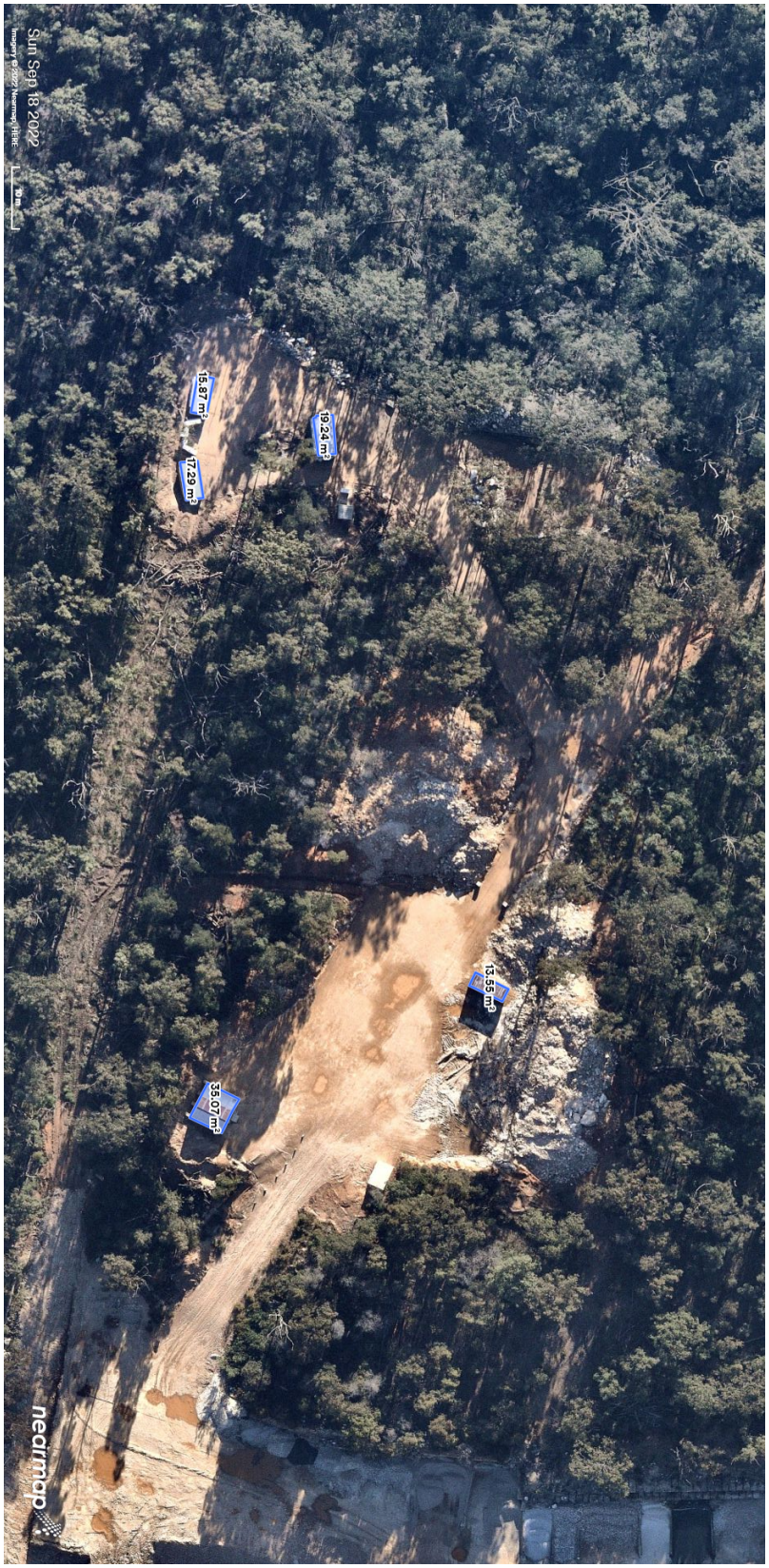

Figure 3: Inset of existing buildings Source: nearmap

Figure 4: Inset of existing buildings Source: nearmap

Figure 5: Inset of existing buildings Source: nearmap

RA9-N

Queensland Government

Queensland Treasury

SARA reference: 1905-11141 SRA
Council reference: MC2019/0029

14 October 2020

Chief Executive Officer
Lockyer Valley Regional Council
PO Box 82
Gatton QLD 4343
mailbox@lvrc.qld.gov.au

Attention: Ms Tammee Van Bael

Dear Ms Van Bael

SARA response—613 Seventeen Mile Road, Helidon

(Referral agency response given under section 56 of the *Planning Act 2016*)

The development application described below was confirmed as properly referred by the State Assessment and Referral Agency (SARA) on 18 June 2019.

Response

Outcome:	Referral agency response - No requirements Under section 56(1)(a) of the *Planning Act 2016*, the SARA advises it has no requirements relating to the application
Date of response:	14 October 2020
Advice:	Advice to the applicant is in **Attachment 1**
Reasons:	The reasons for the referral agency response are in **Attachment 2**

Development details

Description:	Development permit	Material change of use for extractive industry (100,000 tonnes to 1,000,000 tonnes) and environmentally relevant activities 16 Extracting and screening (2)(b) and (3)(b) and 53 Organic material processing (a)
SARA role:	Referral agency	
SARA trigger:	Schedule 10, part 5, division 4, table 2, item 1 (Planning Regulation 2017) Development application for a material change of use for non-devolved environmentally relevant activities Schedule 10, part 9, division 4, subdivision 1, table 1, item 1	

South East Queensland (West) regional office
Level 4, 117 Brisbane Street, Ipswich
PO Box 2390, North Ipswich QLD 4305

	(Planning Regulation 2017) Development application for a material change of use identified in schedule 20 of the Planning Regulation 2017
SARA reference:	1905-11141 SRA
Assessment Manager:	Lockyer Valley Regional Council
Street address:	613 Seventeen Mile Road, Helidon
Real property description:	Lot 154 on CA311380; Lot 141 on CA311273; and Lot 95 on CSH352
Applicant name:	Scotbar Pty Ltd
Applicant contact details:	613 Seventeen Mile Rd, Helidon QLD 4344
Environmental Authority:	This referral included an application for an environmental authority under section 115 of the *Environmental Protection Act 1994.* Below are the details of the decision: • Approved • Reference: EA0002540 • Effective date: On the day that the development application is approved by the assessment manager • Prescribed environmentally relevant activity (ERA): ERA 16 Extraction and screening 2 (b) – extracting, other than by dredging, in a year, more than 100,000t but not more than 1,000,000t; ERA 16 Extracting and screening 3 (b) – screening, in a year, more than 100,000t but not more than 1,000,000t; and ERA 53 Organic material processing (a) – processing more than 200t of organic material in a year by composting the organic material. If you are seeking further information on the environmental authority, the Department of Environment and Science's website includes a register. This can be found at: www.des.qld.gov.au.

Representations

An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (section 30 of the Development Assessment Rules). Copies of the relevant provisions are in **Attachment 3**.

A copy of this response has been sent to the applicant for their information.

For further information please contact Kieran Hanna, Principal Planning Officer, on 3432 2404 or via email IpswichSARA@dsdmip.qld.gov.au who will be pleased to assist.

Yours sincerely

Warren Oxnam
Planning Manager SEQ West

enc Attachment 1 - Advice to the applicant
Attachment 2 - Reasons for referral agency response

Attachment 3 - Representations provisions

cc Scotbar Pty Ltd, Jsimmonds.bts@gmail.com

Attachment 1—Advice to the applicant

General advice	
1.	Terms and phrases used in this document are defined in the *Planning Act 2016*, its regulation or the State Development Assessment Provisions v2.4 (SDAP). If a word remains undefined it has its ordinary meaning.

Attachment 2—Reasons for referral agency response

(Given under section 56(7) of the *Planning Act 2016*)

The reasons for the department's decision are:

- The proposed development complies with the purpose and performance outcomes of State code 6: Protection of state transport networks of the State Development Assessment Provisions; in particular:
    - it does not create a safety hazard for users of state transport infrastructure or public passenger transport
    - it does not result in a worsening of the physical condition or operating performance of state-controlled roads and the surrounding road network
    - it does not compromise the state's ability to cost-effectively construct, or significantly increase the cost to operate and maintain state transport infrastructure.
- The proposed development complies with the purpose and outcomes of State code 22: Environmentally relevant activities of the State Development Assessment Provisions; in particular:
    - it is located and designed to avoid or mitigate environmental harm on environmental values of the natural environment, adjacent sensitive land uses and sensitive receptors
    - avoids impacts on matters of state environmental significance.

Material used in the assessment of the application:

- The development application material and submitted plans.
- *Planning Act 2016*.
- Planning Regulation 2017.
- The State Development Assessment Provisions (version 2.4).
- The Development Assessment Rules.
- SARA DA Mapping system.
- State Planning Policy mapping system.

Attachment 3—Change representation provisions

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12.2 Appointment of Local Government Representative to Southern Queensland Country Tourism Board

Author: Tracy Vellacott, Senior Tourism and Events Officer
Responsible Officer: Amanda Pugh, Group Manager Community & Regional Prosperity

Purpose:

The purpose of this report is to seek Council's endorsement of the reappointment of Cr Geoff McDonald of Toowoomba Regional Council to the position of Local Government Representative on the board of Southern Queensland Country Tourism (SQCT).

Officer's Recommendation:
THAT Council advise Southern Queensland Country Tourism that Council endorse the reappointment of Cr Geoff McDonald of Toowoomba Regional Council to the role of Local Government Representative on the Southern Queensland Country Tourism Board.

Executive Summary

Southern Queensland Country Tourism has requested Council advise its acceptance for Cr Geoff McDonald of Toowoomba Regional Council to continue in the role of Local Government Representative on the SQCT Board or advise a preferred nominee.

Proposal

Southern Queensland Country Tourism (SQCT) moved to a new board structure on 30 November 2020 - the board is now composed of six skills-based directors and one director representing the interests of local government.

At the time, Councils were invited to nominate a representative and Council resolved to nominate Cr Brett Qualischefski. A vote was conducted between financial member councils, with Cr Geoff McDonald from Toowoomba Regional Council being elected to represent the interests of local government on the SQCT board.

Options

Option 1
THAT Council accept the nomination of Cr Geoff McDonald to continue in the role of Local Government Representative on the board of Southern Queensland Country Tourism.

Or

Option 2
THAT Council advise Southern Queensland Country Tourism of a new preferred nominee.

Previous Council Resolutions
Resolution number 20-24/0159 of 14 October 2020 – That Council nominate Cr Qualischefski as a candidate for the Board Director, who will represent the interests of the Local Governments represented by SQCT.

Critical Dates

SQCT's Annual General Meeting will be held 24 November 2022.

Strategic Implications

Corporate Plan
2. Lockyer Business
Outcome:
2.3 Promote and market the Lockyer Valley as a destination for commerce, tourism and lifestyle.

Finance and Resource
Budget of $61,500 is allocated in the 2022/23 budget for Council's membership of Southern Queensland Country Tourism.

Legislation and Policy
Nil

Risk Management
Nil

Consultation

Council Workshop

Attachments

There are no attachments for this report.

13. INFRASTRUCTURE REPORTS

13.1 Lake Apex Amphitheatre

Author: Brendan Sippel, Manager Community Facilities
Responsible Officer: John Keen, Group Manager Infrastructure

Purpose:

The purpose of this report is to formally bring the tender process to a close in relation to the design and construction of the Lake Apex Amphitheatre project.

Officer's Recommendation:
THAT Council resolve to not proceed with awarding the Lake Apex amphitheatre project due to tendered prices exceeding the budget, and defer the project to future years.
AND Further;
THAT Council delegate authority to the Chief Executive Officer to submit a variation application to the Department of State Development, Infrastructure, Local Government and Planning to reallocate the remaining budget to other approved projects contained within the 2021 -2024 South East Queensland Community Stimulus Program.

Executive Summary

A Council discussion in February 2021 led to the concept of an Amphitheatre at Lake Apex. A design was commissioned and completed in consultation with the Lake Apex Community Advisory Committee and Council.

The Lake Apex Amphitheatre project was submitted as part of a grant submission to the *2021-2024 South East Queensland Community Stimulus Program* grant funding round and was successful.

The project was put out to open tender on two occasions and on both occasions the responses received were for amounts greater than the approved budget allocation.

Council has several approved projects under the 2021-2024 South East Queensland Community Stimulus Program that require supplementary funding to assist with their delivery and which have a higher degree of certainty on the ability to be able to be delivered within the required timeframes.

Proposal

The design was tendered to the open market via a tender procurement process in April 2022 and again in August 2022. The results of both tender processes have demonstrated that costs and lead times across the building and construction industry continue to increase. On each occasion the Lake Apex Amphitheatre was tendered, the price has been outside the allocated budget.

Due to market conditions, it is proposed to defer the Lake Apex Amphitheatre project until future years. The funding for this project, if agreeable to the Department of State Development, Infrastructure, Local Government and Planning could be reallocated to other projects which are capable of being delivered within the required grant timeframes.

Options

1. Council resolve to defer the project and Council negotiates with representatives of the Department of State Development, Infrastructure, Local Government and Planning to reallocate the remaining budget to other preapproved projects that have a high probability of being delivered in the required timeframes.
2. Council resolve to defer the project and returns grant funding to the Department of State Development, Infrastructure, Local Government and Planning.
3. Council allocates further budget from existing budget allocation to complete the project.

Previous Council Resolutions

At the Special Council Meeting held on 20 July 2022, the budget for this project alongside other Council projects were adopted under resolution 20-24/0590.

THAT Council adopt pursuant to Sections 169, 170 and 171 of the Local Government Regulation 2012, the Budget for the financial year 2022-2023 and the Long-Term Financial Forecast for the financial years 2022-23 to 2031-32, contained in the document entitled "2022-23 Annual Budget and Long-Term Financial Forecast" as attached to these minutes and including the:

i. Statement of Income and Expenditure
ii. Statement of Financial Position
iii. Statement of Cash Flows
iv. Statement of Changes in Equity
v. Relevant Measures of Financial Sustainability
vi. Detailed Statements of Income and Expenditure:
a. Business Unit – Child Care Centres 2022-2023 to 2024-2025
b. Business Unit – Waste Management 2022-2023 to 2024-2025
vii. Percentage Change in Rates Levied from 2021-2022.

Further;
THAT Council note the Statement of Estimated Financial Position at 30 June 2022, as attached to these minutes and presented by the Chief Executive Officer in accordance with Section 205 of the Local Government Regulation 2012.

AND Further;
THAT Council resolve not to apply the Code of Competitive Conduct to Council's Child Care or Waste Management Business Activities as applying the Code would result in unnecessary administrative costs for Council.

Critical Dates

Under the funding guideline the approved projects are to be completed by June 2024, therefore a decision regarding this project will allow Council to apply to the Department of State Development, Infrastructure and, Local Government and Planning for a variation to the schedule to allow the funds to be reallocated to the preapproved projects.

Strategic Implications

Corporate Plan

Lockyer Planned

4.1 Provision of fit- for purpose infrastructure which meets the current and future needs of the region.

Lockyer Leadership and Council

5.1 Undertake robust and accountable financial, resource and infrastructure planning and management to ensure affordable and sustainable outcomes for our community

Finance and Resource

The Lake Apex Amphitheatre project is externally funded under the *2021-2024 South East Queensland Community Stimulus Program*. If Council agrees to defer the project due to current market conditions negotiations will need to occur between Council officers and representatives of the Department of State Development, Infrastructure, Local Government and Planning. Council may be able to negotiate moving allocated budget to other projects in the 2022/2023 budget or put forward new projects which would be required to be completed by June 2024. This decision to reallocate the preapproved funding will be at the discretion of the Department of State Development, Infrastructure, Local Government and Planning.

Any monies expended on the preplanning and design for the Lake Apex Amphitheatre project will need to be covered by Councils own source funding in the 2022/23 budget. The project will remain in Council's forward list of works for future capital works bids at budget preparation time.

Legislation and Policy

Local Government Regulation 2012 LGR s. 173(2), (3) & (4).

Risk Management

Key Corporate Risk Code and Category:	FE1
Key Corporate Risk Descriptor:	Finance and Economic Finance sustainability to support the achievement of strategy, goals, and objectives in the medium to long term.
Key Corporate Risk Code and Category:	R1
Reference & Risk Descriptor:	Reputation Reputation and goodwill.

Consultation

Portfolio Councillor Consultation

Portfolio Councillors, Councillor Holstein and Cook have been briefed on this report. The Lake Apex amphitheatre project was discussed at Council workshop on the 4 October 2022.

Internal Consultation

- ✓ Coordinator Procurement
- ✓ Coordinator Accounting Services
- ✓ Senior Project Officer Community Facilities
- ✓ Coordinator Engagement and Communications
- ✓ Group Manager Infrastructure
- ✓ Grants Officer

External Consultation

Council's decision around this matter will be discussed at the Lake Apex Community and Advisory Committee meeting on the 23 November 2022 where an update on the project will be provided.

Community Engagement
Council decision around this matter will be discussed at the Lake Apex Community and Advisory Committee on the 23 November. This group consists of members that utilise Lake Apex and one of the key stakeholders identified in early project scoping phases. Internal stakeholders will be notified of the outcome of this report.

Attachments

There are no attachments for this report.

14. ITEMS FOR INFORMATION

14.1 Chief Executive Officer's Monthly Report - October 2022

Author: Ian Church, Chief Executive Officer
Responsible Officer: Ian Church, Chief Executive Officer

Purpose:
This report provides Council with a summary of key operational activities undertaken by the Chief Executive Officer's Group during October 2022.

