

Wagga Wagga Quarry

ANNUAL REVIEW



July 2016 - June 2017

Document Control

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Table 1: Annual Review title block

Name of operation	Wagga Wagga Quarry
Name of operator	Hanson Construction Materials Pty Ltd
Development consent / project approval #	MP 07_0069
Name of holder of development consent / project approval	Hanson Construction Materials Pty Ltd
Water licence #	40BL190719 and 40BL190720 for groundwater extraction of 360 ML/year; and WAL37001 (and the associated Water Supply Works Approvals) entitled the quarry to pump 100 ML/year from the Murrumbidgee River.
Name of holder of water licence	Hanson Construction Materials Pty Ltd
Annual Review start date	1 July 2016
Annual Review end date	30 June 2017

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List of Abbreviations

DPE	NSW Department of Planning and Environment.
DPI Water	Division of Water within the NSW Department of Primary Industries.
DRE	Division of Resources & Energy within the NSW Department of Industry.
EPA	Environment Protection Authority.
RMP	Rehabilitation Management Plan or equivalent plan required under the conditions of a relevant approval
WAL	Water Access Licence
DDG	Deposited Dust Gauge
Relevant approval	Includes the following approvals where they are material to the conduct of the operation: a development consent, project approval, mining lease or water access licence.
Reporting period	Financial year, unless specified otherwise in the relevant conditions of approval or agreed in writing with DPE and DRE.

Table 2: DPE Compliance Audit July 2015-June 2016 Summary of Project Approval Non- Compliances

ID number	Condition	Details of Non-compliance	Risk Rating	Recommendation	Comment
1.1	2.8 Schedule 2, Condition 8	Failure to make annual contributions to Wagga Wagga Shire Council for the maintenance of local roads.	Non - Compliant (Administrative)	Ensure contributions paid to Council by end of September 2015. Payment made to Wagga Wagga Council on 28 August 2015.	Payment made January 2017 for 2016.
1.2	3.9 Schedule 3, Condition 9	Proponent failed to submit a Comprehensive Water Audit Report within 6 months of commissioning the report.	Non - Compliant (Administrative)	Comprehensive Water Audit Report submitted 9 April 2014.	Noted.
1.3	3.17 (b) Schedule 3, Condition 17 (b)	Proponent has failed to provide records on a quarterly basis for the amount of product material transported from site.	Non - Compliant (Administrative)	Ensure records are uploaded quarterly, and that website is up to date by 31 December 2015	Records uploaded quarterly.
1.4	3.24 Schedule 3, Condition 24	Proponent failed to prepare and implement a Waste Management Plan by June 2012.	Non - Compliant (Administrative)	The Plan dated July 2014 was submitted but not on time	Noted.
1.5	5.4 Schedule 5, Condition 4	No evidence review of strategies, plans and programs had occurred at time of audit.	Non - Compliant (Administrative)	Ensure review of all strategies, plans and programs is undertaken by 31 December 2015. Review undertaken post Annual Review	Management plans and programs have been reviewed and revised in consultation with DPE.
1.6	5.10 (b) Schedule 5, Condition 10 (b)	Website was not up to date with regard to Schedule 3, Condition 17 (b)	Non - Compliant (Administrative)	Ensure website is reviewed and updated by 31 December 2015. Management Plans are on website but not required monitoring records.	Noted.

Table 3: Statement of compliance

Were all conditions of the relevant approval(s) complied with?	
DC MP 07_0069	YES/NO

Table 4: Non-compliances

Relevant approval	Condition #	Condition description (summary)	Compliance status	Comment	Where addressed in Annual Review
DC MP 07_0069	Sh.2, C.6 (b)	Not permit more than six heavy vehicle movements per hour between 3:00pm and 6:00pm on any weekday,	Non-compliant	There were 7 dispatches outside of Sat operating hours, and 13 of more than 3 trucks dispatched per hour between 3pm-6pm.	Section 3.5, Section 5.4
DC MP 07_0069	Sh.3, C.5	PM ₁₀ particulate emissions	Non-compliant	7 days where PM ₁₀ levels exceeded 24hr criterion	Section 3.3, Section 5.3
DC MP 07_0069	Sh.3, C.5	Long Term Criteria for Deposited Dust	Non-compliant	3 unusually high DDG readings in Sept 2016. 1 marginally high reading in Dec 2016.	Section 3.3, Section 5.3

Compliance status key for Table 2

Risk level	Colour code	Description
High	Non-compliant	Non-compliance with potential for significant environmental consequences, regardless of the likelihood of occurrence
Medium	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> potential for serious environmental consequences, but is unlikely to occur; or potential for moderate environmental consequences, but is likely to occur
Low	Non-compliant	Non-compliance with: <ul style="list-style-type: none"> potential for moderate environmental consequences, but is unlikely to occur; or potential for low environmental consequences, but is likely to occur
Administrative non-compliance	Non-compliant	Only to be applied where the non-compliance does not result in any risk of environmental harm (e.g. submitting a report to government later than required under approval conditions)

1 INTRODUCTION

Hanson Construction Materials Pty Ltd (Hanson) own and operate a sand and river gravel quarry located on the floodplain of the Murrumbidgee River five kilometres (km) west of the city of Wagga Wagga, in the Riverina region of NSW, approximately 460km southwest of Sydney (refer to

Figure 1).