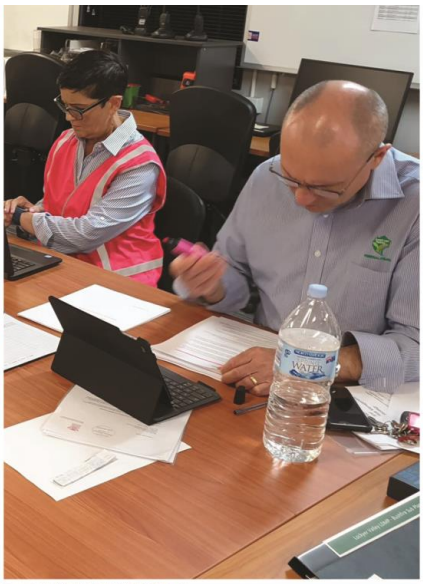
This document is for Council's information only.

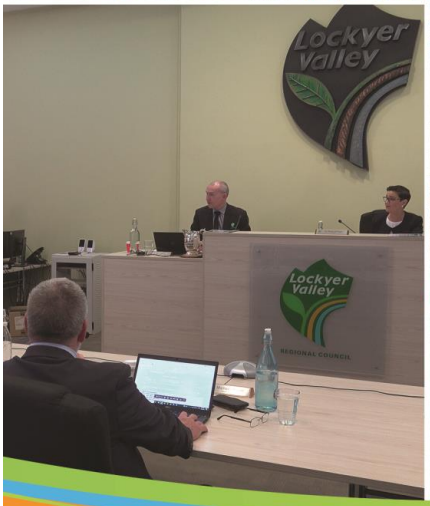
Executive Summary
The activities covered in this report include Strategic Planning; Internal Audit and Risk; Procurement; Disaster Management; Community Development and Engagement and Advocacy. The Finance function is subject to separate reporting.

Proposal
That this report be received and noted.

Attachments

1⇩ Chief Executive Officer's Monthly Report - October 2022 19 Pages


Executive Office

MONTHLY GROUP REPORT
October 2022

Lockyer Valley
REGIONAL COUNCIL

HIGHLIGHTS

Procurement/Disaster Management/Community Development and Engagement/Advocacy

The relevant Coordinators will speak to the highlights of their contributions to the report.

Flood Restoration Program Update

Expenditure incurred during and after the three declared events has been substantial and it is important to ensure all eligible costs are reimbursed. The following table provides a snapshot of costs incurred and claimed to date.

Event/Description	Relief Measure	Submission Amount Requested by LVRC	Received Amount	Approved Amount
November 2021 Flood Event	CDO	48,557.21		
February 2022 Flood Event	CDO	770,848.87		
May 2022 Flood Event	CDO	534,172.00		
May 2022 Traffic Management	CDO	245,028.05	244,311.12	244,311.12
TOTAL FOR CDO		$ 1,598,606.13	$ 244,311.12	$ 244,311.12
November Event	EMERGENT	949,591.44	711,598.01	711,598.01
February Event	EMERGENT	3,050,673.44	1,000,000.00	
May Event	EMERGENT	4,307,102.24		
TOTAL FOR EMERGENT WORKS		8,307,367.12	1,711,598.01	711,598.01
Fed Thomas Pedestrian Bridge	REPA	220,158.93	-	165,119.20
Unsealed Roads Zone 9	REPA	234,227.26	-	175,670.44
Unsealed Roads Zone 2	REPA	234,376.00	-	185,977.43
Unsealed Roads Zone 3	REPA	388,211.76	106,043.26	375,635.52
Unsealed Roads Zone 1	REPA	535,404.80	-	403,858.65
Liftin Bridge	REPA	3,653,570.66	701,813.55	2,339,378.50
Unsealed Roads Zone 8 Part 2	REPA	566,781.76	-	515,749.32
Unsealed Roads Zone 8 Part 1	REPA	689,045.09	-	641,853.47
Unsealed Roads Zone 8 Part 3	REPA	410,117.72	-	298,006.79
Sealed Roads Zones 1,2,and 3 Submission 1	REPA	246,645.95	-	241,352.19
Unsealed Roads Zone 10	REPA	689,329.38	-	686,821.75
Old Laidley Forest Hill Road CH 1800	REPA	265,942.14	-	
Unsealed Roads Zone 4 - Part 1	REPA	1,178,563.75	-	867,359.19
Unsealed Roads Zone 4 -Part 2	REPA	1,146,515.28	336,409.90	1,121,366.34
Unsealed Roads Zones 11-18	REPA	152,129.87	-	129,406.86
Woolshed Creek Road Floodway CH 400	REPA	442,230.33	101,908.21	339,694.04
RCP and RCBC Desilting and Clean Outs	REPA	211,063.54		
East Egypt Road Landslip	REPA	4,112,341.97		
Berlin Road Landslip	REPA	2,588,718.51		
Sealed Roads Zone 9	REPA	432,350.36		
Sealed Roads Zone 5	REPA	1,275,573.38		
IRW May 2022	REPA	22,799.12		
Adare Road Floodway	REPA	183,830.60		
TOTAL FOR REPA		19,879,928.16	1,246,174.92	8,487,249.69
TOTAL FOR DRFA PROGRAM		**29,785,901.41**	**3,202,084.05**	**9,443,158.82**

Voluntary Home Buy Back Scheme (VHBB)

As previously reported the VHBB is administered by the State Government through the Queensland Reconstruction Authority (QRA). Council is charged with implementation of the Scheme based on the requirements of the QRA. At this stage contractors have been secured who will be able to manage Council's responsibilities as the Scheme progresses.

Disaster Management

Council is focusing on seasonal preparedness including training staff to operate the Local Disaster Coordination Centre and encouraging the community to prepare for the predicted severe weather season. Council has two additional funded positions due to the disaster events; one to assist with ongoing disaster management and the other to assist with preparing the community to adapt to climate induced weather events. A third funded position will also become available to Council within the near future to assist the community to become more disaster resilient.

Insurance

I have included in this report an update on insurance claims which I will provide on a quarterly basis in future.

BUSINESS IMPROVEMENT & STRATEGY

Audit and Risk Management

Delivery of Council's Audit and Risk Management function as outlined in this report assists in achieving the "*Compliant with Legislation"* Outcome of Council's Corporate Plan 2022-2027 and in improving business processes.

Audit and Risk Management Committee

At the time of writing this report the next meeting of Council's Audit and Risk Management Committee is due to be held on Thursday 10 November. An important issue to be considered by the Committee will be the draft 2021-2022 financial statements, including position paper on the treatment of infrastructure assets damaged by the three declared events that occurred during the financial year. The financial statements show an operating surplus for the year and a strong cash position at the end of the financial year. Other items on the agenda include external and internal audit updates and the recommendations of two completed internal audits being "Plant and Fleet Utilisation Review" and "Development Applications Review."

Audit Register Status

The following table provides insight into the status of the internal audit recommendations captured on Council's Audit Register. The table identifies the number of current active action items on the Audit Register by their level of risk to Council.

Internal Review (audit)	Total No of Rec.	Number of Current Active Recommendations by Risk Level				Completed Rec.
		High	Medium	Low	Improve	
Tendered Contract Review	17	0	3	1	1	12
Project Management Practices	11	0	1	1	0	9
Review of Legislative Compliance	6	0	1	0	0	5
Payroll and Remuneration Processes	10	1	0	1	0	8
Payroll and Vendor Analytics	9	0	3	0	0	6
Lessons Learned from Pandemic	4	3	1	0	0	0
Property Management Review	10	4	1	1	1	3
Disaster Response (On Ground)	14	8	4	0	0	2
Total	81	16	14	4	2	45

Internal Audit Plan Progress Update

As noted above two internal audits have recently been completed and will be presented to the Audit and Risk Committee for adoption at the 10 November meeting. Further internal audits will continue in accordance with the 3-year internal audit plan adopted by the Committee, with the next being Revenue Management.

Corporate Risk Management

No action was undertaken this month in relation to the review of Council's Corporate Risk Management Framework and associated Corporate Risk and Branch Registers.

Corporate Planning and Performance Reporting

Delivery of Council's Corporate Planning and Performance Reporting function as outlined in this report assists in achieving the *"Provide leadership and contemporary management systems that drive a coordinated and connected organisation"* outcome of Council's Corporate Plan 2022-2027.

Development of Annual Report 2021-2022

Councils 2021-2022 Annual Report is being drafted by responsible officers and will be finalised in the near future for adoption by Council. Work is still required to be undertaken on the development of the Community Financial Report and assessment of Council's progress on the implementation of Council's Corporate and Operational Plans.

Review of Corporate Performance Reporting

A review of Council's corporate performance reporting continues. The aim of this review is to reduce duplication, inconsistencies and streamline Council's corporate performance reporting provided to Council and the community. The framework for the quarterly performance update on Council's Operational Plan was completed in consultation with Council's Corporate Design Team. No further activity was conducted on the Review this month.

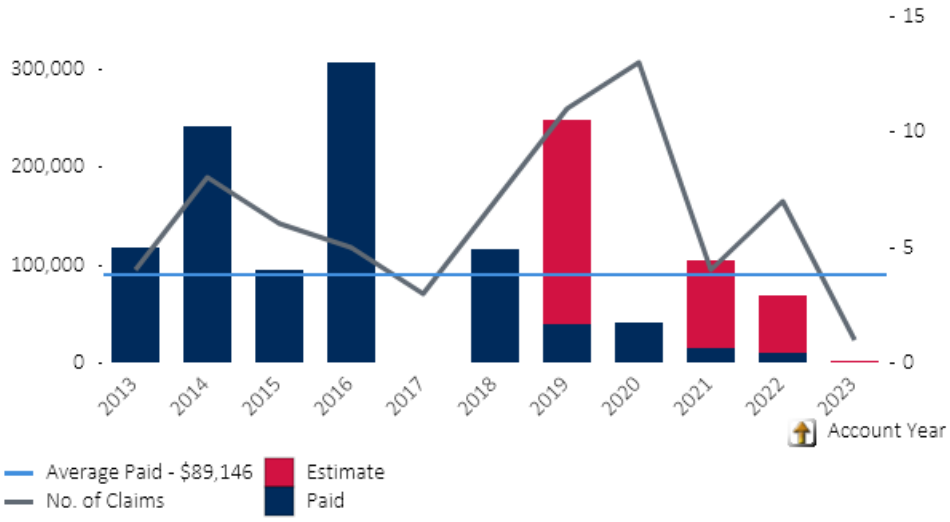
Business Services Review

Procurement requirements for the engagement of Mead Perry Group to review the four-day working week as currently applied under the 2021 Certified Agreement-Field have been completed.

Insurance

LGMS Queensland provides a claims dashboard for Council, showing outstanding claims and the status of these claims across Council's Liability and Assets insurance covers. Following is an update on these claims as at 26 October 2022.

Liability Insurance (Public Liability, Professional Indemnity & Personal Injury; including notifications)

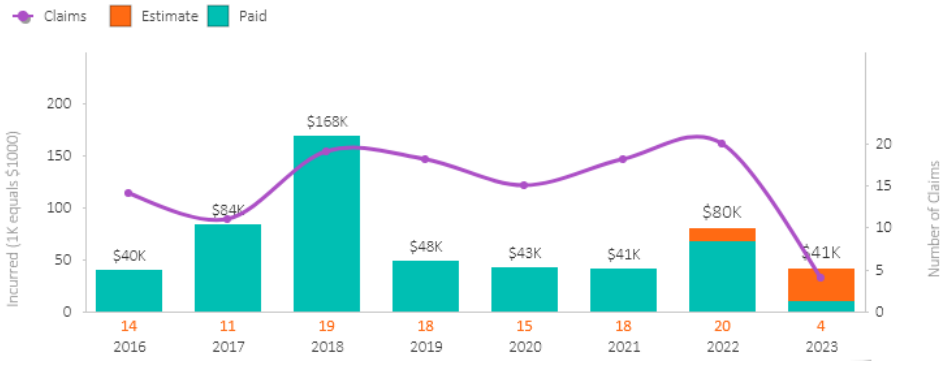


In 2022 Council lodged seven claims/notifications under its public liability and professional indemnity insurance policy. In 2021 four claims/notifications were lodged and in 2020, 13 were lodged.

The red value on the graph indicates the estimated cost of the claim, in the event that Council has a liability exposure. This cost estimate is calculated/estimated by Council's insurer and this estimate is inclusive of the costs to defend the claim/notification.

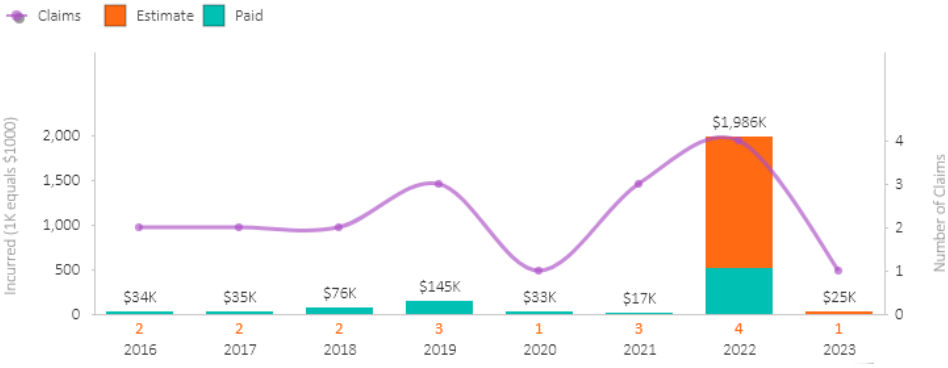
The blue value on the graph indicates what has been paid to date in both settlements and costs to defend.

Motor Vehicle Claims



Council has lodged 4 motor vehicle claims for the 2022-2023 year to date, with repair costs totalling approximately $41,000.00. In 2022 Council lodged 20 motor vehicle claims, in 2021 18 were lodged and in the 2020 year, 15 were lodged. The orange value on the graph indicates the cost of the repairs yet to be paid. This is due to delays in the repairers being able to source parts due to COVID-19.

Property Claims



During the current financial year, Council has lodged one property claim for damage to the Pound facility as result of a stolen motor vehicle being used to crash through the fence. In the 2021-2022 financial year, Council lodged four property insurance claims. These claims were for the loss of a hired site hut and Council portaloo that were washed away during the large storm in November 2021, property damage at multiple locations are a result of the February and May flood events and theft of tools from Council's depot. The two flood claims are for clean-up/debris removal and repair/replacement of Council's impacted parks infrastructure as a result of these two events. The February 2022 claim has been assessed by LGM Assets and the loss adjustor appointed to oversee Council's claim. Council's claim for this event is approximately $1.2m and Council has received a preliminary payment of $500,000 to enable remediation works to the Gatton Showgrounds and the Glenore Grove Cricket Club ahead of the speedway and cricket seasons recommencing.

The orange value on the graph indicates the claim cost yet to be paid, while the green indicates what has been paid.

PROCUREMENT

INFRASTRUCTURE DELIVERY:

- LVRC- 22-037 – Tyres & Tyre Repairs - **Planning Phase** - for Tender process
- LVRC-22-065 - North & East Street Roundabout Asphalt - **Planning Phase** - for Tender process
- LVRC-22-042 – Gatton Stormwater Condition Survey 2022 – **Evaluation phase** - Tender released on 1 September 2022 extended closure date of 22 September 2022
- LVRC-22-036 Fred Thomas Bridge Replacement – **Evaluation phase** - RFQ released 1 August 2022 with a closure date of 22 August 2022
- LVRC-22-046 Gatton Central Drainage - Design - Evaluation phase - RFQ released 10 October 2022 with a closure of 31 October 2022
- LVRC-22-050A Building Condition Assessments & Maintenance Services Schedules - Evaluation Phase – for Tender process

28 responses were received for the above listed closed procurement processes for Infrastructure Delivery.

INFRASTRUCTURE SERVICES / FLEET:

- LVRC-22-070 – Multiple Earthmoving Plant – **Planning Phase** – for Limited Market Tender process
- LVRC-22-071 – Multiple Trucks – **Planning Phase** – for Limited Market Tender process
- LVRC-22-073 – Multiple Mowers – **Planning Phase** – for Limited Market Tender process
- LVRC-22-074 – Multiple Trailers – **Planning Phase** – for Limited Market Tender process
- LVRC-22-072 – Multiple Light Commercial / Passenger Vehicles - Evaluation Phase – RFQ released 13 October 2022 with a closure of 24 October 2022.

1 response was received for the above listed closed procurement processes for Infrastructure Delivery.

WASTE:

- LVRC-22-076 – Leachate Management Services – Planning Phase – for Tender process
- LVRC-22-044 – Waste Facilities Supervision – **Sourcing Phase** – RFT Released 19 October 2022 with a closure of 13 December 2022
- LVRC-22-045 MRF Kerbside Recyclable Processing - **Planning Phase** – RFT Released 19 October 2022 with a closure of 13 December 2022
- LVRC-22-002 - Gatton Landfill Cell 5 Construction - **Evaluation Phase** - Tender released 26 May 2022 closed on 30 June 2022 – Evaluation complete.

8 responses were received for the above listed closed procurement process for Waste.

COMMUNITY FACILITIES:

- LVRC-22-054 – Lake Apex Amphitheatre – (Now withdrawn)
- LVRC-22-067 - Roof Height Safety Systems - **Evaluation phase** – RFQ released 8 September 2022 with a closure date of 22 September 2022
- LVRC-22-060 – Gatton Administration building Roof Repairs **– Awarded** – Daniel Banditt Constructions Pty Ltd.