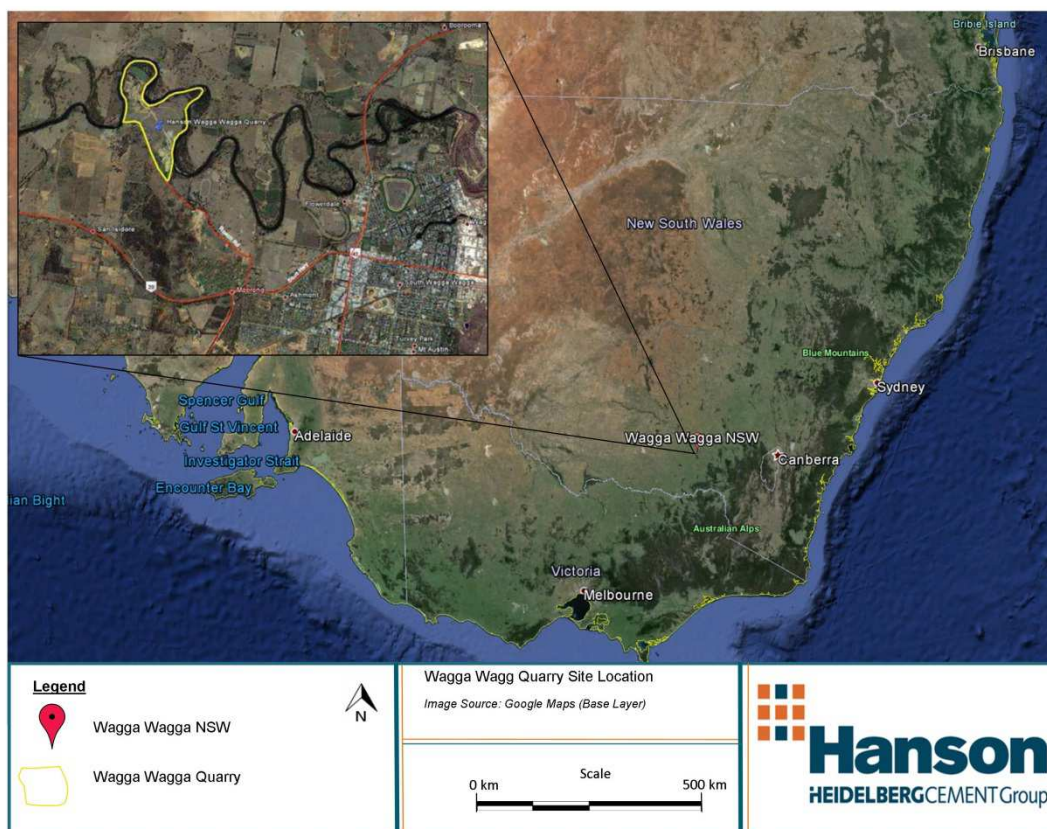


Figure 1: Site location

The Wagga Wagga Quarry Extension Project involves the extraction of up to 150,000 tonnes per annum (tpa) of construction aggregates over a project life of 25 years. Aggregates extracted from the site would be processed at the site and transported by road to regional customers in Wagga Wagga, Griffith, Mildura, Leeton, Canberra, Temora, Shepparton and as far south as Melbourne. The quarry directly employs 6 people during the reporting period, these being 3 operators, one truck driver, one casual plant operator and a quarry manager.

The Department of Planning and Environment (DP&E), formally the Department of Planning and Infrastructure, granted Project Approval 07 0069 subject to approval conditions on 22 November 2011. Under condition 3 of Schedule 5 of the Project Approval, an Annual Review is required to be submitted to the DP&E to review the environmental performance of the project. This Annual

Review will detail the operational and environmental management activities of the project during the period July 2016 - June 2017.

1.1 Project Setting

The quarry has been in operation since 1987. The project site is bounded by private land to the south and the Murrumbidgee River to the north (**Figure 2**). The site is part of the Murrumbidgee River's alluvial floodplain and is situated within a large meander of the River with an elevation between 174 and 177 metres AHD.

The land uses surrounding the site comprise a mixture of agricultural and residential properties, and areas of public recreation. The quarry is close to a significant new residential development, Riverview Estate, which is approximately 1.5 km south of the project site. The nearest receivers are shown on **Figure 3**.



Figure 2: General Project Layout



Figure 3: Site Map and Nearest Receivers

Table 5 provides the details of the key personnel who are responsible for the environmental management of the quarry.

Table 5: Quarry Roles and Responsibilities

Position	Name	Phone	Email
Operations Manager	John Hewitt	+61 412 213 775	john.hewitt@hanson.com.au
Area Manager	Maciej Mojsa	+61 417 611 663	maciej.mojsa@hanson.com.au
Quarry Manager	John Navybox	+61 437 359 212	john.navybox@hanson.com.au
Risk Manager	Ian Bradbury	+61 417 423 467	ian.bradbury@hanson.com.au
Development Manager	Andrew Driver	+61 417 234 774	andrew.driver@hanson.com.au
Graduate Environmental Planning and Compliance Coordinator	Belinda Pignone	+61 439 131 941	belinda.pignone@hanson.com.au

2 CONSENTS AND LICENSING

2.1 Project Approval

Project MP 07_0069 was approved under Section 75J of the *Environmental Planning and Assessment Act 1979* (EP&A Act), (22 November 2011). The major components of the project are summarized in **Table 6**. Full project description can be reviewed in Hanson's Wagga Wagga Quarry Environmental Assessment (EA).

Table 6: Major Project Approval Components

Aspect	Description
Project summary	Continuation and expansion of the Wagga Wagga Quarry including: <ul style="list-style-type: none"> • Extraction of up to 150,000 tpa of sand and gravel from four new staged quarry pits; • Construction of haul roads, levee banks and sediment dams; • Processing and washing of raw quarried material; • Loading and dispatch by road of an average of 150,000 tpa of quarry products including concrete, aggregates, asphalt aggregates and road base; • Stockpiling of topsoil for reuse in rehabilitation works; and • Progressive rehabilitation of the site.
Total Site Area	200ha.
Extraction Areas	51.6 Ha (proposed new extraction area, including up to 22.5 ha of quarry pits); 29 ha (previous extraction area, including up to 16.8 ha of exhausted quarry pits).
Extraction Method	40-tonne excavator.
Extraction Rate	Up to 150,000 tpa.
Extraction Staging	Four separate quarry pits, operated as five successive extraction stages, starting from the north and extending southwards.
Resource	In excess of five million tonnes of sand and gravel.
Depth of Extraction	Approximately 22 m - 25 m below the existing land surface, to a maximum depth of 152 m AHD, approximately 15.5 m below the average height of the Murrumbidgee River.
Processing and Facilities	Operation of existing processing facilities including a primary feed crusher and screens, with connecting conveyor belts. The site contains an existing workshop and office amenities building. A weighbridge is located on the site access road.
Water Management	Water produced from licenced groundwater dewatering operations to be treated on-site (settled to <50 ppm suspended solids) then discharged to the

	Murrumbidgee under EPL.
Main Products	Concrete aggregates, asphalt aggregates, road base and sundry aggregates.
Product Transport	All products would be transported by road, via Roach Road and McNickle Road to the Sturt Highway and thence to market destinations. Maximum of 6 heavy vehicle movements per hour between 3 pm and 6 pm.
Project Life	Quarrying operations may take place at the site until 31 December 2036.
Rehabilitation	Rehabilitation is proposed to be a combination of wetlands, grassland and a revegetated riparian zone. Levee banks would be removed and the material returned to pits. Pit banks would be regraded and revegetated and all pits allowed to fill with water to a standing water level of 168m AHD (except Stage 1, which would be refilled to 1m above groundwater level). The final outcome would be a large grassed area, with five water-filled pits with vegetation around the perimeters.
Employment	The project would directly employ between 10 and 15 people during operation, and would support employment of an additional 10 subcontracted truck drivers.
Capital Value	\$0.5 million.
Construction	Construction of haul roads, levee banks and sediment dams, and surface water diversion banks (if required).
Hours of Operation	<p>Quarrying operations Monday – Friday: 6 am – 6 pm Saturdays: 8 am – 1 pm Sundays and Public Holidays: No Activities</p> <p>Transportation off-site Monday – Friday 6 am – 6 pm Saturdays: 8 am – 1 pm Sundays and Public Holidays: No activities</p>

2.1.1 Environmental Protection Licence (EPL) No. 2433

EPL 2433 Applies to all scheduled activities undertaken by Hanson Construction Materials at Lot 2 DP 610795 and part Lot B DP 381991 (north of Roach Road). The license provides the following:

- Performance criteria for environmental management including pollutant concentration load limits, waste limits, noise limits, air quality (odour and dust) limits;
- Monitoring and record keeping requirements;
- Testing methods;
- Pollution complaints handling; and
- Reporting requirements.

3 OPERATIONS SUMMARY

The operational production performance of the Wagga Wagga quarry is shown in **Table 7**. The quarry continues to operate well within its allowable limit under the development consent.

Table 7: Production summary

Material (specify source)	Approved limit	Previous reporting period (actual)	This reporting period (actual)	Next reporting period (forecast)
Sand & gravel	150,000 tonnes/year	73,413 tonnes	87,201 tonnes	92,256 tonnes

3.1 Hours of Operation

The operator has complied with the approved hours of consent as per **Table 8**.

Table 8: Approved Operating Hours

Activity	Day	Time
All quarrying operations	Monday – Friday (except Public Holidays)	6am – 6pm
	Saturdays	8am – 1pm
	Sundays and Public Holidays	No activities
Transportation off-site	Monday – Friday (except Public Holidays)	6am – 6pm
	Saturdays	8am – 1pm
	Sundays and Public Holidays	No activities

3.2 Extraction

Wagga Wagga Quarry have continued extraction of sand and gravel from Cell 1/Stage 1 of the quarry by either a front end loader or excavator and hauled to the processing plant where it is sorted into sellable product.

3.3 Air Quality

The Proponent manages air quality in accordance with the Project's Air Quality Management Plan, EPL requirements, and Project Approval Conditions. The Proponent maintains a DustTrak monitor on site with SMS "real-time" response, a site weather station, and has 5 Dust Deposition Gauges (DDGs) located over the site.

The DDGs were relocated in consultation with the EPA in June 2016. **Figure 5** shows the current locations of DDGs and other particulate monitoring locations.

Over the reporting period, the DDG readings were generally compliant. Information published on the Hanson website (**Table 9**) indicates that there were four (4) instances of where monthly levels were higher than 4g/m²/month. Three (3) of these are unusually high levels and have been considered as anomalies and not a true representation of quarry emissions. It is noteworthy that these high levels were recorded during the flood events of September and November 2016.

Table 9: Extract of DDG records from Hanson Website

HANSON EPA LICENSE CONDITIONS - Public Monitoring Register						
Date	License No	Site Name	Monitoring Location	Test Type		Result
15 Sep 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)		37.2
15 Sep 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)		30.5
15 Sep 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)		27.8
15 Dec 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)		4.2

The DustTrak monitor was recording PM₁₀ levels in 10 minute intervals during the reporting period. Seven (7) instances (**Table 10**) were recorded where PM₁₀ levels for the 24 hour averaging period exceeded the criteria of 50µg/m³, two of these were marginal.

Table 10: DustTrak monitoring records showing 24Hr exceedances

Date	Average of DT2_MASS 10 MIN AVERAGE (µg/m ³)
01/05/2017	52.11458333
11/05/2017	60.07291667
12/05/2017	87.15625
13/05/2017	79.04166667
16/05/2017	56.95833333
17/05/2017	67.75
04/06/2017	51.35416667

The annual average PM₁₀ recorded by the DustTrak monitor was 17.7µg/m³ which is below the required criterion 30 µg/m³.

The Air Quality Management Plan was prepared by PAE Holmes (29 May 2012) and submitted to DP&E as Attachment A of the Environmental Management Strategy May 2012. The Air Quality Management Plan was revised to address comments provided by DP&E and re-submitted 2 February 2017 with the plan approved by the Secretary on 19 June 2017.

3.4 Noise

The proponent manages noise emissions in accordance with the project's Noise Management Plan which has been prepared by PAE Holmes and the Project Approval Conditions. The Noise Management Plan was revised to address comments and re-submitted to DP&E and approved by the Secretary on 19 June 2017.

There were no instances of noise related non-compliance.

3.5 Traffic

The Proponent is operating in accordance with the Traffic Management Plan as prepared by Intersect Traffic. The recommendations presented in the Traffic Management Plan will be continuously assessed throughout the life of the project. The Project continues to operate as per the Project's Traffic Management Plan.

There were thirteen (13) instances (see Appendix A) where the transportation movements exceeded the stipulated 3 dispatches per hour between the hours of 3pm – 6pm and seven (7) instances where the Saturday dispatch hours were exceeded. There were no exceedances after 4pm. Breaches are due to a need to meet high customer demand for products supplied to the local area.