7 responses were received for the above listed closed procurement processes for Community Facilities.

PLANNING & DEVELOPMENT:

- LVRC-22-027 Forest Hill Silos Art Project – **Planning Phase** – for Tender process
- LVRC-22-049 Forest Hill Silo Reference Design - **Evaluation Phase –** RFQ released 28 September 2022 with a closure date of 12 October.

7 responses were received for the above listed closed procurement processes for Community Facilities.

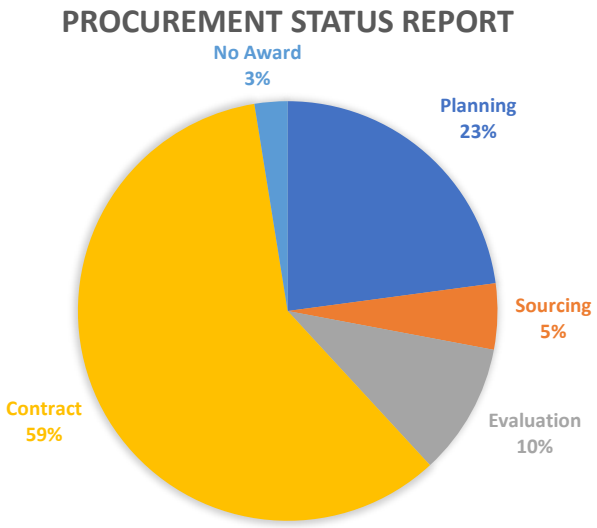
PROCUREMENT & STORES

- LVRC-22-078 – Bitumen Products & Services – **Planning Phase** – for Tender process – engagement of multiple suppliers on ad-hoc agreements
- LVRC-22-052- Traffic Control Ad-hoc Services – **Planning Phase** – for Tender process

CORPORATE

- LVRC-22-038 – PPE – Safety Boots – **Evaluation Phase** – RFQ released 23 August 2022 with a closure date of 12 September 2022.
- LVRC-22-022 – Corporate Uniforms – **Planning Phase** – for tender process

3 responses were received for the above listed closed procurement processes for Corporate.


PROCUREMENT STATUS REPORT
No Award
3%
Planning
23%
Sourcing
5%
Evaluation
10%
Contract
59%

DISASTER MANAGEMENT

Council's disaster management team is maintaining focus on seasonal preparedness activities and encouraging the community to also prepare for the upcoming severe weather season.

Engagement both with internal and external stakeholders is continuing with training of staff to enhance operational response capability and capacity is leading the direction into the season.

PREVENTION

Community Education

Ongoing messaging commenced regarding community preparedness and seasonal checklists for the community. Messaging advising the community to prepare now in readiness for an impending event regarding sandbags and their availability.

All messaging promotes use of the LVRC Disaster Dashboard.

Sandbagging

Twelve Sandbag fillers have been received and assembled ready for deployment with all associated signage added. Currently 3000 sandbags are on hand.

Reviews

IGEM – Southeast Queensland Rainfall and Flooding - February to March 2022.

The main context of the report focused on the Emergency and Alert Systems and their use during the February to March 2022 weather event. The report identified and addressed the messaging system usage across the SEQ region and highlighted the complexities and lengthy timeframes of the Warnings and Alert System.

Page 99 of the report identified the use of a drone by Queensland Fire and Emergency Services (QFES) to deliver medical supplies to community members within the Lockyer, with no other direct references to the Lockyer Valley Regional Council (LVRC) being made.

Independent Review of Queensland Fire and Rescue Services.

The review made 19 recommendations including the creation of a single marine rescue entity transferring through a machinery of government process from QFES to the Queensland Police Service (QPS) effective from June 2023.

SES review – Sustaining the SES – Partnering the Change.

This review was conducted 2019 – 20 and finalised 31 March 2020. However, the recommendations of this review are now outdated by the independent Review of Queensland Fire and Emergency Services 2022.

Review into Volunteer Marine Rescue Organisation in Queensland (Bluewater Review).

This review has no obvious relevance to the LVRC

PREPAREDNESS

Training

Training sessions identified and delivered to LVRC staff regarding LDCC functions included the following:

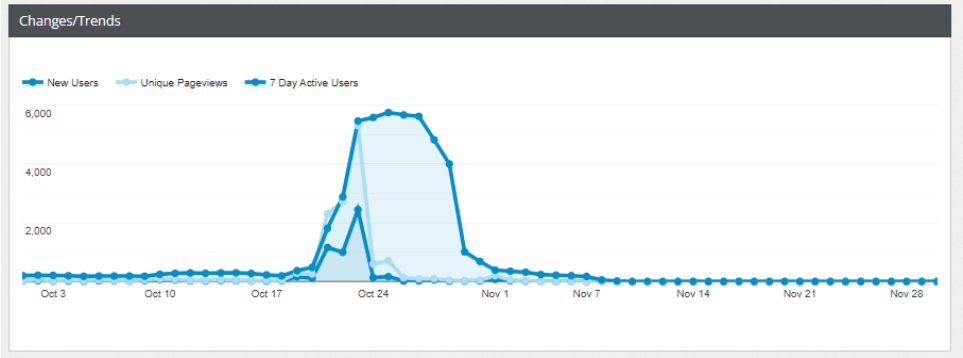
- Queensland Disaster Management Arrangements
- Operations Cell
- Logistics Cell
- Guardian System – Overview delivered to Laidley Library Staff
- Disaster Management Planning
- Evacuation Centre Management

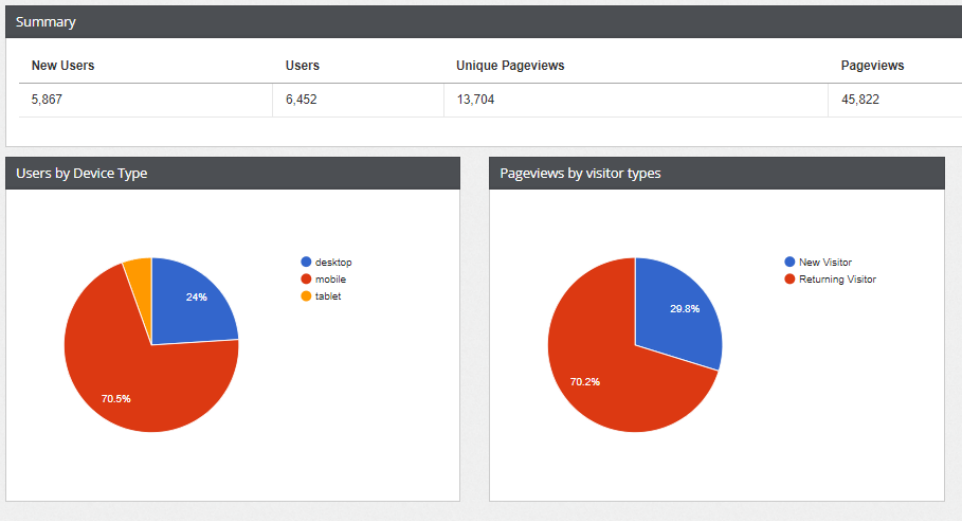
- Warning and Alerts Refresher training delivery by QFES Severe Weather Season Preparedness Project – in line with IGEM review recommendations

Warnings and Alerts
Review of LVRC warnings and Alerts messaging and Polygons – in line with IGEM recommendations

Disaster Dashboard
The below graphics indicate the LVRC Disaster dashboard is well utilised and a key community reference in times of an impending event. New users spiked over the weather event for a seven-day period covering the weather event on Sunday 23rd October.

The majority of usage is via mobile phones 70.5% and pageviews had a 70.2% return of users to the Dashboard.





Air Operations

Councils Disaster Management Coordinator and Procurement staff are identifying local assets that can be utilised during an event in line with the States Operational Arrangements.

Flood Monitoring

Council's new maintenance provider, Aquamonix has completed, or is currently undertaking, the following projects:

- Camera communication upgrades have been completed.
- Operation and maintenance of river and rain gauges is progressing with work to be finalised later this month.
- Camera solar panel upgrades are due to be completed by the beginning of December.
- Woodlands automated Flood Monitoring and Sign system is being repaired however it is not expected to be fully automated until February 2023. In the meantime, it can be used manually.
- The Grantham Siren is operational with batteries and charger replaced. Code for the siren is being rewritten to transition to a new operating system, however until that is complete Council can continue to operate the siren using Qtec's operating system.

RESPONSE

Disaster Management staff continue to monitor the evolving weather situation, with the latest system impacting late October. The following actions were taken in response to the event:

- Friday 21/10 at 1115hrs LDMG moved activation status to ALERT
- Evacuation trailer deployed to Laidley on Friday 21/10
- Weather event – Saturday and Sunday 22-23/10
- Monitoring of weather situation by WMA Representative overnight Saturday
- Flood Monitoring Saturday night by LVRC staff
- Bureau (BoM) update/advice @ 0300hrs Sunday 23/10 rain exceeding 100mm in Laidley Creek Catchment likely – result in impact to the Laidley township

- Sunday 23rd LDMG moved activation status to LEAN FORWARD
- LDCC activated and staffed with all functions
- Flood monitoring continued, 0900 hrs Bureau weather brief
- Sunday 23/10 at 1330 hours LDCC stood down and monitoring conducted as business as usual
- Monday 24/10 at 1400 hrs - LDMG moved activation status to STAND DOWN

I note that Lockyer Valley has been activated for Counter Disaster Operations for the October event which means that costs incurred will be reimbursed.

Evacuation Trailers
Both trailers are stocked and ready for deployment when needed.
Signage for the new trailer has been received with workshops mounting the signage to the trailer.

RECOVERY
Support for recovery operations is ongoing through the Recovery committee.

Strengthening Business Service – Navigating the Storm Workshops
Strengthening Business Service through the Entrepreneurs' Program is a fully funded Federal Government scheme that supports business development in flood affected regions. The Program delivers a free business advisory service to local businesses through experienced, independent experts who are able to work with local businesses

Navigating the Storm workshops were conducted at Laidley, Withcott and Gatton during October. Disaster Management staff are currently discussing options for future workshops.

COMMUNITY DEVELOPMENT & ENGAGEMENT

Strategic Priority 1 – Engage *with the community to ensure the community's views, values and aspirations inform Council decision-making.*

12 projects received engagement support in October

- Flood-affected Park Furniture Program
- Disaster Management Seasonal Preparedness
- Lockyer Valley Arts and Cultural Plan Review
- Grantham Scrub Rd Pavement Works
- Grantham Flood Siren Testing
- Inland Rail Community Impacts
- Future Rate Notices Strategy
- Lockrose Community Facilities
- Bridges Project
- Lorikeet Road /Gerhke Road Roadworks
- Lorikeet Road Floodway Upgrade Project
- Fairways Park Carparking

Strategic Priority 2 – *Support community groups to increase their capacity, resilience and sustainability*.

- The *Black Summer Bushfire Recovery*-funded $1.5M *Community Safer Places Project* provides funding to a range of rural halls to be better equipped for localised disaster responses, long-term community connectedness and fundraising. Council has commenced distribution of funding to successful applicants and several halls have commenced upgrade works.
- The Team is also managing grants from the Queensland Health Localised Mental Health Initiative which is being used to support smaller events and initiatives led by community groups where promotion of mental health and support is a key component. The Council Catch Up series was opened on 14 October as a key disaster recovery initiative from this funding. Applications close 17 November 2023.
- One Sporting Ambassador application was approved for Jackson Stewart, to represent the region at the Queensland School Boys Cricket Championships.
- Council approved the recommendations of the Community Grants Review Committee for Round 1 of the Major Community Grants Program. Funding will be distributed in November.

My Community Directory: Statistics for October 2022

Type	This Month	Last Month	*This Month Last Year*	Comments
Search Results	**5106**	7,028	*5,502*	The number of people that have searched My Community Directory for local information.
Listing Views	**1,041**	1,067	*1,286*	The number of people that have clicked on individual listings in My Community.
Events Listed	**55**	55	*30*	The number of events listed in the My Community Diary section.
Unique Users	**1,853**	1,722	*1,936*	The number of people who have visited My Community Directory to find local community information.
New Organisations	**1**	0	*0*	The number of organisations registering this month

Total Organisations	**196**	195	*183*	The number of organisations registering on the platform.

Top 5 searched categories	Top 5 most viewed service
1. Health Services 2. Community Clubs & Interest Groups 3. Religion & Philosophy 4. Crisis & Emergency Services 5. Sport	1 Laidley Oral Health Service 2. Laidley Hospital 3. Laidley Crisis Care & Accommodation 4. Gatton SES Unit 5. Brave Companion Dog Rescue

Strategic Priority 3 – *Develop and deliver programs, in consultation and collaboration with stakeholders, to promote community wellbeing and resilience, including recovery from adverse events*.

Community recovery and resilience engagement continues through the:

- Council Catch Up series – disaster recovery program launched 14 October. Events will be delivered by 15 December 2023.
- Council Libraries' initiative to provide 'Welcome Packs' to new residents via (select) real estate agents. Welcome Packs will include disaster preparedness and recovery information.
- South-East Queensland Climate Resilient Alliance, alongside Council's Growth and Policy business unit.
- Refinement of a strategy for the Community Resilience Engagement Officer project to ensure maximum opportunity for a range of business units to work collaboratively towards improving community resilience across Human & Social, Economic and Environmental areas.

Multi-agency planning has commenced for the 2022 Regional Youth Mental Health Forum

Strategic Priority 4 – *Strengthen and utilise partnerships with NGOs and government agencies to improve support services and programs for vulnerable members of the community*.

<u>Disaster Recovery and Resilience</u>

The Community Resilience Engagement Officer:

- provided in-kind logistics, promotion and stakeholder networking support to the Queenslanders with Disability Network (QDN) hosted, 'Building Inclusive Disaster Resilient Communities' initiative. The program's first of three forums was held in the Lockyer Valley on 11-12 October 2022.

- Is collaborating with the Children's Health Queensland Hospital and Health Service to deliver their new DRFA Category C-funded 'Child and Youth Mental Health – Pregnancy and Early Childhood Response to Rainfall and Flooding' initiatives, focusing on early intervention and trauma treatment for expectant parents and children aged 1-6, post-2021-22 flooding events.

- The CE Team prepared a report on '*The State of Housing and Homelessness in the Lockyer Valley*' for submission to the Local Government representatives at the QLD Housing Summit on 20 October. A key portion of the report was drawn from qualitative survey responses provided to Council from eight frontline services, an education provider, and law enforcement.

Interagencies

Staff are involved in the following networks aimed to improve local support services:

- Culturally and Linguistically Diverse (CALD) community disaster preparedness and capacity building online resource development.
- Lockyer Youth Agency Network Meeting
    - Met mid-October with 11 people representing eight agencies.
    - Key issues included: high incidence of vaping, the Queensland Youth Engagement Strategy, and ways to engage with independently living young people around disaster preparedness.
- Lockyer Valley Service Provider Interagency meeting.
- Local Level Alliance and Ipswich West Moreton Community Central.
- Toowoomba and Ipswich Districts Human and Social Recovery Committee.

Other

Engagement & Communications team members provided support in disaster activations during the October Severe Weather Event and continue to undertake various Local Disaster Coordination Centre training modules to broaden and deepen their knowledge and ability support the organisation and community.

The Engagement & Communications team is supporting the Waste Team with community engagement on the FOGO project and administration for both the recycling contamination and FOGO projects.

Priority 1 – Engage *with the community to ensure the community's views, values and aspirations inform Council decision-making.*:

8 projects received engagement support during August

- Flood-affected Park Furniture Program
- Disaster Management Seasonal Preparedness
- Lockyer Valley Arts and Cultural Plan Review
- Grantham Scrub Rd Pavement Works
- Inland Rail
- Future Notices Strategy
- Lockrose Community Facilities
- Bridges Project

Strategic Priority 2 – *Support community groups to increase their capacity, resilience and sustainability.*

- The Local Economic Recovery-funded $800,000 Rural Hall Upgrades Project concluded with designated rural halls completing upgrade projects and supplying acquittals to Council. Council made a $100k contribution to this program that has better equipped these halls localised disaster responses and long-term community connectedness
- The *Black Summer Bushfire Recovery*-funded $1.5M *Community Safer Places Project* provides funding to a range of rural halls to be better equipped for localised disaster responses, long-term community connectedness and fundraising has commenced. A grant round has been conducted for identified public halls and funding delegations approved at Council's September Council Meeting.
- The Team is also managing grants from the Queensland Health Localised Mental Health Initiative which are being used to support smaller events and initiatives led by community groups where promotion of mental health and support is a key component.
- Three Sporting Ambassador applications have been assessed and approved with funds distributed to successful applicants as well as one Minor Community Grant.

1. Joshua Sapolu, Queensland School Sport 10-12 Years Track & Field State Championships, State Event.
2. Marshall Muller, National Veteran Championships 2022, State Event.
3. Samson Noffke, Queensland School Sport 13-15 Years Boys Cricket State Championships, State Event.

- Minor Community Grants were provided to:
  - Fordsdale School of Arts Inc.
- Support was provided to Laidley Bowls Club to explore options that could increase their financial viability and sustainability.

My Community Directory: Statistics for September 2022

Type	This Month	Last Month	Comments
Search Results	**7,028**	**7,591**	The number of people that have searched My Community Directory for local information
Listing Views	**1,067**	**1,173**	The number of people that have clicked on individual listings in My Community
Events Listed	**55**	**45**	The number of events listed in the My Community Diary section.
Unique Users	**1,722**	**1,843**	The number of people who have visited My local Community Directory to find local community information
New Organisations	**0**	**1**	The number of organisations registering on the platform

Strategic Priority 3 – ***Develop and deliver programs, in consultation and collaboration with stakeholders, to promote community wellbeing and resilience, including recovery from adverse events.***

The Community Recovery and Resilience Engagement Officer provided support to the Lockyer Regenerative Farm Management Essentials Workshop 17-18 September. The Officer also commenced engagement with the South-East Queensland Climate Resilient Alliance alongside Council's Growth and Policy team, and continues to partner with Queenslanders with a Disability Network (QDN) to improve disaster preparedness for vulnerable people.