3.6 Water

Groundwater and surface water is managed in accordance with the Project Water Management Plan (WMP), EPL requirements and the Project Approval Conditions.

There has been substantial development in the site's water management. Firstly the riverbank repair works have been structurally completed during the reporting period.

Secondly the *Water Management Improvement Program* has been progressively established during the reporting period. The system has substantially upgraded the water flows and water recycling over the site in general accordance with the *Water Management Improvement*

Program. The implementation of the *Water Management Improvement Program* has resulted in the quarry no longer requiring drawing processing water directly from the Murrumbidgee River, and removal of two river pumps. Furthermore, the implementation of the *Water Management Improvement Program* has resulted in no discharge from the licence discharge point.

The implementation of the *Water Management Improvement Program* is currently being assessed in regards to Project Approval Schedule 2, Condition 7 relating to approval to excavate materials below the currently approved depth of 158m AHD.

The site has five groundwater loggers which sample water depth and temperature on a continuous hourly basis. One logger (W0705) was lost during the reporting period as bore 705 was destroyed during the flooding of Cell 1 in September/October 2016. Two loggers were faulty and sent back to supplier for data recovery.

The site surface water monitoring was compliant during the reporting period.

The Water Management Plan and Sub-Plans were reviewed by the DP&E, revised and submitted to the DP&E for approval.

3.7 Landscape and Biodiversity

The project has generally maintained compliance with the various biodiversity management plans and the rehabilitation management plan. The Rehabilitation Management Plan is currently being revised at the date of this audit to address the outstanding comments received from the DP&E on 19 June 2017.

3.8 Next Reporting Period

The following activities are proposed actions for the July 2017-June 2018 reporting period. The results of these proposed actions will be reported on in the next Annual Review.

3.8.1 Extraction

Extraction will continue in the current pit (Cell1/Stage 1) throughout the next reporting period in the same manner as it is currently conducted.

3.8.2 Rehabilitation

Environmental management including continued weed management and seeding/planted of vegetation at rehabilitated areas (as they become available/in case of flooding event) will continue throughout the next reporting period in the same manner as it is currently conducted. Further weed inspections by the Wagga Wagga Council are to be planned during the next reporting period.

3.8.3 Water Management

Water usage is expected to be calculated with the assistance of DPI Water in the next reporting period.

The implementation of the *Water Management Improvement Program* is currently being assessed in respect to Project Approval Schedule 2, Condition 7 regarding the approval to excavate materials below the currently approved depth of 158m AHD.

3.8.4 Traffic Management

Hanson is applying for a Modification Application to MP 07_0069 to increase heavy vehicle traffic movements between the weekday hours of 3pm to 6pm.

4 ACTIONS REQUIRED FROM PREVIOUS ANNUAL REVIEWS

Table 11 outlines the actions taken from the previous annual review and where in this annual review the actions have been addressed.

Table 11: Actions from the previous Annual Review

Action required from previous Annual Review	Requested by	Action taken by the Operator	Where discussed in Annual Review
Report progress of DPE Compliance Audit July 2015	DPE	Items actioned where relevant.	Table 2
Sh.5, C.3 (b)	DPE	Predictions and Actuals addressed.	Table 13
Sh.2, C.6 (b) does not make reference to average movements over the 3 hour period	DPE	Truck movements between 3pm-6pm counted for each separate hour.	Section 3.5, Section 5.4, Table 20
Where trend data exists, it should be presented in graph form	DPE	Items actioned where relevant.	Figure 6, Figure 12
Reference Approval number in S.2.3	DPE	Referenced.	Section 2.1
Production volumes do not correlate with the reporting period	DPE	Production volumes in-line with the reporting period.	Table 7
No table identifying how previous ARs have been addressed	DPE	Table included in this AR.	Table 11
Formal approval from DPE required to cease CCC	DPE	CCC meeting re-activated.	Section 5.7

5 ENVIRONMENTAL PERFORMANCE

5.1 Environmental Management Plans

The following environmental management/monitoring plans have been prepared in accordance with the requirements of the Project Approval:

- *Air Quality Management and Monitoring Plan* (Hanson, March 2017);
- *Noise Monitoring Plan* (Hanson, March 2017);
- *Traffic Management Plan* (Hanson, March 2017);
- *Comprehensive Water Audit* (Evans & Peck; June 2012);
- *Water Improvement Program* (Evans & Peck; March 2013)
- *Waste Management Plan* (Hanson , November 2016);
- *Biodiversity Management Plan* (Hanson, September 2016);
- *Rehabilitation Plan* (Hanson Construction Materials; September 2014)
- *Water Monitoring Program* (Martens and Associates; June 2015);
- *Water Management Plan* (Martens and Associates; June 2015) which includes;
 - Site Water Balance.
 - Erosion and Sediment Control Plan.
 - Surface Water Management Plan.
 - Flood Management Plan.
 - Contingency measures.

A summary of monitoring plans is provided in **Table 12**.

Table 12: Summary of Environmental Monitoring

Plan	Monitoring Frequency	Monitoring
Surface Water Monitoring Plan	Monthly	TSS
Air Quality Management and Monitoring Plan	Monthly	Dust deposition monitored by 5 Dust Deposition Gauges
	Continuous	Particulate matter < 10 µm (PM ₁₀) monitored by a DustTrak Monitor
	Continuous	Meteorological monitoring via AWS on site.
Noise Monitoring Program	Commencement of each stage of extraction/development.	Unattended noise monitoring at the nominated sensitive receivers (NMP) for 7 days (site must be operating normally during the monitoring period).

	Commencement of each stage of extraction/development.	Operator attended monitoring at the nominated sensitive receivers for a minimum of two 15 minute periods during hours of operation (site must be operating normally during the monitoring period).
	In response to complaints	Operator attended monitoring at the receiver where complaint was received for a minimum of two 15 minute periods during hours of operation (site must be operating normally during the monitoring period).
Traffic and Transport Management Plan	Quarterly	Product materials transported from the site, including the date, time and tare weight of each product haulage vehicle dispatched from the site
Various Biodiversity Management Plans	Reported Annually, activities conducted as required.	Weeds & riverbank repair vegetation.

Table 13: Summary of Environmental performance

Aspect Approval criteria /	EIS prediction	Performance during the reporting period	Trend / key management implications	Implemented/ proposed management
Noise	Table 14	No complaints	No complaints during the three previous reporting periods.	Noise monitoring check prior to commencement of Stage 2.
Air	Table 15: PM10 - Annual Limits	17.7µg/m ³ which is below the required criterion 30 µg/m ³ .	No trend yet.	Continuous monitoring during the next reporting period.
	Table 16: PM10 - 24 hour Limits	Seven (7) instances were recorded PM ₁₀ levels for the 24 hour averaging period exceeded the criteria of 50µg/m ³	No trend yet.	Continuous monitoring during the next reporting period.
	Table 17: Deposited Dust - Annual and Monthly Limits	There were four (4) instances of where monthly levels were higher than 4g/m ² /month. Three (3) of these are unusually high levels and have been considered as anomalies and not a true representation of quarry emissions. It is noteworthy	Improvement on previous reporting period of six exceedances.	Mitigation measures as per the AQMP.

		that these high levels were recorded during the flood events of 2016.		
Transport	Shall not permit more than six heavy vehicle movements per hour (total of all quarry haulage truck movements into and out of the site) between 3:00pm and 6:00pm on any weekday	13 occurrences of more than 3 trucks per hour dispatched between 3pm-6pm due to customer demands.	Previous reporting period recorded 12 breaches of out of hours dispatches	A modification will be applied for to increase the allowable truck movements between 3p-6pm weekdays. Consultation with the CCC indicates that this would be acceptable subject to the details of the application.
Surface Water	EPL discharge limit of 50mg/L TSS	Highest recorded levels being 46 mg/L for the "River" and 7mg/L for the "Settling Pond".	Criterion continues to be met.	No river discharges have occurred from the licenced discharge point ("Settling Pond"). Notwithstanding this monthly monitoring sample of the "River" and "Settling Pond" will continue to occur.
Ground Water	Table 25: Comparison of groundwater drawn down levels	Lesser drawdown impacts than predicted. See Table 25: Comparison of groundwater drawn down levels.	Application to increase extraction depth to 152mAHD appears plausible.	Continue to monitor at existing locations. Replace logger in W0705 with W0703. Install new bore near Phi 2 and Settlement Pond

5.2 Noise

The Proponent managed noise compliance through the project's Noise Management Plan and the Project Approval conditions of consent. The Project has not progressed to the next development stage and therefore has not triggered noise monitoring during the reporting period. The last noise monitoring was undertaken 2012.

There have been not noise complaints during the reporting period.

Table 14 depicts a duplication of noise limits as per Project Approval condition 1, schedule 3.

Table 14: Noise Impact Assessment Criteria (dB(A) LAeq(15min))

Location	Day
Kullaroo 2	39
Riverglen	40
All other privately owned land	36

Supplementary attended monitoring: Not triggered.

Traffic: not applicable.

Complaints: no complaints made during the reporting period.