Strategic Priority 4 – ***Strengthen and utilise partnerships with NGOs and government agencies to improve support services and programs for vulnerable members of the community.***

Disaster Recovery and Resilience

The Community Recovery and Resilience Engagement Officer continues to:

- provide in-kind logistics, promotion and stakeholder networking support to the Queenslanders with a Disability Networkhosted, 'Building Inclusive Disaster Resilient Communities' initiative. The program's first of three forums will be held in the Lockyer Valley on 11-12 October 2022.

Interagencies

The Lockyer Valley Service Providers' Interagency meeting was held on Thursday 15 August and attended by 19 support agency workers. The meeting included a strong focus on the housing crisis and homelessness, including how it impacts school students maintaining stable education.

Staff are involved in the following networks aimed to improve local support services:

- CALD community disaster preparedness and capacity building online resource development.
- Lockyer Youth Agency Network Meeting.
- Lockyer Valley Service Provider Interagency meeting.
- Local Level Alliance and Ipswich West Moreton Community Central.
- Toowoomba and Ipswich Districts Human and Social Recovery Committee.

Other

Engagement & Communications team members are undertaking various Local Disaster Coordination Centre training modules to broaden and deepen their knowledge and ability to support the organisation and community.

Samson Noffke, sporting ambassador funding recipient

Facilitating a discussion at the Building Inclusive Disaster Resilient Communities forum OR just: *Disaster preparedness forum*

COMMUNICATIONS

The Communications Team manages a range of media and communication products ranging from media releases and social media posts, to design of posters, signs and fact sheets, to videography and media events, as well as website management.

Our primary function is to provide meaningful and timely information to the community on Council decisions, programs and services through a range of mediums.

DISASTER COMMUNICATIONS

The Communications Team leads the Public Information function during severe weather events and disasters and provides time-sensitive information via social posts and the Disaster Dashboard as well as managing enquiries and interviews from external media. Between disaster activations, the team publishes a range of preparedness messages.

6 preparedness messages published

5 awareness and warning messages published

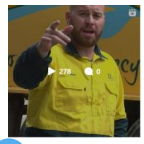
ONLINE ENGAGEMENT

40 CORPORATE FACEBOOK POSTS

HIGHEST PERFORMING POST

Sandbags
Reactions: 21,593
Shares: 42

36 INSTAGRAM GRID POSTS



HIGHEST PERFORMING POST
Waste contamination video
Reach: 553
Reactions: 20

39 TWITTER POSTS

HIGHEST PERFORMING POST
Breast Cancer Staff Raising Funds
Impressions: 4
Shares: 2

18 IN-HOUSE DESIGN PROJECTS

44 DESIGNS CREATED

$8,080.00 COUNCIL SAVED ON DESIGN PROJECTS

0 INTERNAL VIDEOS

1 EXTERNAL VIDEOS

MEDIA ENQUIRIES

7	4	2	2
RADIO	NEWSPAPER	TV	OTHER

EXTERNAL COMMUNICATIONS

14 MEDIA RELEASES

2 PAID ADVERTS

COMMUNITY CONNECT NEWSLETTER

An opt-in e-newsletter aimed at community groups including sport an interest groups and schools which provides timely information on capacity-building workshops, a wide range of grants and community events.

581 Subscribers with an open rate of **36.49%** (industry average < 25%).

TOP 3 ARTICLES

1. Building Inclusive Disaster Resilient Communities
2. Lockyer Valley Libraries e-newsletter
3. Seniors Month

COUNCIL'S CORPORATE WEBSITE

26,927 TOTAL WEBSITE USERS

68% NEW WEBSITE USERS

MOST VISITED WEB PAGES

- Flood monitoring cameras
- Current Vacancies
- Contact us

ADVOCACY

Inland Rail

The Australian Rail Track Corporation's (ARTC) Inland rail project is of great concern to Council. The key issue for Council remains the concern over the alignment that currently traverses communities in the Lockyer Valley. A particular concern is the loss of amenity in the towns of Gatton and Forest Hill where the reference design goes very close to many residential areas. Council continues to advocate for a change in alignment around Gatton and Forest Hill seeking to minimise the impacts on residents as far as possible.

These concerns have been raised directly with the CEO of ARTC, the Chairman of the ARTC Board, the Minister for Infrastructure and a range of other Government Ministers and Senators. The benefits of the alternate alignment to both ARTC and the community have been detailed. The ARTC decision to retain the reference design seems to be primarily based on their view that the alternate would be more costly. Council has been critical of ARTC directly and in the media for their unwillingness to provide details of the alternate alignment, the respective costs and designs and the evaluation process to date.

Regionerate Rail (RR), the preferred bidder, have provided further material to ARTC and those parties intend to execute a Commitment Deed in the short to mid-term. Council is concerned that this will lock in the project and potentially confirm the non-preferred reference design. Nevertheless, Council is working in good faith with ARTC and RR on legal agreements that they would like to have in place as soon as possible. We continue to look to minimise impacts on the community, Council and on proposed Council assets.

The Office of the Co-Ordinator General (OCG) has assessed the Draft Environmental Impact Statements for both Helidon to Calvert (H2C) and Gowrie to Helidon (G2H) sections of Inland Rail. OCG have now required ARTC to provide additional information on both the G2H and the H2C projects. These requests require significant additional information from ARTC and both projects will have another period of public notification in the new year.

At the time of writing, Council has just finalised a submission to the Australian Governments Independent Review of the Delivery of the Inland Rail Program. A copy of the submission has been provided to Councillors.

The Australian Government's Interface Improvement Program is seeking to identify benefits associated with Inland Rail. Ernst Young have been working on Council's behalf and have prepared a Draft Gateway 4 Report to the Government on potential benefits. This will be the final Gateway in this process. It is important to note that this Program is to develop business cases and will not deliver funding for those projects.

Passenger Rail

There has been no further progress on this item. The last advice from the State Government remains that the Draft Strategic Business Case has been referred to the Australian Government for consideration. Passenger rail is a significant issue for the region given the poor existing public transport options which limit mobility and access.

It is worth noting that Inland Rail has been developed as a freight railway. While ARTC's project will not impede future Passenger rail, there is no passenger rail planned at this stage. Unfortunately, the myth persists that Inland rail will deliver passenger services. Council is seeking to counter that perception through media releases and Facebook posts.

It is interesting to note that on 29 October 2022 the Department of Transport and Main Roads closed the eastbound Toowoomba Bypass due to concerns over slope movement following recent rainfall. This highlights the concerns about large infrastructure being constructed through the escarpment area. It also reinforces concerns raised in our EIS submission for Inland rail which will have significantly more and larger cuttings and structures than the Toowoomba Bypass. Attached is a photo of remedial works on the Toowoomba Bypass where there is currently major works to address concerns over slippage.

Lockyer Valley Water Collaborative

Lockyer Valley Water Collaborative (the Collaborative) members participated in a workshop on 26 September 2022 with representatives from the Department of Regional Development, Manufacturing and Water (the Department) and other key stakeholders. The workshop was held for two reasons as follows:

1. To revisit and refine the options identified in the detailed business case. The recommended project option is reliant on the recommissioning of the Western Corridor Purified Recycled Water (PRW) Scheme following drought, and the transfer of PRW into Wivenhoe Dam. The dam system is now full and there is little likelihood of transferring PRW into Wivenhoe, hence alternative options are being assessed. These will include transferring PRW directly to existing storage dams located in the Lockyer and Somerset regions and into the proposed irrigation system.

2. To determine how best to utilise $10m of City Deal funding which has been allocated to water security in the Lockyer and Somerset regions. The funding will be administered by the Department and be used to revisit the detailed business case options as noted above and to consider long term water security.

14.2	**Group Manager People, Customer and Corporate Services Monthly Report - October 2022**
Author:	Dan McPherson, Group Manager People, Customer and Corporate Services
Responsible Officer:	Dan McPherson, Group Manager People, Customer and Corporate Services

Purpose:

This report provides Council with a summary of key operational activities undertaken by the People, Customer and Corporate Services performance group during October 2022.

This document is for Council's information only.

Executive Summary

This report provides Council with a summary of key operational activities undertaken by the People, Customer and Corporate Services Group during October 2022.

Proposal

That this report be received and noted.

Attachments

1⇩ Monthly Group Report - People Customer and Corporate Services - October 2022 7 Pages

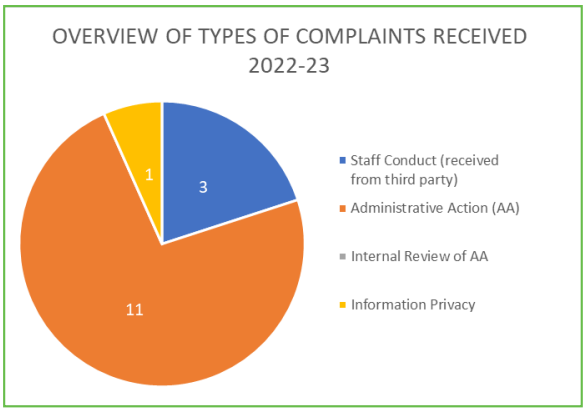
People, Customer and Corporate Services

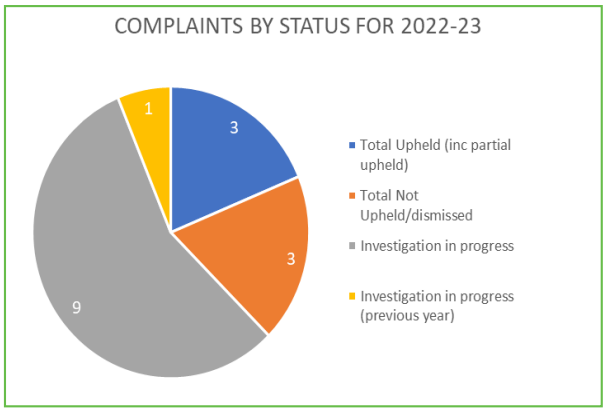
MONTHLY GROUP REPORT

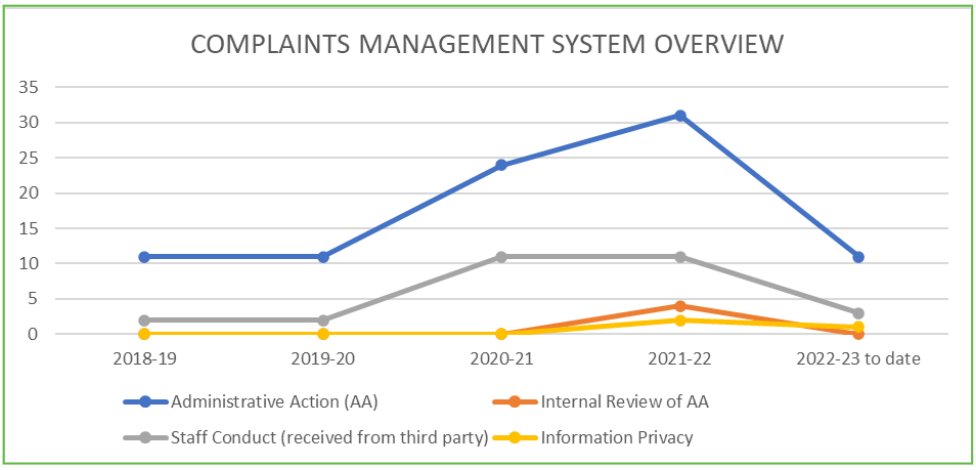
OCTOBER 2022

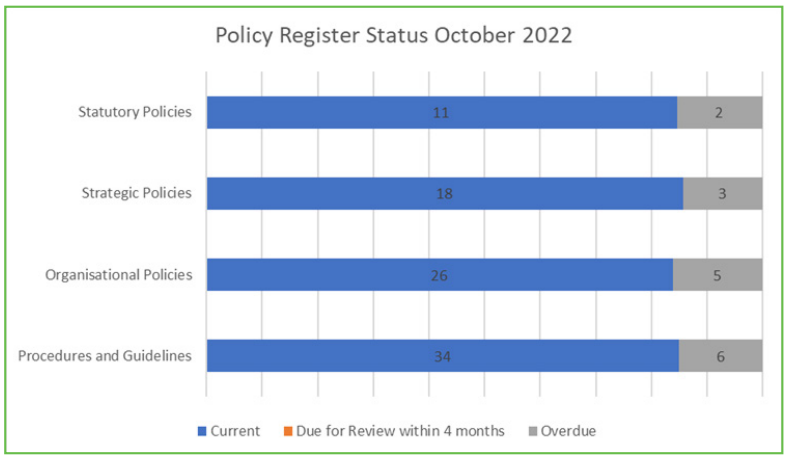
Lockyer Valley REGIONAL COUNCIL

GOVERNANCE AND PROPERTY









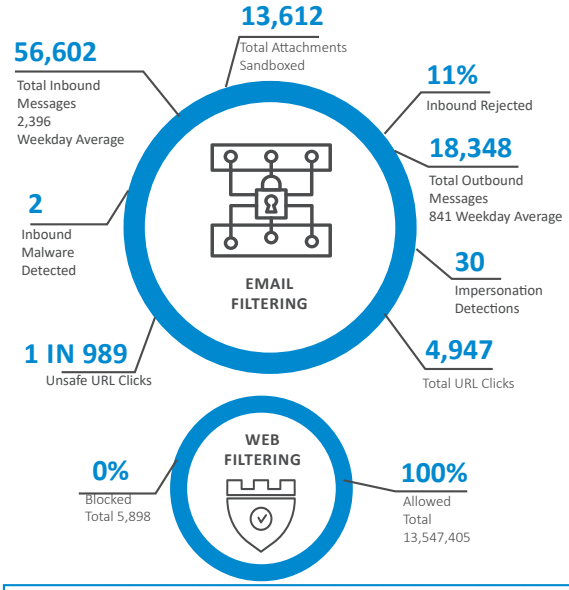
INFORMATION COMMUNICATION TECHNOLOGY

ICT UPDATE

Outages: During October 2022 services facilitated by and provided by the ICT Team experienced interruptions that are not considered full network outages, and therefore not captured in the Network Outage statistics in this report. The service interruptions were as follows:

- TechnologyOne experienced an outage on 19 October for remote desktop services that they use to deliver their Software as a Service (SaaS) cloud based full client "CI" functionality. The outage commenced at 7am and was rectified at around midday. This outage had a minor impact on staff productivity.
- Internal Firewall services experienced a partial outage on the 21- 22 October. The services impacted were Email and VPN functionality. The issue was discovered around 7AM and rectified around 2PM. This outage had a minor impact on the monitoring and preparation for the Local Disaster Coordination Centre that had moved to a lean forward status on the 22 October. Rectification of this issue required ICT Staff to attend the workplace on Saturday after remote efforts were unsuccessful. Further planned rectification works were required after hours on the 26th to permanently rectify the issue. The cause of the issue was identified as software failure on both the dual high availability firewalls located in Gatton. The firewalls were due for replacement, awaiting installation. The replacement was fast tracked and completed during the subsequent planned outage outside of normal hours on 26 October.
- LVRC Apple devices experienced an Email authentication services outage on the 27 October due to implementing a planned change. ICT Staff were aware of the planned change, however were not aware that the change would impact Apple devices. The outage commenced late on 26 October. Staff were impacted when authentications attempted to renew throughout the day. The issue was first reported to ICT around 10am, further investigations discovered Microsoft allowed a temporary reversal of the change which was invoked and started to return services to most devices from around 5pm.
- Intramaps, Council's desktop Geographical Information System (GIS) provided by TechnologyOne experienced an outage on 31 October between approximately 11am and 1:30am. We are awaiting further detail from TechnologyOne on the incident.