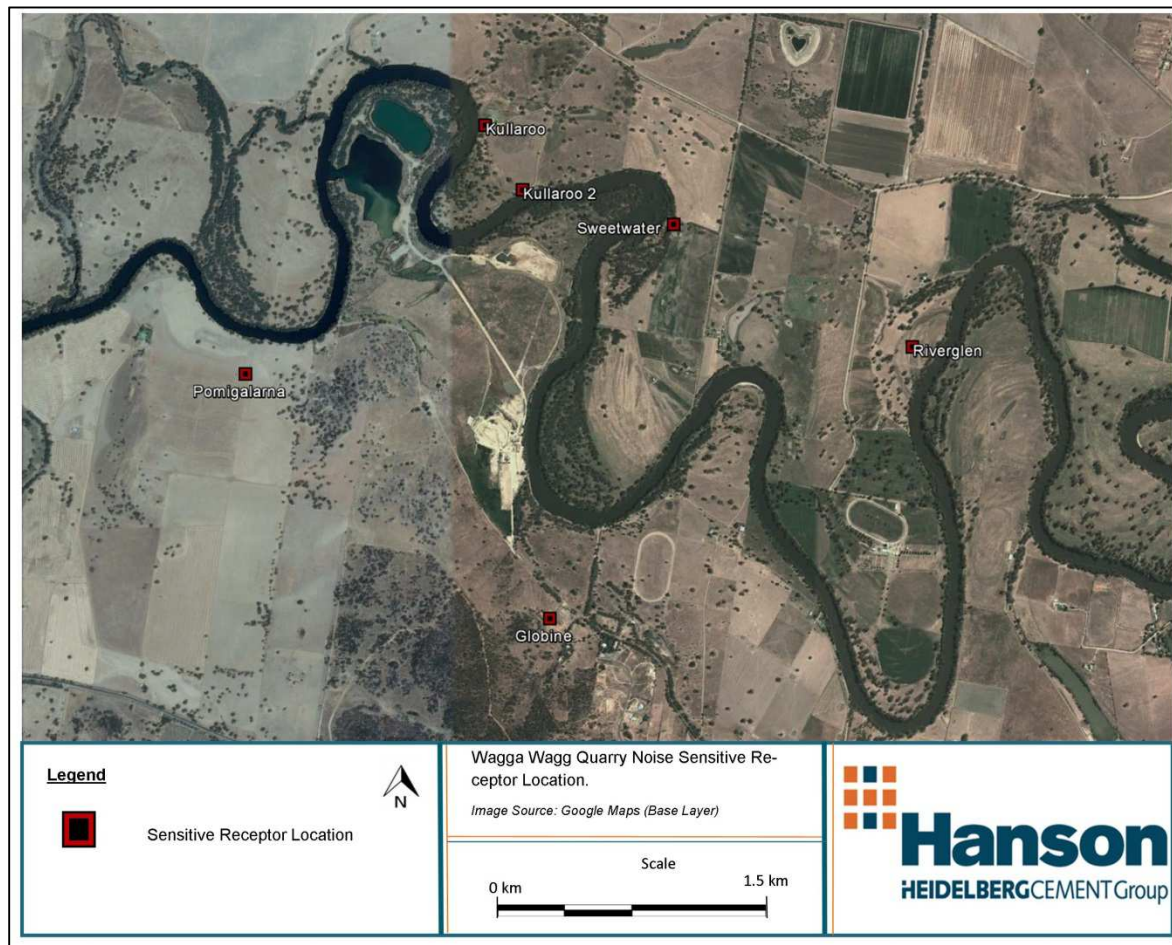


Figure 4: Noise and Air Sensitive Receptors

5.3 Air Quality

The operation of the quarry must comply with conditions of air quality impact assessment criteria (Condition 5 of schedule 3 of the Project Approval), operating hours (condition 2 of schedule 3 of the Project Approval) and air quality management (conditions 6 and 7 of schedule 3 of the Project Approval). All reasonable and feasible avoidance and mitigation measures must be employed so that particulate matter emissions generated by the project do not cause an exceedance of the criteria shown in **Table 15**, **Table 16** & **Table 17**.

Table 15: PM₁₀ - Annual Limits

Pollutant	Averaging Period	^a Criteria
Total Solid Particulates (TSP)	Annual	^a 90 µg/m ³
Particulate matter <10 µm (PM ₁₀)	Annual	^a 30 µg/m ³

Table 16: PM₁₀ - 24 hour Limits

Pollutant	Averaging Period	^a Criteria
Particulate matter <10 µm (PM ₁₀)	24hr	^a 50 µg/m ³

Table 17: Deposited Dust - Annual and Monthly Limits

Pollutant	Averaging Period	Maximum Project Contribution	Maximum Total Deposited Dust Level
^c Deposited Dust	Annual	^b 2 g/m ² /month	^a 4 g/m ² /month

The *Air Quality Management Plan* and has been adhered to during the reporting period. The management plan summary outlined in **Table 12** is required to meet the objectives outlines the Plan.

The Management Plan is summarised by the following;

- Five Dust Deposition Gauges
- DustTrak Monitor (real time)
- Hi-Volume Sampler for a 3 month period
- Metrological Monitoring – AWS

5.3.1 Deposited Dust

Information published on the Hanson website (Table 9) indicates that there were four (4) instances of monthly levels that were higher than 4g/m²/month. Three (3) of these are unusually high levels and have been considered as anomalies and not a true representation of quarry emissions. It is noteworthy that these high levels were recorded during the flood events of 2016. The non-compliances have been assessed in respect to operational and metrological factors in **Table 18**.

Table 18: DDG Non-Compliances

Month	DDG ID	DDG ID and Reading	Operational and/or Metrological Factors
November 2016	DDG2	4.2g/m2/mth	<p>Weather:</p> <ul style="list-style-type: none"> • Average temp- 19C • High temp- 36.4C • Total Rain- 34.6mm • Days of rain >2mm- 5 • Wind speed Avg- 2.8km/h • Wind Direction- W • High Gust- 43.5km/hr (12th Nov)

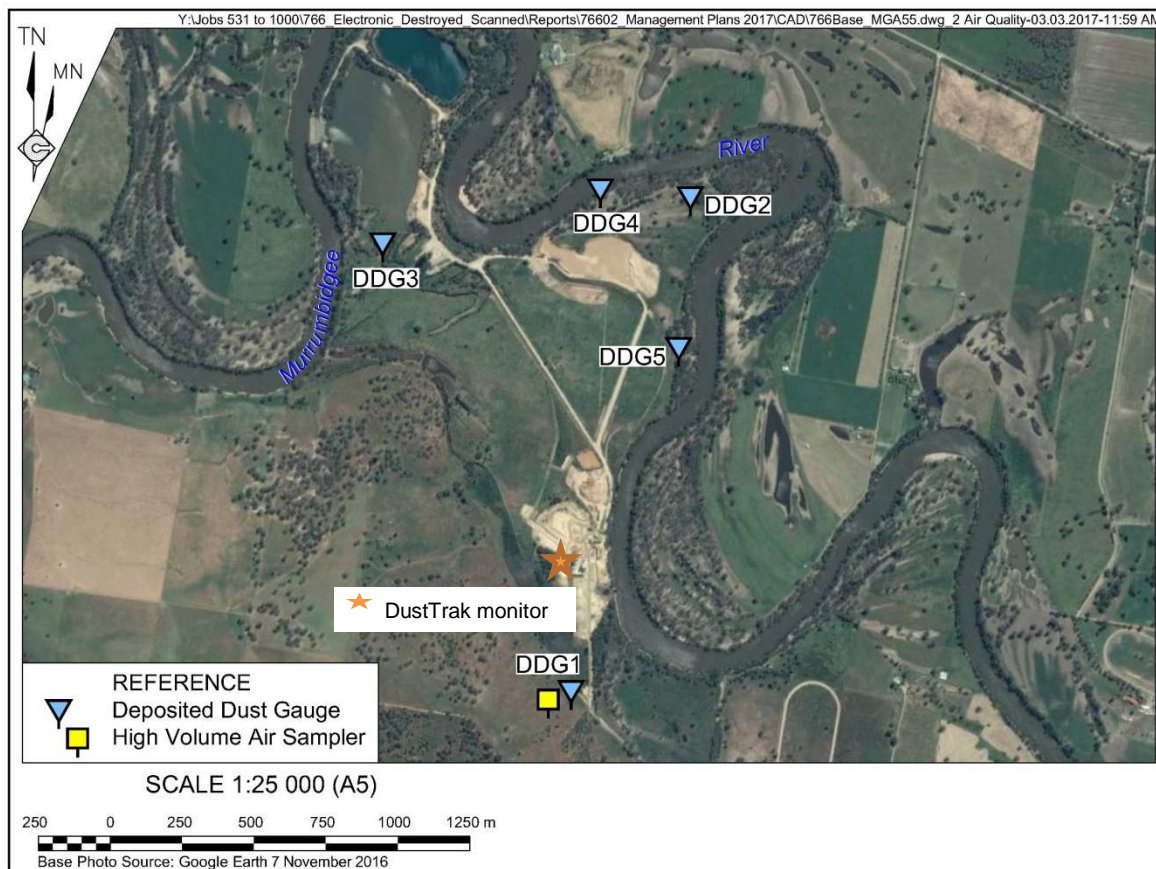


Figure 5: Location of Air Monitors

5.3.2 PM₁₀ results

The DustTrak monitor was recording PM₁₀ levels every 10 minute intervals during the reporting period. There were seven (7) instances were recorded PM₁₀ levels for the 24 hour averaging period exceeded the criteria of 50µg/m³ (**Table 19**).