EMAIL AND WEB PROTECTION



NETWORK PERFORMANCE

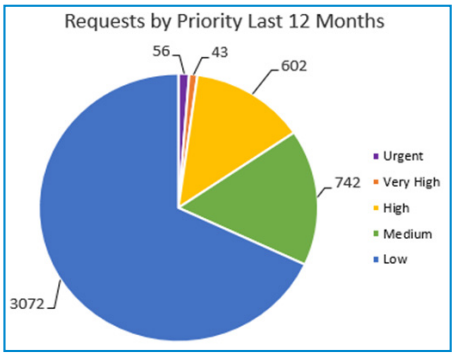
INFORMATION SNAPSHOT

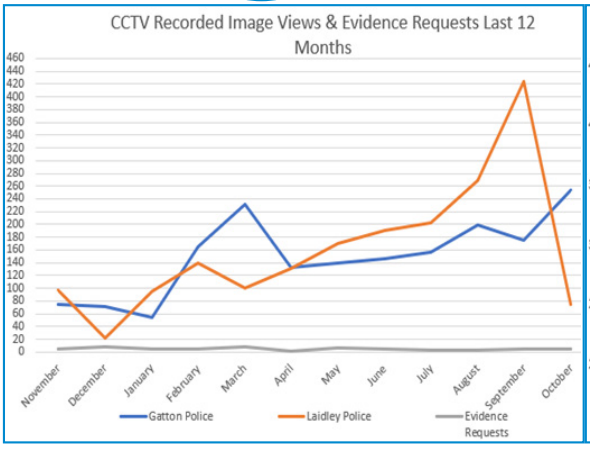
8 MINUTES OUTSIDE BUSINESS HOURS

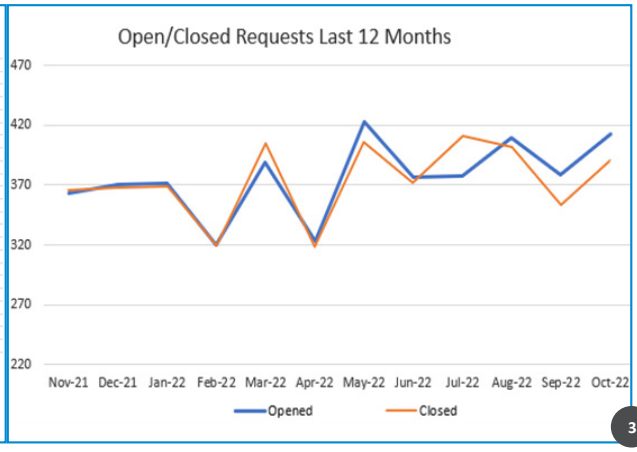
14 MINUTES DURING BUSINESS HOURS

UNPLANNED NETWORK DOWNTIME

99.95% NETWORK AVAILBILITY







PEOPLE AND CUSTOMER EXPERIENCE

ORGANISATIONAL DEVELOPMENT AND PAYROLL

Full Time Equivalent 280 POSITIONS

Headcount 303 EMPLOYEES

Average Time to Hire 28 DAYS

Early Turnover Rate 14%

Voluntary Turnover Rate 2%

Absenteeism Rate 6%

Training Participation Rate 78%

Training Events 7

CORPORATE TRAINING

- *Corporate Induction*
- *Employee Code of Conduct Training*
- *Workplace Bullying and Harassment Training*
- *Work Health and Safety Training*
- *LGMA Leadership Development Programme – Workshop 3*
- *LGMA Leadership Development Programme – Workshop 4*
- *Chainsaw Training*

RECRUITMENT CAMPAIGNS 16 ACTIVE CAMPAIGNS

- *Asset Engineer*
- *Project and Administration Officer*
- *Community Recovery and Resilience Officer*
- *Senior Project Officer (Business Operations and Maintenance)*
- *Waste Projects and Compliance Officer*
- *Local Laws Officer*
- *Administration Officer*
- *Tourism Officer*
- *Chief Financial Officer*
- *Principal Engineer (Operations and Maintenance)*
- *Team Leader*
- *Flowcon Operator*
- *Cleaner*
- *Labourer (Parks, Recreation and Cemeteries)*
- *Coordinator Special Projects and Tourism*
- *Junior Library Assistant*

UNSUCCESSFUL RECRUITMENT CAMPAIGNS 2 CAMPAIGNS

- *Development Compliance Officer*
- *Project Support Officer*

INFORMATION MANAGEMENT

PROJECT UPDATES

Disposal of Physical Records

Work is ongoing for the disposal of records and 1930 boxes of documents have been destroyed this year. Work also continues on the audit of physical records and evaluation of other archived documents to determine their value for digitisation or listing for disposal in accordance with legislation.

INFORMATION MANAGEMENT SNAPSHOT

	October 2022	Year to Date 2022
Mail / Email items Processed	1788	16, 961
Requests for files/boxes	89	663

RIGHT TO INFORMATION APPLICATIONS

	2022	2021	2020	2019	2018	2017
Number of applications received	9	14	10	2	8	11

CUSTOMER CONTACT

TELEPHONE

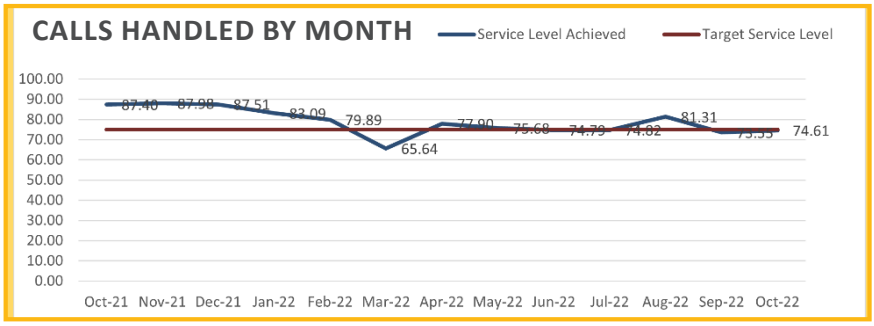
2,553 CALLS RECEIVED
Decrease of 136 calls from last month

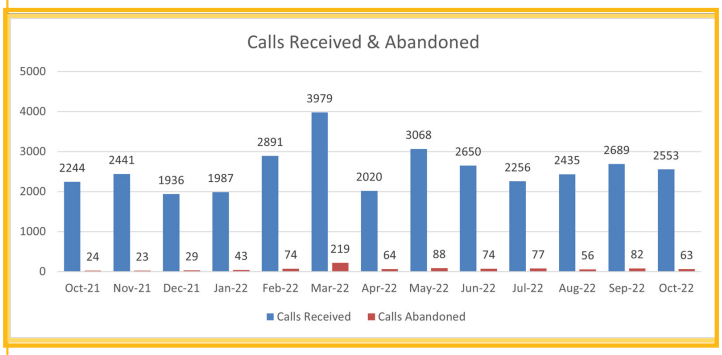
4:38 MINUTES AVERAGE HANDLING TIME
Increase of 1 second from last month

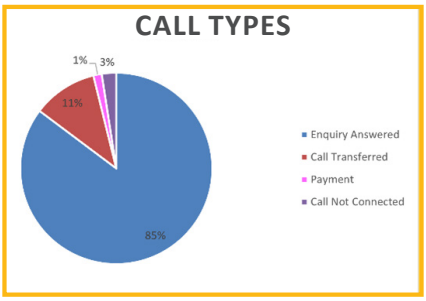
74.61% SERVICE LEVEL REACHED

SERVICE LEVELS - TARGET 75%

SERVICE LEVEL REACHED 74.61%







85 TOTAL WEB CHATS
Increase of 16 chats from last month

8:41 MINUTES WEBCHAT HANDLING TIME
No change from last month

1011 TOTAL eREQUESTS
Increase of 22 eRequests from last month

1147 TOTAL RECEIPTS
Increase of 494 receipts from last month.

1,498 TOTAL CRM RECEIVED
Increase of 22 requests from last month

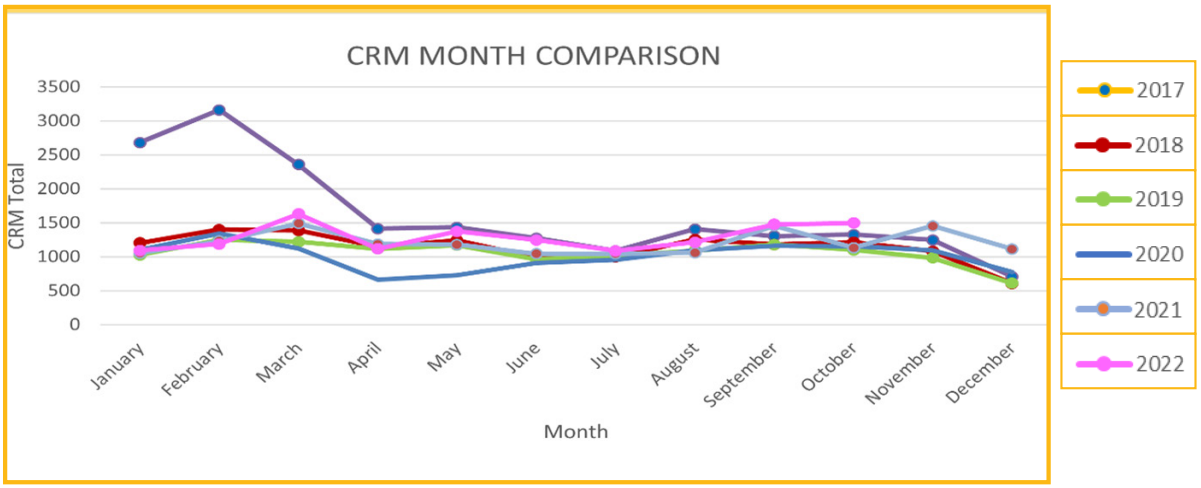
COUNCILLOR REQUESTS
25 RECEIVED **82** OPEN
Increase of 10 received requests from last month

QGAP PERFORMANCE

62.05 HRS
Total time taken for all transactions

394
Total number of transactions

9:45
Total average time for all transactions



OUR GOAL ZERO HARM

MEASURING OUR SAFETY PERFORMANCE

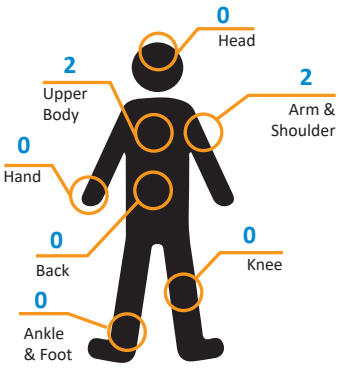
OCTOBER 2022

4 INJURIES OCCURRED

INJURIES BY CLASSIFICATION TYPE

0	LOST TIME
1	MEDICAL ONLY
0	FIRST AID
3	REPORTABLE ONLY
0	NEAR MISS

AREAS OF THE BODY MOST AFFECTED



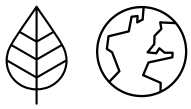
KEY FACTORS ASSOCIATED WITH ASSET INCIDENTS

6 ASSET INCIDENTS OCCURRED

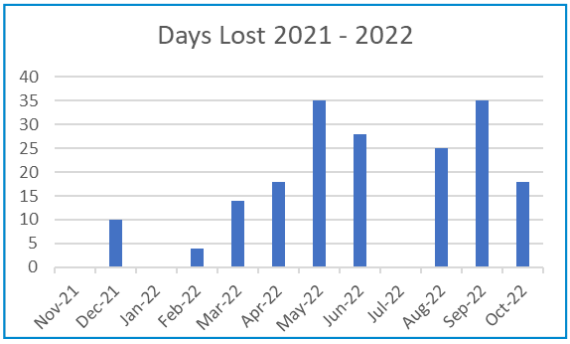
1	PROPERTY DAMAGE
5	PLANT VEHICLE/ INCIDENT
0	ANIMAL STRIKE
0	FIRE

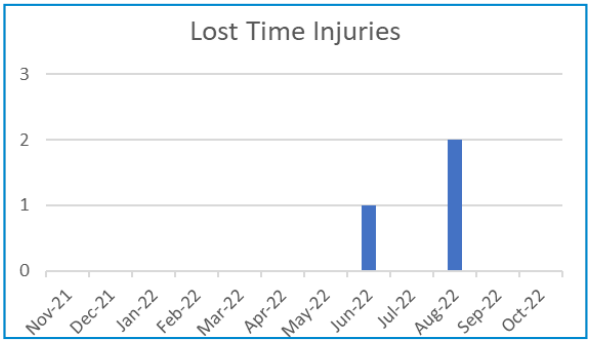
KEY FACTORS ASSOCIATED WITH ENVIRONMENTAL INCIDENTS

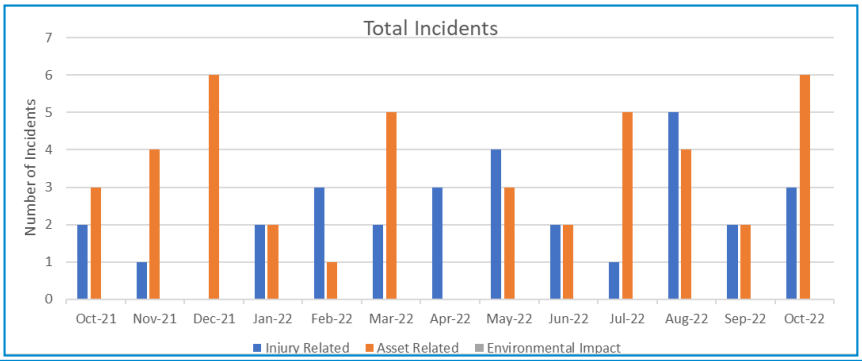
0 ENVIRONMENTAL INCIDENTS OCCURRED



0%	SPILLS
0%	CONTAMINATION







6

WASTE SERVICES

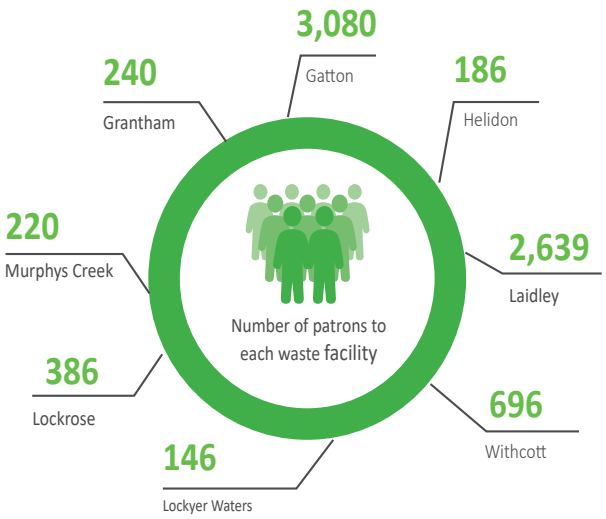
WASTE MANAGEMENT

UPDATE

- 460 tonnes FOGO collected since the start of the trial. End of trial surveys and newsletters sent to residents in trial area.
- Recycling contamination (contamination is items that are in the recycling bin that should be in the general waste bin) is at an all-time high. Council has prepared a short video to help residents understand recycling contamination produced. The video is on Council's YouTube channel and will be used on social media platforms.
- Letters are being sent to residents identified as contaminating recycling bins to remind them what goes in the bins and how to manage their waste streams most effectively. Our recycling bin contents are hand sorted by Anuha staff so it's important the right things go in the right bin.

KERBSIDE WASTE & RECYCLING SERVICES OCTOBER 2022

Garbage Bins Collected 78% presentation rate	64,539
Garbage Tonnes Received	948 TONNES
Recycle Bins Collected	30,601
Recycle Tonnes Received	205 TONNES
Recycle Contamination	34 TONNES
FOGO Food/Garden Tonnes Received 1 Year Trial - 1000 Homes 44% presentation rate	34 TONNES



7,493
TOTAL PATRONS TO ALL WASTE FACILITIES IN SEPTEMBER 2022

14.3 **Group Manager Community and Regional Prosperity Monthly Report - October 2022**

Author: Amanda Pugh, Group Manager Community & Regional Prosperity
Responsible Officer: Amanda Pugh, Group Manager Community & Regional Prosperity

Purpose:

This report provides Council with a summary of key operational activities undertaken by the Community and Regional Prosperity Group during October 2022.

This document is for Council's information only.

Executive Summary

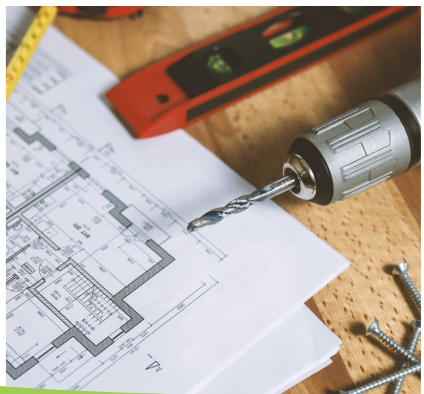
This report provides Council with a summary of key operational activities undertaken by the Community and Regional Prosperity Group during October 2022.

Proposal

That this report be received and noted.

Attachments

1⇩ Community and Regional Prosperity Monthly Group Report - October 2022 10 Pages



Community and Regional Prosperity

MONTHLY GROUP REPORT

OCTOBER 2022

Lockyer Valley REGIONAL COUNCIL

PERFORMANCE REPORTING

KEY GROUP PROJECTS

LOCAL FLOODPLAIN MANAGEMENT PLAN

The flood modelling project is complete. The creation of the new Defined Flood Event (DFE) map and finalisation of flood risk planning trigger maps have been able to move forward with this in place. The consultant has finalised calibration of the 2022 Laidley Creek event as part of review of the Laidley Town Flood Protection scheme and provided a report for review.

The finalised regional engineering mapping and rainfall models have been provided to the Flood Intelligence vendor (WaterRIDE) to allow that project to progress. The vendor has been engaged to consider and include learnings from the February/March 2022 events to improve operation of the Flood Intelligence tool, particularly in complex localities such as Grantham.

FLOOD MODELLING - ENGINEERING

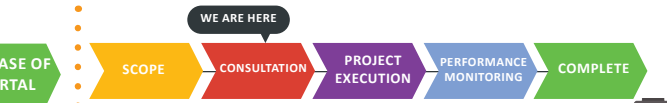
The Defined Flood Event (DFE) map and flood risk planning trigger maps are nearing completion with the consultant refining the effect of freeboard in relation to the Probably Maximum Flood (PMF). The calibration of the 2022 Laidley Creek event is completed and report provided for review. The current hydrology models and current regional flood maps have been provided to the vendor for integration in WaterRide to improve operation of the flood intelligence tool, particularly for complex locations such as Grantham.

FLOOD INFORMATION PORTAL

A final review of the reports that the FIP generates is underway to ensure accuracy and efficacy. Media supporting the release of the FIP is complete with information tool and factsheet nearing completion. It is anticipated that the portal will be due for launch in late October.