Table 19: PM₁₀ 24Hr Average Non-Compliances

Date	Average of DT2_MASS 10 MIN AVERAGE (µg/m ³)
01/05/2017	52.11458333
11/05/2017	60.07291667
12/05/2017	87.15625
13/05/2017	79.04166667
16/05/2017	56.95833333
17/05/2017	67.75
04/06/2017	51.35416667

The average PM₁₀ data was obtained from the DustTrak data. Readings are taken every 10 minutes and the results have been charted against the 24 Hour Average criterion of 50 µg/m³ (**Figure 6**). There are only five days of erroneous data, which is considered acceptable.

The annual average for PM₁₀ for the reporting period was 17.7µg/m³. This complies with the 30µg/m³ annual limit as outlined in the Development Approval (**Table 6**).

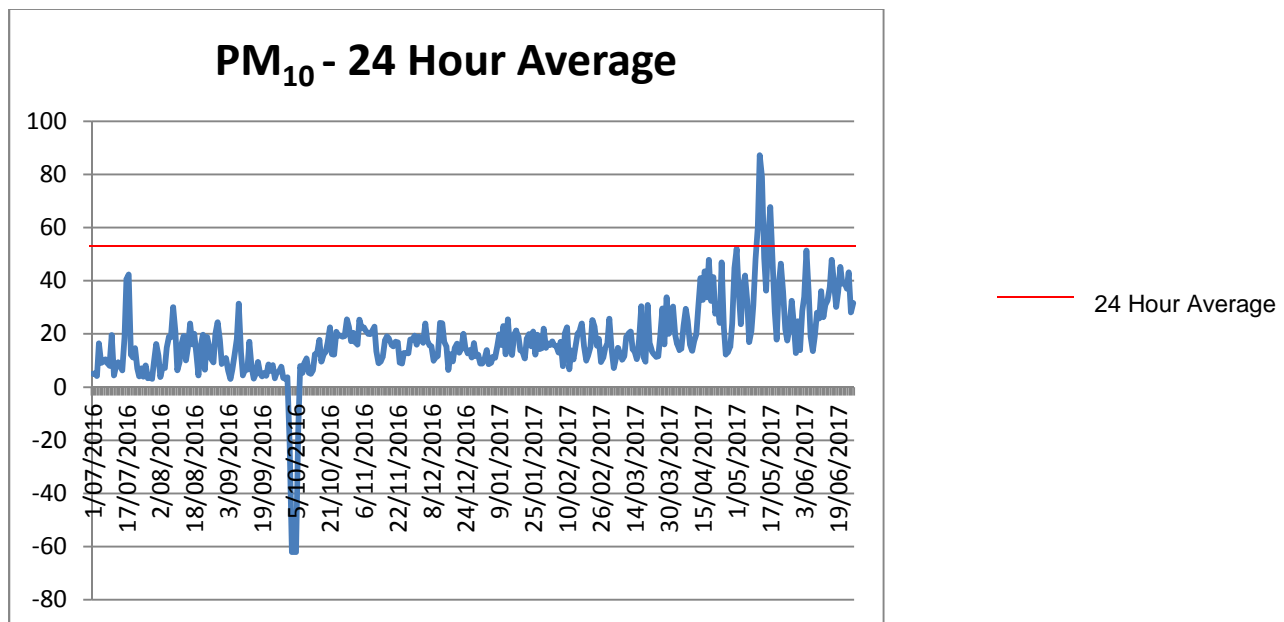


Figure 6: DustTrak Results (24-Hour Average)

5.4 Transport Management

There were thirteen (13) instances (see Appendix A) where the transportation movements exceeded the stipulated 3 dispatches per hour between the hours of 3pm – 6pm and seven (7) instances where the Saturday dispatch hours were exceeded. There were no exceedances after 4pm. Breaches are due to a need to meet high customer demand for products supplied to the local area. The details of these are shown in

Table 20.

Table 20: Transport Management Non-Conformances

Date	Time	Details of Non-Compliance (NC)
04/08/2016	3pm – 4pm Weekday (15:28:00; 15:34:00)	2 truck exceedance due to human error.
05/08/2016	3pm – 4pm Weekday (15:39:00; 15:41:00)	2 truck exceedance due to human error.
09/08/2016	3pm – 4pm Weekday (15:25:00)	1 truck exceedances due to human error.
12/08/2016	3pm – 4pm Weekday (15:24:00; 15:50:00)	2 truck exceedances due to human error.
29/08/2016	3pm – 4pm Weekday (15:32:00; 15:35:00)	2 truck exceedances due to human error.
28/09/2016	3pm – 4pm Weekday (15:26:00)	1 truck exceedances due to human error.
19/11/2016	Before 8am Saturday (07:25:00; 07:35:00; 07:48:00)	3 truck exceedances due to human error.
14/01/2017	Before 8am Saturday (07:35:00)	1 truck exceedances due to human error.
19/01/2017	3pm – 4pm Weekday (15:01:00; 15:05:00; 15:18:00; 15:33:00)	4 truck exceedances due to human error.
22/02/2017	3pm – 4pm Weekday (15:04:00; 15:15:00; 15:16:00; 15:28:00; 15:57:00)	4 truck exceedances due to human error. Administrative NC. The time printed on the ticket does not allow for the time taken for the truck driver to exit the truck at the weighbridge collect the ticket, climb back aboard the truck and drive out of the quarry. These tasks would have taken more than 3 minutes
2/03/2017	Before 6am Weekday 05:57:00	Administrative NC. The time printed on the ticket does not allow for the time taken for the truck driver to exit the truck at the