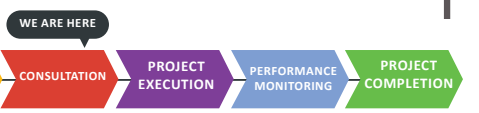
TOOWOOMBA AND LOCKYER VALLEY ESCARPMENT MOUNTAIN BIKE TRACK PROJECT

Investigations in to alternative sites for the Withcott Hub have been included on the agenda for discussion at the next Escarpment project meeting with Toowoomba Regional Council in early November.



FOREST HILL SILO PROJECT

Procurement process has commenced and progressing through the assessment phase. Concept designs may be completed by Quarter One, 2023



EQUINE COLLABORATIVE PRECINCT

A meeting has been scheduled with Racing Queensland to provide a project update on Friday 4 November 2022. No further actions have been taken.

ARTS AND CULTURAL PLAN

Following an extensive community consultation process, the Arts and Cultural Plan is being drafted with a focus on the themes “Grow’ and “Connect”.

COMMUNITIES

TOURISM

Southern Queensland Country Tourism

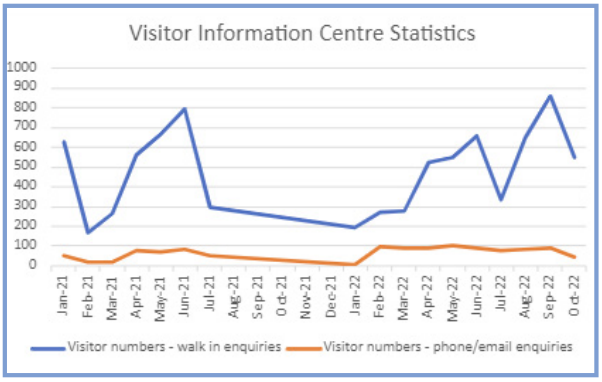
STATISTICS FOR SEPTEMBER 2022

65%
SOUTHERN QUEENSLAND COUNTRY OCCUPANCY
12% Increase in comparison to 53% in 2021

55%
LOCKYER VALLEY OCCUPANCY
14% Increase in comparison to September in 2021

Friday
MOST POPULAR DAY TO VISIT THE REGION

50 Days
RESERVATION WINDOW
13.6% increase in comparison to September 2021.



EVENTS

Ongoing support is being provided to a range of community event organisers. Support includes advice and equipment.

0 COUNCIL LED EVENTS

There were no Council led events held during the month of October.

2 COMMUNITY GROUPS/ EVENTS GIVEN ASSISTANCE

Ongoing assistance was provided to:

- Gatton RSL Sub Branch, Remembrance Day – equipment loaned and electrical access.

4 PROJECTS IN PLANNING

- Mayoral Christmas Carols- 26 November 2022, Gatton Shire Hall
- Lockyer Valley Christmas Carnival – 16 December 2022, North Street, Gatton
- 2023 Australia Day Awards- 26 January 2023, Gatton Shire Hall
- 2023 Laidley Spring Festival

3 UPCOMING COMMUNITY EVENTS

Ongoing assistance was provided to:

1. Laidley Christmas Carnival – 25 November 2022
2. Hatton Vale Christmas Concert and Markets – 25 November 2022
3. Forest Hill Christmas Festivities – 9 December 2022

LIBRARIES AND GALLERIES

59,247
ITEMS IN OUR COLLECTION
In comparison to 116,383 in October 2021

1,365
ACQUISITIONS YTD
Physical & eResources
In comparison to 2,655 in October 2021

83.4%
ITEMS ISSUED VIA SELF-SERVICE
KPI 85%

eRESOURCES

PLATFORM		OCTOBER 2022	OCTOBER 2021
	eAudiobooks & eBooks (Borrowbox)	1,954	1,978
	eAudiobooks, eBooks & eMagazines (Overdrive)	426	448
	eMovies (Beamafilm)	102	96

9,885
PHYSICAL LOANS
In comparison to 9,005 in October 2021. Including audiobooks, books, DVDs, magazines, literacy kits, CDs, seeds, and toys.

2,504
ELECTRONIC LOANS
In comparison to 2,312 in October 2021.

12,389
TOTAL LOANS
Increase of 4.3% in comparison to last month

16,899
ACTIVE LIBRARY MEMBERS
In comparison to 15,745 in October 2021

101
NEW LIBRARY MEMBERS IN JULY
In comparison to 53 in October 2021

0
VIRTUAL EVENTS
Reach: N/A

61
IN PERSON EVENTS
Total Attendees: 718

OPEN **8,054** VISITORS IN SEPTEMBER

4,860	3,194
Gatton Library	Laidley Library
Increase of 861 people	Increase of 361 people

LIBRARIES - EVENTS

Our October events at Gatton and Laidley Libraries included:

- **Weekly** – First 5 Forever Children's story times (four sessions a week at each branch), JP in the Community sessions, Craft Group (Gatton)
- **Bimonthly** – Digital literacy sessions, writing group
- **Monthly** – Lockyer Valley Cancer Support Group (Gatton), Movie matinees, Story times at the Gatton Child Care Centre (Gatton), Book chat (Laidley), Book group (Gatton).
- **Special Events** – Human Book Guest Speakers

LIBRARIES UPDATE

- Our collection statistics took a dive this month due to the withdrawal of an eMagazine subscription service. Despite having a large number of titles and back issues, usage of this platform was very low. We have added a new platform to replace this service however the back issue catalogue is much smaller resulting in a smaller collection size.
- Events have been well attended this month – the "Too Many Elephants" special story time was booked out at both libraries, the "Aussie Bird Count" Story time at Gatton and the Human Book Guest Speakers had great turnouts. We intend in continue our Human Book events quarterly.
- The Chat Around Craft group have been busy folding stars for the Mayor's Christmas carols and will be crafting Christmas decorations to be displayed around the Lockyer Valley.

ART GALLERY UPDATE

- "Eclectic Collections" by Ula Bingeeli's Lockyer Valley Art Group is currently in the gallery. This local group exhibition showcases a range of mediums and approaches.
- Staff have been participating in the Museums and Galleries Standards Review which has involved responding to areas of the standards and identifying implementation plans and where assistance is required. Two reviewer's visited the gallery, review documentation, discuss practical issues from the self-review and identify key issues for further discussion. The visit was encouraging, and staff are excited by the next stage of the review.
- 2,077 people visited the art gallery during the month of October. Our people counters have been updated and we are more confident with the visitor figures than previously.
- Exhibition applications for 2023 have closed. Fourteen applications were received with space for five exhibitions. Staff will assess the applications next month.

REGIONAL ARTS AND DEVELOPMENT FUNDING (RADF)

- Elizabeth Browne held RADF funded Watercolour workshops in October. Attendees spent the morning exploring watercolour and took home their wonderful creations.
- The RADF annual report for 2021/22 was completed and submitted to Arts Queensland. More than 400 people attended RADF funded events with an additional 307 people actively participating in a workshop or program. 6 people were employed through RADF funded activities and a further 44 people volunteered their time.

CHILDCARE

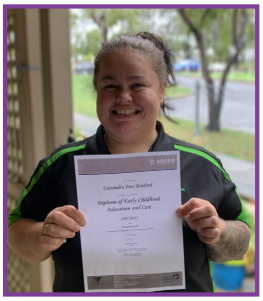
UPDATE

In the coming weeks we will see the centre change over to a new software system. The staff will undergo training on how to use the new system. We are all really excited for this change, and are looking forward to having a more streamlined process for the families, as well as the team.

93.82%

TOTAL OCCUPANCY RATE

In comparison to 81% in October 2021



We're delighted to announce the recent achievement of our valued staff member Miss Cassie, who has successfully completed her Diploma of Early Childhood, Education and Care.

ACTIVITIES

'DAY FOR DANIEL'

Friday 28 October, we held 'Day for Daniel' at the centre.This day honours the memory of Daniel Morcombe while helping to drive brave conversations about child safety with the children.

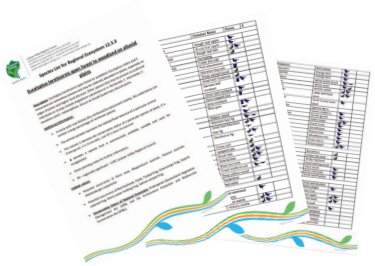
GRANDPARENTS DAY

This month we also celebrated Grandparents Day. It was so wonderful to see the special connections between the children and their grandparents. Thank you to all our amazing grandparents who allowed us to celebrate the significant contribution they make to their families, with a special afternoon tea.

From the entire team here at Gatton Childcare Centre, happy 'Grandparents Day'.

PLANNING POLICY AND COMMUNITY WELLBEING

GROWTH AND POLICY



Environmental Planning

Revegetation species list for 8 of the most common Lockyer Valley Regional Ecosystems have been added to the LVRC website.
The lists details species that are commercially available and are categorised into plant type and includes special planting notes.
These lists have proven valuable to ecological consultants writing restoration plans for Development Applications and save Council considerable time reviewing and editing restoration plans.

Risk assessments are being conducted to determine the most appropriate uses for each reserve. A site assessment of Seven Mile Lagoon was conducted after the recent rain to assess any damage. The lagoon is recovering well from the flood events earlier this year. There is significant regeneration of native vegetation, with native frogs utilising a patch of water primrose (Ludwigia peploides). The frogs could only be heard so the calls were recorded and posted to iNaturalist for identification. The iNaturalist community identified two species from the recording: the striped marsh frog (Limnodynastes peronii) and the spotted marsh frog (L. tasmaniensis). The majority of the calls were from the striped marsh frog with occasional calls from the spotted marsh frog. To listen to the calls go to the following link: https://www.inaturalist.org/observations/140011824

The Growth Management Strategy preparations progressing well with the team are participating in a number of workshops that support the work that feeds into the GMS. Various consultants have presented on Urban and Regional revitalisation approaches and methodology for effective and inclusive Growth Management Strategy development.

Studies to support GMS and strategic planning:
Industrial land study - *near completion*
Constraints Analysis - *due to commence November*
Matters of Local Environmental Significance - *scoping*
Cultural Heritage study - *to be scoped*
Retail and commercial land use audit - *to be scoped*

Draft Planning Scheme

Council officers are in the process of testing and finalising the draft Planning Scheme.
Council has met with Flood Engineers and Planning Scheme map consultant to progress finalisation of the maps.

Projects supporting scheme adoption:
PSP Infrastructure design manual - *procuring*
Planning scheme collateral - *underway*

Economic Development

The first of the Your Local - Independent Newspaper campaign pieces has been completed and due for publication on 9 November. The team has procured the services of a childrens book illustrator to develop images of well known Lockyer landmarks to create a series of maps that encourage residents and others to get out and shop local this festive season while sharing their finds using #luvyalockyer on social media. This program has been supported by the Events and Communications teams.

DEVELOPMENT ASSESSMENT

ACTIVITY	CURRENT MONTH	2022 YTD	2021 SAME YTD PERIOD
DEVELOPMENT APPLICATIONS			
RECEIVED	26	236	233
DECIDED	22	212	186
EXEMPTION CERTIFICATES			
RECEIVED	7	36	49
DECIDED	4	26	45
BUILDING, PLUMBING, PLANNING INFORMATION AND FORM 19'S			
RECEIVED	40	401	469
COMPLETED	34	423	427
PRELODGEMENT MEETINGS HELD	5	67	74

LAND DEVELOPMENT PIPELINE

- **5** PRE-LODGEMENTS — 4x MCU, 1x Industrial
- **40** RECONFIGURING A LOT — 40 New Proposed Lots, Total of 339 YTD
- **1** OPERATIONAL WORKS — 23x Proposed Lots
- **0** INSPECTIONS — No inspections conducted this month.
- **6** NEW LOTS SEALED — 6x Future Residential Lots
- **14** NEW HOUSES — 19x Plumbing Approvals for New Dwellings

AUGUST 2022 STATISTICS

22 DECISION NOTICES ISSUED
100% in statutory timeframes

26 DECISIONS MADE
60% in statutory timeframes

0 NEGOTIATED DECISIONS THIS MONTH

27 BUSINESS DAYS
AVERAGE TIME FOR APPLICATIONS IN DECISION STAGE THIS MONTH

73% DECISIONS MADE WITHOUT ADDITIONAL INFORMATION REQUESTS

DEVELOPMENT ACTIVITY IN COMPARISON TO THE SAME 2021 YTD PERIOD

- **1%** increase in Development Applications lodged
- **14%** increase in Development Applications decided
- **9%** decrease in Prelodgement Meetings
- **14%** decrease in Building, Plumbing, Planning information & Form 19's received
- **1%** increase in Building, Plumbing, Planning information & Form 19's completed

DEVELOPMENT COMPLIANCE

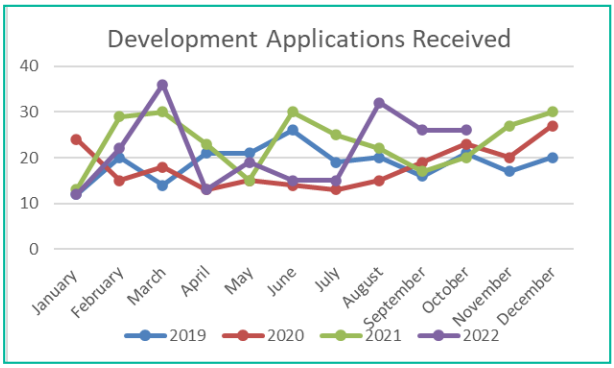
32 COMPLAINTS RECEIVED THIS MONTH

9 COMPLAINTS RESOLVED THIS MONTH

0 SHOW CAUSES ISSUED THIS MONTH

100% RESOLVED WITHOUT LEGAL ACTION

ZERO ENFORCEMENT NOTICES ISSUED THIS MONTH



INFRASTRUCTURE CHARGES PAID
YTD = $1,685,937.07

INFRASTRUCTURE CHARGES OUTSTANDING
YTD = $304,906.21

BUILDING AND PLUMBING

BUILDING APPROVALS 80
By Private Certifiers and LVRC.
In comparison to 90 in 2021

BUILDING APPROVALS BY LVRC 18
In comparison to 19 in 2021

PLUMBING APPROVALS 59
In comparison to 25 in 2021

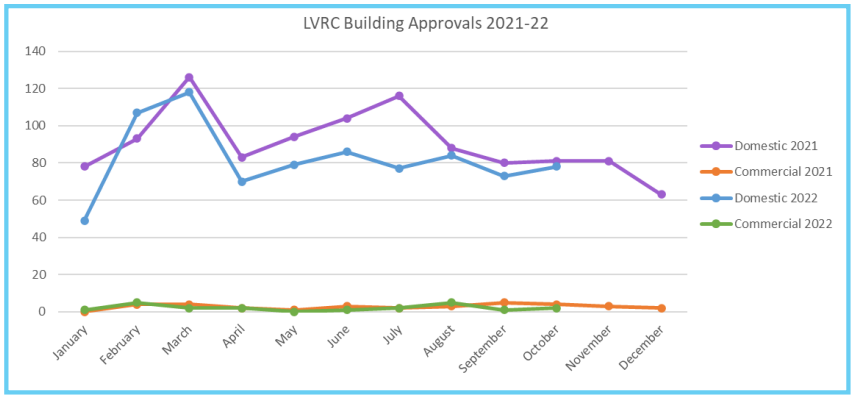
AVERAGE DAYS TO APPROVE 18 Days
Building Applications

$26.5M
COMMERCIAL AND DOMESTIC VALUE OF WORKS
in the Lockyer Valley Region

AVERAGE DAYS TO APPROVE 16 Days
Plumbing Applications

BUILDING INSPECTIONS 40

PLUMBING INSPECTIONS 164



CONTINUOUS IMPROVEMENTS

Process Improvement delivers efficiency and consistency

INFRASTRUCTURE CHARGES RECOVERY TEMPLATES

Three new templates have been implemented to assist with recovery of infrastructure charges. Unrecoverable Infrastructure Charges are able be transferred to Rates under Section 144 of the Planning Act 2016 following a report to Council.

CUSTOMER EXPERIENCE OFFICERS KNOWLEDGE BASE UPDATED FOR PEST WEED ENQUIRIES

Following the spraying of declared pest plants on road reserves becoming an IWS function, there was confusion on which team within Council looks after different enquiries. To eliminate the confusion, Customer Experience Officers' Knowledge Base has been updated and training provided to the team.

GATTON CORRECTIONAL CENTRE PLUMBING INSPECTIONS AND INVOICING PROCESS

Collection of inspection details, travel and invoicing process has been reviewed to reduce Plumbing Inspectors' time entering a month's data at the beginning of each month into two spreadsheets. Inspectors attending the inspection will compile details throughout the month when they return to the office.

PLUMBING BACKFLOW LICENCES

A process has been implemented to capture when backflow prevention devices are overdue for inspection. Backflow prevention devices must be tested annually. This improvement means that a report can easily be generated when previously it was a manual check.

ECOSYSTEM REVEGETATION LISTS ADDED TO LOCKYER VALLEY REGIONAL COUNCIL WEBSITE

Council's website has been updated to include revegetation species lists for eight of the most common Lockyer Valley Regional Ecosystems https://www.lockyervalley.qld.gov.au/our-services/strategic-planning/pd-online. The lists highlight which species are commercially available and are broken into trees, small trees, tall shrubs, shrubs, vines, herbs, ferns, grasses, grass like species, epiphytes and mistletoes plus special planting notes.
This process improvement will save applicants, their ecologists and Council officers significant time.

BUILDING AND PRIVATE CERTIFICATION LODGEMENT WORK INSTRUCTIONS UPDATED

Work instructions for the lodging of building applications have been updated. This will assist the Business Support team with cross training and ensure consistency.

COMMUNITY AND WELLBEING

LVRC PROPERTY MANAGEMENT

- Site inspection and monitoring at 7 Mile lagoon property.
- Work on property management plans for key environmental reserves as part of the ILM project.

PEST MANAGEMENT

- Attended the Matta Harri Judas Fox meeting to discuss Council's potential involvement with the program in assisting in the capture of a fox specimen for research purposes.
- Attended the QPWS & LVRC Environment and Pest Working Group Quarterly Meeting. Various topics were discussed including, the LVRC Biosecurity Surveillance Program 2022/23 and QPWS control programs for Giant Rats Tail Grass in Gatton National Park and last year's treatments for Parthenium in the Junction View areas.
- Attended the Annual Pest Distribution Mapping Workshop provided by DAF at the Gatton Research Facility, UQ. The purpose of this workshop was to provide Biosecurity Qld with LVRC pest, plant and deer mapping data from the past 4 years.

RESILIENT RIVERS

- Funding Deed of Agreement received for next stage of on ground works on Lockyer Creek (Phase 5).
- Planned community workshop on waterway stabilisation and erosion prevention at Junction View Hall.
- Maintenance of revegetation sites on Lockyer Creek at Cahill Park and Beavan Street.
- Platypus eDNA sampling at Murphy's Creek and lower Lockyer Creek.
- Received consultant report for post flooding impact assessment and site prioritisation on Lockyer Creek project areas.
- COMSEQ investment strategy meeting to discuss future stakeholder lead investment in the Lockyer Valley.
- Meeting with traditional owner managed and run business to discuss potential future service level agreement.

PEST MANAGEMENT - OCTOBER

- **49** PEST WEED ENQUIRIES
- **14** PROPERTY FOLLOW-UPS
- **$4,926.89** HERBICIDE SUBSIDY CREDITS PROCESSED
- **6** RABBIT INFESTATION REPORTED
- **2** FOX REQUESTS FOR ASSISTANCE
- **3** WILD DOG ASSISTANCE REQUESTED
- **3** CAGE/TRAP SUPPLIED (Fox)
- **4** COMMUNITY SPRAY EQUIPMENT HIRES
- **NIL** WILD PIG ASSISTANCE REQUESTED
- **1,331.86 ha** TOTAL AREA OF PRIVATE PROPERTY MANAGEMENT PLANS
- **21** PRIVATE PROPERTY MANAGEMENT PLANS

LAND FOR WILDLIFE (LFW)

- **194** REGISTERED MEMBERS
- **16,635.79 ha** TOTAL LAND FOR WILDLIFE
- **28** PROPERTIES WORKING TOWARDS LAND FOR WILDLIFE
- **2** NEW LAND FOR WILDLIFE PROPERTIES
- **71** PROPERTIES AWAITING ASSESSMENT

ENVIRONMENTAL COLLABORATION

- Queensland Parks and Wildlife quarterly meeting
- Two-day Little Liverpool Range Initiative BioBlitz at Mulgowie and Townson
- Sediment tracking project with University of Qld, installation of single stage sampling devices in waterways through Lockyer Valley
- Lockyer Valley Waterway Report Card briefing with HL&W
- Compiling 20 Regional Ecosystems flora/fauna lists for PD Online LVRC Web Page

RESTRICTED WEED MANAGEMENT

FOCUS OF RESTRICTED WEEDS TREATED

ENVIRONMENTAL HEALTH

THE FOLLOWING HAVE BEEN ISSUED YEAR TO DATE

164 FOOD LICENCES ISSUED YTD

164 CURRENT FOOD LICENCES

4 PERSONAL APPEARANCE SERVICES LICENCES

16 LOCAL LAWS PERMITS

- **3** CARAVAN
- **4** EVENTS
- **2** TEMPORARY HOME
- **1** CAMPING
- **1** MARKET
- **1** ROADSIDE STALL

LOCAL LAWS

605 NUMBER OF CUSTOMER REQUESTS RECEIVED FINANCIAL YTD

66 NUMBER OF DOGS IMPOUNDED YTD
In comparison to 169 in 2021-2022

34 KENNEL LICENCES ISSUED YTD
In comparison to 38 in 2021-2022 (Expire 30 September 2022)

18 TOTAL NUMBER OF INFRINGEMENT NOTICES ISSUED YTD
In comparison to 41 in 2021-2022

399| 65.95% NUMBER OF CUSTOMER REQUESTS RESOLVED FINANCIAL YTD
In comparison to 1849 / 91.35% in 2021-22

52 NUMBER OF DOGS RELEASED/REHOMED YTD
In comparison to 153 in 2021-2022

58 EXCESS ANIMAL PERMIT RENEWALS YTD
In comparison to 66 in 2021-2022 (Expire 30 September 2022)

NUMBER OF DOGS REGISTERED **7,009** YTD
In comparison to 8,347 in 2021-2022

ILLEGAL DUMPING / LITTERING UPDATE

Illegal Dumping Statistics have been collated based on review of all Illegal Dumping CRMs received and actioned year to date.

2 TOTAL NUMBER OF INFRINGEMENTS YTD ISSUED = $2,875

92 ILLEGAL DUMPING INCIDENTS YTD
In comparison to 181 in 2021-2022

APPROXIMATELY **509** WHEELIE BINS OF ILLEGALLY DUMPED WASTE YTD
In comparison to 1009 in 2021-2022

WASTE TYPES ILLEGALLY DUMPED YTD (APPROXIMATE %)

- 20% Wrecked Vehicles
- 18% Demolition Materials
- 17% Tyres
- 25% Household Waste
- 11% Mattresses/Furniture
- 4% Green Waste
- 2% White Goods
- 1% Asbestos

14.4 Group Manager Infrastructure Monthly Report - October 2022

Author: John Keen, Group Manager Infrastructure
Responsible Officer: John Keen, Group Manager Infrastructure

Purpose:

This report provides Council with a summary of key operational activities undertaken by the Infrastructure Group during October 2022.

This document is for Council's information only.

Executive Summary

This report provides Council with a summary of key operational activities undertaken by the Infrastructure Group during October 2022.

Proposal

That this report be received and noted.

Attachments

1⇩ Group Manager Infrastructure Monthly Report - October 2022 11 Pages

Infrastructure

MONTHLY GROUP REPORT

OCTOBER 2022

Lockyer Valley REGIONAL COUNCIL

INFRASTRUCTURE & ENGINEERING SERVICES BRANCH HIGHLIGHTS

DESIGN & CONSTRUCTION WORKS

SAFE SCHOOL PROJECT

- Joint funded by the Transport Infrastructure Development Scheme (TIDS) and Council.
- Scope includes minor civil works, concrete footpaths, signs and lines at local schools in the Lockyer Valley. Locations include schools in Gatton, Laidley and Lake Clarendon.
- Contract awarded and works commenced late October with the expected completion due by December 2022.

GEHRKE ROAD, PLAINLAND REHABILITATION

- Gehrke Road accommodates an increasing volume of traffic in the Plainland area and hence requires pavement upgrades to improve the pavement strength and serviceability level. The project is funded by the Transport Infrastructure Development Scheme and Council, it will provide the means to complete pavement reconstruction between Barcoo Drive and Mountain View Drive.
- Council's internal crew completed culvert extensions and road widening and an asphalt contractor finished the pavement works on 25 August. Contractor has been engaged for line marking works which will be completed this month.

SPRINGBROOK PARK CARPARK UPGRADE

- Springbrook Park/Withcott Sporting Complex is located in Withcott, off Parkridge Drive. The sporting complex and park is utilised by a number of sporting clubs and community groups including Little Athletics, Soccer, Martial Arts, Basketball, School Sports and the CWA. The venue is also able to be used as a community shelter in times of natural disaster. Successful funding from the Local Roads & Community Infrastructure Program will provide improved accessibility and parking for the venue.
- Some key objectives include, widening the pavement along the access road to achieve a consistent width for two-way traffic, improve access point, increase sealed carpark spaces, improve lighting and road signage and define drop off and pick up area.
- Earthworks for carpark extension commenced on the 11 September 2022, with an expected project duration of 6 weeks.

NORTH AND EAST STREET, GATTON INTERSECTION UPGRADE

- The upgrade of the North and East Street intersection in Gatton will be funded under both the Blackspot and South East Queensland Community Stimulus Package. Scope of works include the installation of a concrete roundabout, upgrading of existing stormwater infrastructure, installation of new concrete kerb and channel, formalise pedestrian crossings and footpaths, relocation of public utilities, new pavement, asphalt surfacing and line marking.
- Part 1, stormwater upgrade and installation has been completed with the remainder of asphalt works being completed in December/January school holidays.

GATTON INDUSTRIAL INTERSECTIONS

- Three industrial intersections in Gatton will be upgraded under the Heavy Vehicle Safety and Protection Program funding arrangement. The intersections are; Tenthill Creek Rd and Western Drive, Tenthill Creek Road and Freemans Road and lastly Freemans Road and Market Drive. All three intersections will have pavement widening, new line marking and road furniture to allow heavy vehicles to safely negotiate the intersections. Water main and stormwater infrastructure on Freemans Road and Market Drive intersection was completed in 21/22 financial year with the remainder of the project construction nearing completion.

2022/2023 BITUMEN RESEAL PROGRAM

- Lockyer Valley Regional Council are seeking to reseal approximately 170,000m2 of existing road pavement as asset renewal works for its sealed roads. This program is joint funded by both Council and the State Government through the Roads to Recovery Program (RTR).
- The objective of the RTR Program is to contribute to the Infrastructure Investment Program through supporting maintenance of the nation's local road infrastructure asset, which facilitates greater access for Australians and improved safety, economic and social outcomes.
- Contract has been awarded with works commencing late October and due to be finalised by December 2022.

FLAGSTONE CREEK ROAD STAGE 2B

- The Flagstone Creek Road Stage 2B project will be funded under the Heavy Vehicle Safety and Protection Program (HVSPP). The project will rehabilitate the section of Flagstone Creek Road between Lockyer Creek Road and Reynolds Lane. Geotextile material will be installed between the layers of new road base to strength the pavement and ensure longevity. Additional to the pavement construction the project scope of works includes, road excavation, drainage works, culvert extension, private entrance reinstatement, bitumen seal and road furniture.
- Works commenced 9 August 2022, with the project nearing completion. Line marking contractor engaged with works scheduled for completion this month.

FEBRUARY 2022 WEATHER EVENT

UPDATE

Continuing in phase 2 of recovery, the Reconstruction of Essential Public Assets (REPA) damage assessments are being undertaken of the regions unsealed roads, sealed roads and structures. REPA works aim to permanently restore or reconstruct essential public assets to a pre-disaster standard. These works must be completed and acquitted within two years of the event, being 2024. Betterment projects to improve flood resilience to assets are being identified during the REPA assessment process.

MAY 2022 WEATHER EVENT

UPDATE

A new event was declared after significant rainfall caused flooding across the region from 6 May through to 20 May 2022, with the majority of the damage to Council's assets centered in the Mount Sylvia, Blackduck, Regency Downs, Lockrose, Flagstone and Blanchview localities of the Lockyer Valley Region.

The emergent works phase of recovery for the May 2022 event is now completed with the below program updates.

- The remaining defects identified during the emergent phase are continuing to be reviewed for inclusion in REPA claims.
- Unsealed road restoration works have been completed in Zone 9 of the region. The roads include:
  - Burgess Road
  - Ladybird Road
  - Gillespies Road
  - Wallers Road
  - Treatment Pant Road
  - Adare Road
- Works to the unsealed road network have commenced in Zone 1 and 8 of the region. The localities include:
  - Spring Creek
  - Churchable
  - Lockyer Waters
  - Morton Vale
  - Kentville
  - Adare
  - Lake Clarendon
  - Glenore Grove
  - Lawes
  - College View
  - Withcott
  - Blanchview
  - Derrymore
  - Iredale
  - Flagstone Creek
  - Silver Ridge
  - Upper Flagstone
  - Stockyard
  - Rockmount
  - Preston
  - Egypt
  - Fordsale
- Field assessments for the remainder of unsealed road damage is completed with submissions to the QRA being prepared.
- Damage assessments on the sealed road network and structures are in progress.
- The Woolshed Creek floodway design has been approved. Quotations will be requested via Localbuy in November.
- Geo-technical investigations have been completed at the landslip sites, Liftin Bridge, East Egypt Road, Berlin Road and Mountain view Road. Design quotes have been requested for detailed design of these sites, including risk assessment, cost estimate and specifications for construction tender.

Additional REPA works packages approved by QRA totally $8.8 million:

- Unsealed Roads Zone 1
- Unsealed Roads Zone 2
- Unsealed Roads Zone 3
- Unsealed Roads Zone 4 (part 1 and 2)
- Unsealed Roads Zone 8 (part 1,2 and 3)
- Unsealed Roads Zone 9
- Unsealed Roads Zone 10 (part 1)
- Unsealed Roads zone 11 to 18
- Sealed Roads Zone 1, 2 and 3
- Liftin Bridge, Gatton
- Counter Disaster Operations traffic management

The below works packages have been programmed:

- Unsealed Roads Zone 2

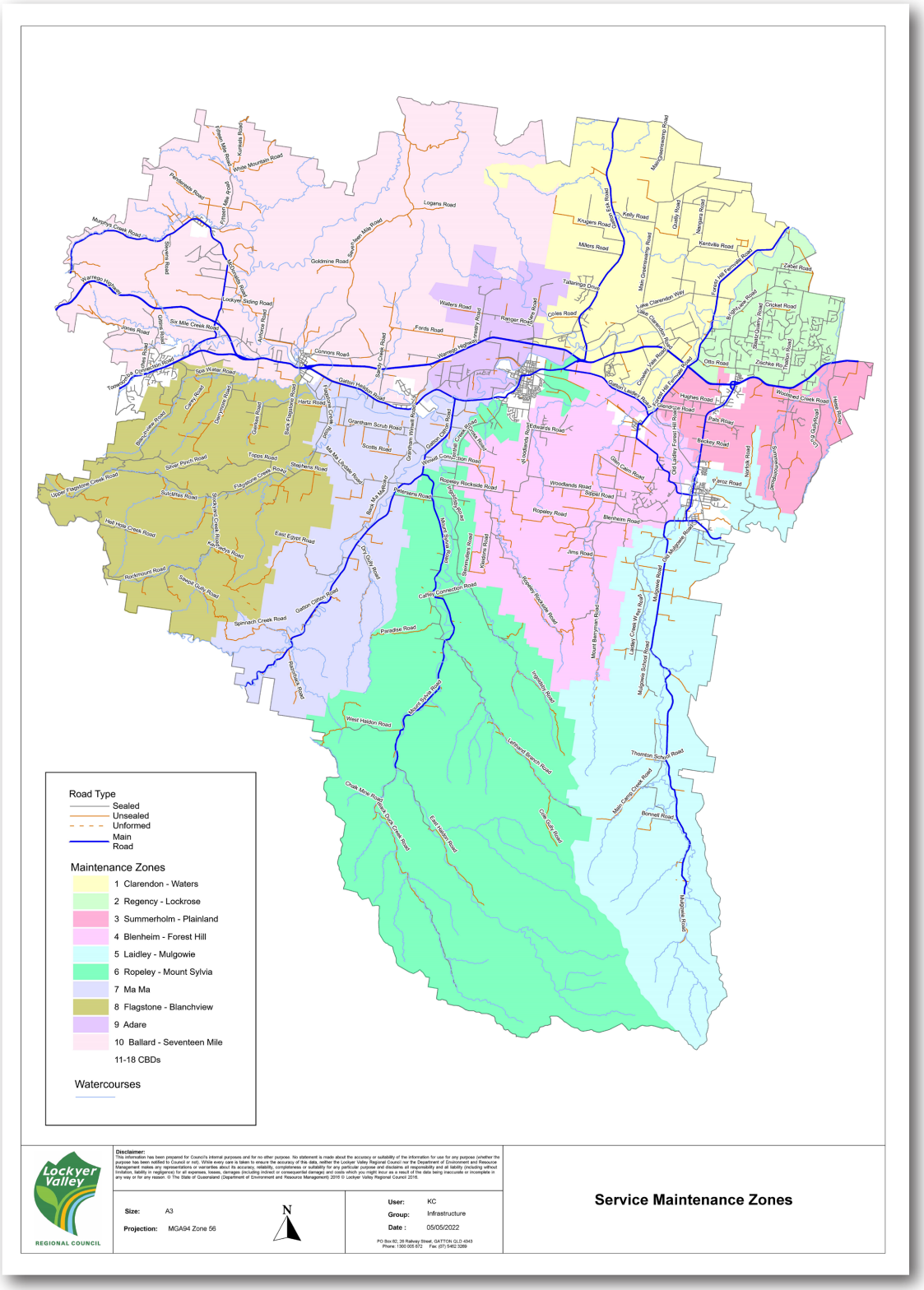
The images below are before and after photos of recent REPA works undertaken on the unsealed road network.

Forestry Road, Adare

Lyons Road, Lake Clarendon

Coles Road, Adare

Qualischefskis Road, Spring Creek


Road Type
Sealed
Unsealed
Unformed
Main Road
Maintenance Zones
1 Clarendon - Waters
2 Regency - Lockrose
3 Summerholm - Plainland
4 Blenheim - Forest Hill
5 Laidley - Mulgowie
6 Ropeley - Mount Sylvia
7 Ma Ma
8 Flagstone - Blanchview
9 Adare
10 Ballard - Seventeen Mile
11-18 CBDs
Watercourses
Lockyer Valley
REGIONAL COUNCIL
Disclaimer:
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Size: A3
Projection: MGA94 Zone 56
N
User: KC
Group: Infrastructure
Date : 05/05/2022
PO Box 82, 26 Railway Street, GATTON QLD 4343
Phone: 1300 005 872 Fax: (07) 5462 3299
Service Maintenance Zones

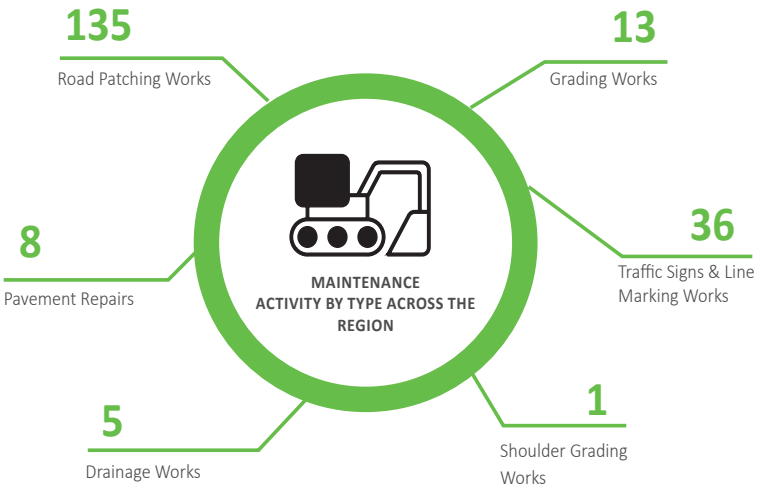
OPERATIONS & MAINTENANCE

WORKS ON ROADS PERMITS & APPLICATIONS

HEAVY VEHICLE APPLICATIONS	20	RURAL ADDRESSING APPLICATIONS	3	LAND ACCESS & ACTIVITY NOTICE	14
TRAFFIC CONTROL	3	OTHER ROAD ACTIVITY APPROVALS	2	DRIVEWAY APPLICATIONS	11

TOTAL APPLICATIONS RECEIVED IN OCTOBER 2022 **53**

MAINTENANCE WORKS



INFRASTRUCTURE PLANNING

ASSET MANAGEMENT

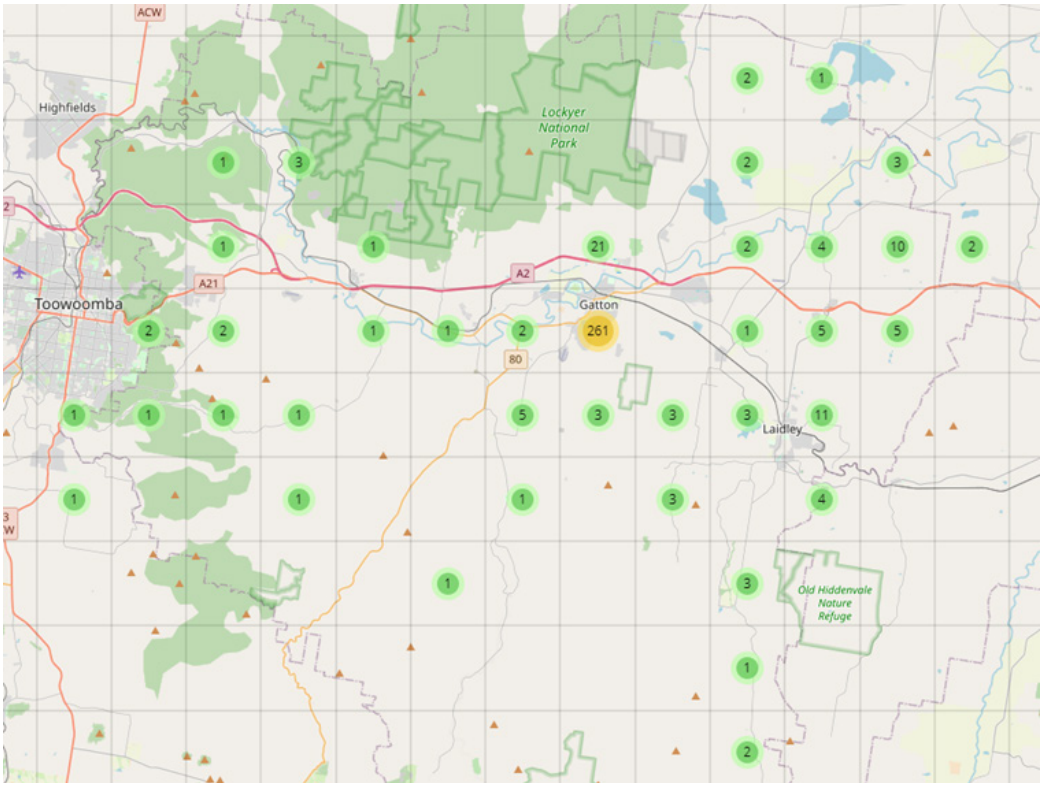
- Flood damage inspections, focusing on emerging issues caused by pavement saturation
- Submission of Emergency Works claim with the Queensland Reconstruction Authority for the May flood event
- Weekly monitoring surveys of the landslip sites at Berlin Road and East Egypt Road
- Routine level 2 bridge inspections
- Routine RMPC inspections
- Continued processing of Capital Completions
- Continuing with assessment of submissions for the Gatton Stormwater CCTV project
- Tenders have closed for the Building Condition Assessment project
- Tenders have been released for the light vehicle renewals and truck renewals for the 2022/23 budget items
- Asset Management Framework briefing was delivered to Council's Executive Leadership Team.
- Strategic Asset Management Plan in development.

DEFECT OVERVIEW

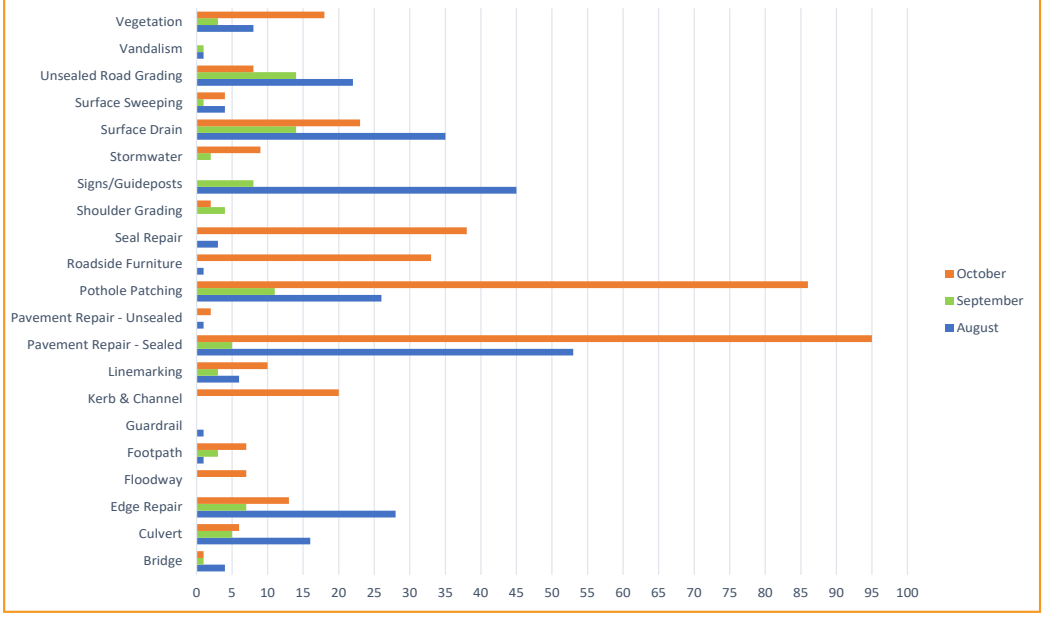
TOTAL DEFECTS CAPTURED IN OCTOBER 2022 382

245 NON-FLOOD DEFECTS COMPLETED IN OCTOBER 2022

Defects Collected Across the Region In October 2022



Defects Captured in 2022



COMMUNITY FACILITIES BRANCH HIGHLIGHTS

CAPITAL WORKS

LAIDLEY CEMETERY SEAM STRIP INSTALLATION

- Works commenced on site to construct 11 new seam strips to section 10 at the Laidley Cemetery. This project is jointly funded by Local Roads and Community Infrastructure Program and Council's 2022/23 Capital Program.

PARKS AND CEMETERIES MAINTENANCE WORKS

Playground Maintenance

- Routine maintenance undertaken at playgrounds across the region.

Furniture Maintenance / Landscaping

- Garden maintenance is ongoing throughout the region.
- Spraying of roadside furniture was completed in zone 8 and 10.

Declared Weeds

- A new operator was appointed the Vegetation Control Officer. This has allowed the Unit to run a continuous spray program.
- There is ongoing monitoring and treatment of all declared weeds, with the focus on Giant Rat Tail Grass and Parthenium Weed.

Disposal Services

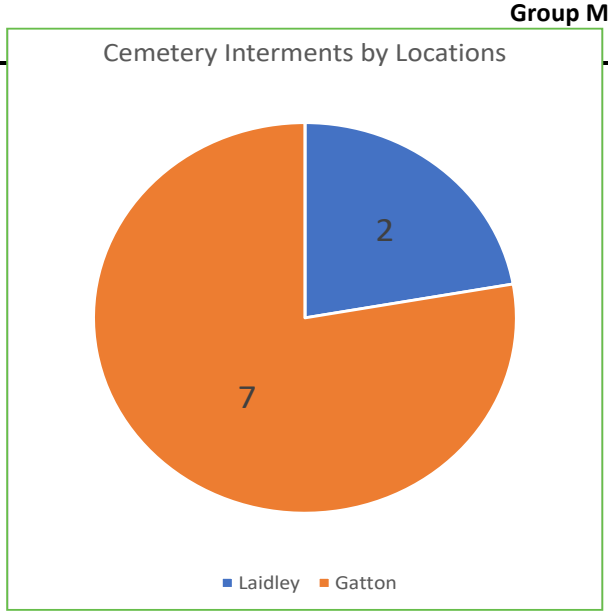
- 903 street and park bins were services each week during October.

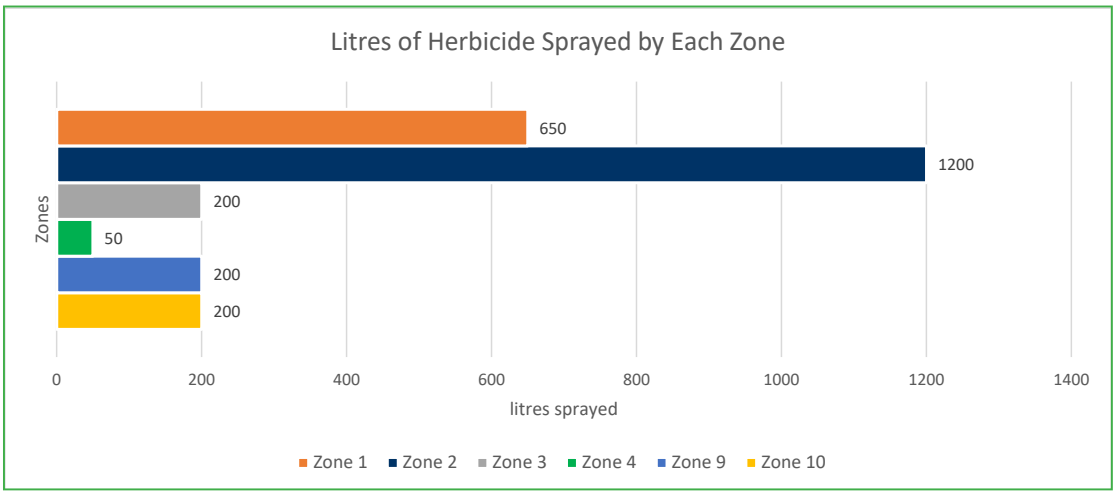
Mowing

- Mowing across the region has been ongoing. Approximately two full rounds were completed in our parks, open spaces and along roadsides. This which equates to 260 hectares mowed during October. Recent weather has impacted mowing activities.
- Slashing was completed in zone 1 and 6 comprising of approximate 180km.

Event Assistance

- Event sign changeovers completed as required.
- Assistance provided with the below events:
  - Lights on the Hill - 1 October 2022
  - Fordsdale School of Arts 90th Anniversary Bush Dance - 15 October 2022





FACILITIES MAINTENANCE WORKS

Electrical

- Scoping of potential solar power supply for Hatton Vale memorial park. The RSL currently sources power from the neighbour as there is no power currently in the park. Looking at funding works through the capital program electrical upgrades
- Site meeting to occur to discuss electrical works at Laidley Recreation Reserve with Council. Investigation options and costs to installed additional power points which can be utilised at future events.
- A new variable speed drive pump was installed for the main filtration pump at the Laidley Pool.
- A new solar controller was also installed at the Laidley Pool

Buildings

- Proofs have been generated for Council logo signage for the Laidley Cultural Centre with quotes being sourced for the signs.
- Tiling and carpentry works were undertaken to the Laidley Recreation Reserve change rooms.

Plumbing

- Works around the Laidley Cemetery toilet have occurred to stop water from saturating the septic trenches which have been leading to issues with the toilets.

LOCKYER VALLEY SPORTS & AQUATIC CENTRE

5,642 TOTAL CENTRE ATTENDANCE

3,045 GYM USERS

2,597 POOL ENTRIES

3,993 LEARN TO SWIM LESSONS

477 SQUAD LESSONS

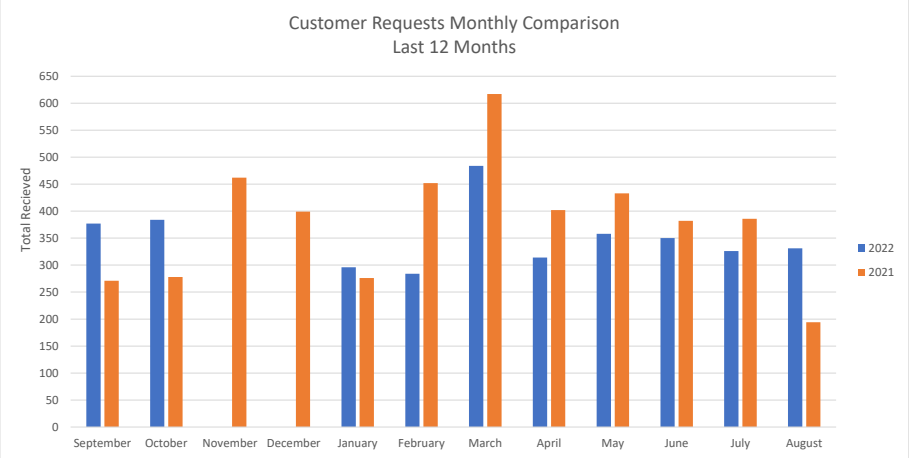
DAL RYAN MEMORIAL SWIMMING POOL

519 TOTAL CENTRE ATTENDANCE

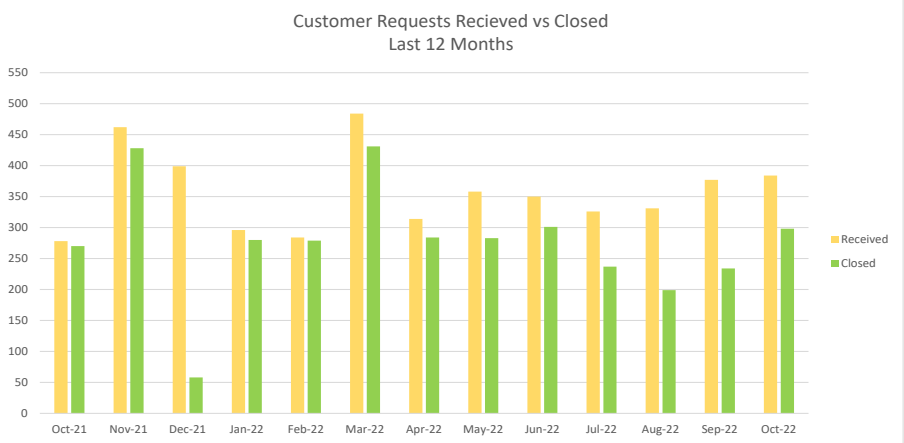
508 POOL ENTRIES

6 LEARN TO SWIM LESSONS

CUSTOMER CONTACT



Data as at 8 November 2022



Data as at 8 November 2022

15. CONFIDENTIAL ITEMS

15.1 Rate Remission - Community Grants Policy - Property ID 213370

Author: Kirsty Johnson, Coordinator Revenue Services; Dee Stewart, Acting Chief Financial Officer

Responsible Officer: Ian Church, Chief Executive Officer

That the above item be considered in Closed Session to the exclusion of the press and public in accordance with Section 254J (3) (d) of the Local Government Regulation, 2012, as the matter involves rating concessions.

Purpose:

The purpose of this report is to seek Council's endorsement of a rates remission of 100% of the 2022-23 General Rate for Property ID 213370 under Council's 2022-23 Revenue Policy and 2022-23 Revenue Statement.

15.2 Request by Swimfit Pty Ltd for Variation and Assignment of Management Agreement

Author: Caitlan Natalier, Coordinator Governance and Property; Brendan Sippel, Manager Community Facilities

Responsible Officer: John Keen, Group Manager Infrastructure

That the above item be considered in Closed Session to the exclusion of the press and public in accordance with Section 254J (3) (g) of the Local Government Regulation, 2012, as the matter involves negotiations relating to a commercial matter involving the local government for which a public discussion would be likely to prejudice the interests of the local government.

Purpose:

The purpose of this report is to consider a request by Swim Fit SEQ Pty Ltd to vary their management agreement for the Lockyer Valley Sports and Aquatic Centre and the Dal Ryan Memorial Pool.

16. MEETING CLOSED