		weighbridge collect the ticket, climb back aboard the truck and drive out of the quarry. These tasks would have taken more than 3 minutes.
04/03/2017	After 1pm Saturday (13:10:00)	1 truck exceedances due to human error.
14/03/2017	3pm – 4pm Weekday (15:08:00; 15:09:00; 15:18:00)	3 truck exceedances due to human error.
16/03/2017	3pm – 4pm Weekday (15:10:00; 15:28:00; 15:38:00; 15:47:00)	4 truck exceedances due to human error.
30/03/2017	3pm – 4pm Weekday (15:46:00; 15:54:00; 15:56:00; 15:58:00; 16:00:00)	3 truck exceedances due to human error. Administrative NC. The time printed on the ticket does not allow for the time taken for the truck driver to exit the truck at the weighbridge collect the ticket, climb back aboard the truck and drive out of the quarry. These tasks would have taken more than 3 minutes.
05/04/2017	3pm – 4pm Weekday (15:33:00; 15:40:00; 15:47:00; 15:50:00)	4 truck exceedances due to human error.
08/04/2017	After 1pm Saturday (13:16:00)	1 truck exceedances due to human error.
29/04/2017	Before 8am Saturday (07:28:00; 07:37:00)	2 truck exceedances due to human error.
13/05/2017	Before 8am Saturday (07:36:00)	1 truck exceedances due to human error.
17/06/2017	After 1pm Saturday (13:05:00)	1 truck exceedances due to human error.
19/06/2017	3pm – 4pm Weekday (15:06:00; 15:13:00; 15:30:00; 15:41:00)	4 truck exceedances due to human error.

5.4.1 Traffic Incident Register

Table 21: Traffic Incident Register

Date	Incident Details
There have been no recorded traffic incidents during the reporting period.	

5.4.2 Code of Conduct Register

The site has three main drivers regularly operating vehicles on site. These three employees have been signed up to the driver code of conduct. Three additional employees have also signed the code of conduct during the reporting period.

Table 22: Code of Conduct Register

Transport Company	Number of Drivers Signed up to Date
Hanson	Six (6)

5.5 Water Management

The implementation of the *Water Improvement Program* (11 March 2013), Evans & Peck, in particular the Water management Option 1 identified in that report, has resulted in the quarry adopting the use of a recycled processing water system. The consequential environmental improvement is the cessation of the need to draw processing water directly from the Murrumbidgee River. Accordingly, Hanson has removed the two river pumps and installed these within the internal water recycling system. The results are demonstrated in **Table 23**.

5.5.1 Licencing and water take

Table 23: Quarry water usage and licencing entitlements

WAL #	Water sharing plan, source and management zone (as applicable)	Entitlement	Passive take / inflows	Active pumping	TOTAL
WAL37001	Murrumbidgee regulated river water source	100 Units	0	0	0
WAL3788	Murrumbidgee regulated river water source	50 Units	0	0	0
WAL33474	Wagga Wagga alluvial groundwater source	360 Units	8.8 ¹	289 ²	297.8

Notes:

1. EIS evaporation for Stage 1.
2. Provided by Water NSW.

5.5.1.1 Flooding History at the Site

Wagga Wagga Quarry is located on the banks of a large meander of the Murrumbidgee River. Due to the locality of the quarry, it has been subject to four major flooding events.

- December 2010 where the Murrumbidgee River reached 9.702m (15.5 years ARI); and
- March 2012 in which the Murrumbidgee River reached 10.602m (58years ARI). Data was taken from the Wagga Wagga gauge (410001).
- 13 September 2016 where the Murrumbidgee River reached 8.318m.
- 5 October 2016 where the Murrumbidgee River reached 8.952m.

In both flooding events of 2016 the repairs riverbank and fuse plug/spillway of Pit 2 performed as per its design (

Figure 7).

Cell 1 levee suffered damage (**Figure 8**) during the flood event on 13 September 2016. The damage area was under repair when the river flooded again three weeks later on 5 October 2016. This flood was higher than the 13 September flood and the flood waters caused further damage (

Figure 9) which resulted in a scoured breach from the Cell 1 pit to the river as well as the loss of bore 705.

It should be noted that the river levels only raised high enough to fill the low lying channels and gullies adjacent to the Cell 1 levees. The perched water caused the levees to become saturated and resulted in localised collapses. The breach has since been repaired and the Cell 1 pit is in the stages of completing repair works to the damaged areas (**Figure 10**).



Figure 7: 2016 Flooding of Wagga Wagga Quarry



Figure 8: Damage to Cell 1 levee during 13 September 2016 flood



Figure 9: Further damage to Cell 1 levee during 13 September 2016 flood



Figure 10: Flood damage repair work to Cell 1 levee

Wagga Wagga Quarry Water Management Plan and Water Monitoring Program have been submitted to the Department and are continued to be progressively implemented over the reporting period.

5.5.2 Groundwater Analysis

Groundwater monitoring bores were installed in June 2012 to assist in monitoring the effectiveness of the Water Management Improvement Program.

Wagga Wagga Quarry has five (5) active borehole water depth loggers on site, which for the most part operate effectively and accurately. The ground water monitoring bore data is recorded continuously every hour. This data is stored in the logger and is able to be collected periodically and uploaded digitally. However the logger technology at Wagga Wagga Quarry has malfunctioned at times, especially over the past year and a half. An explanation of logger functionality is detailed in the Table 24.

Table 24: Logger operational status

Logger ID	Operational Dates	Explanation
701	01/07/2016 – 31/06/2017	Data available (Figure 12)
702	01/07/2016 - 31/06/2017	Data unrecoverable from faulty logger
704	01/07/2016 - 31/06/2017	Data available (Figure 12)
705	01/07/2016 - 13/09/2016	Data logger was lost in September flooding/unable to retrieve data
707	01/07/2016 – 16/09/2017	Partial data recovered from faulty logger (Figure 12)



Figure 11: Location of Groundwater Monitoring Bores (no loggers in 706, & 703)

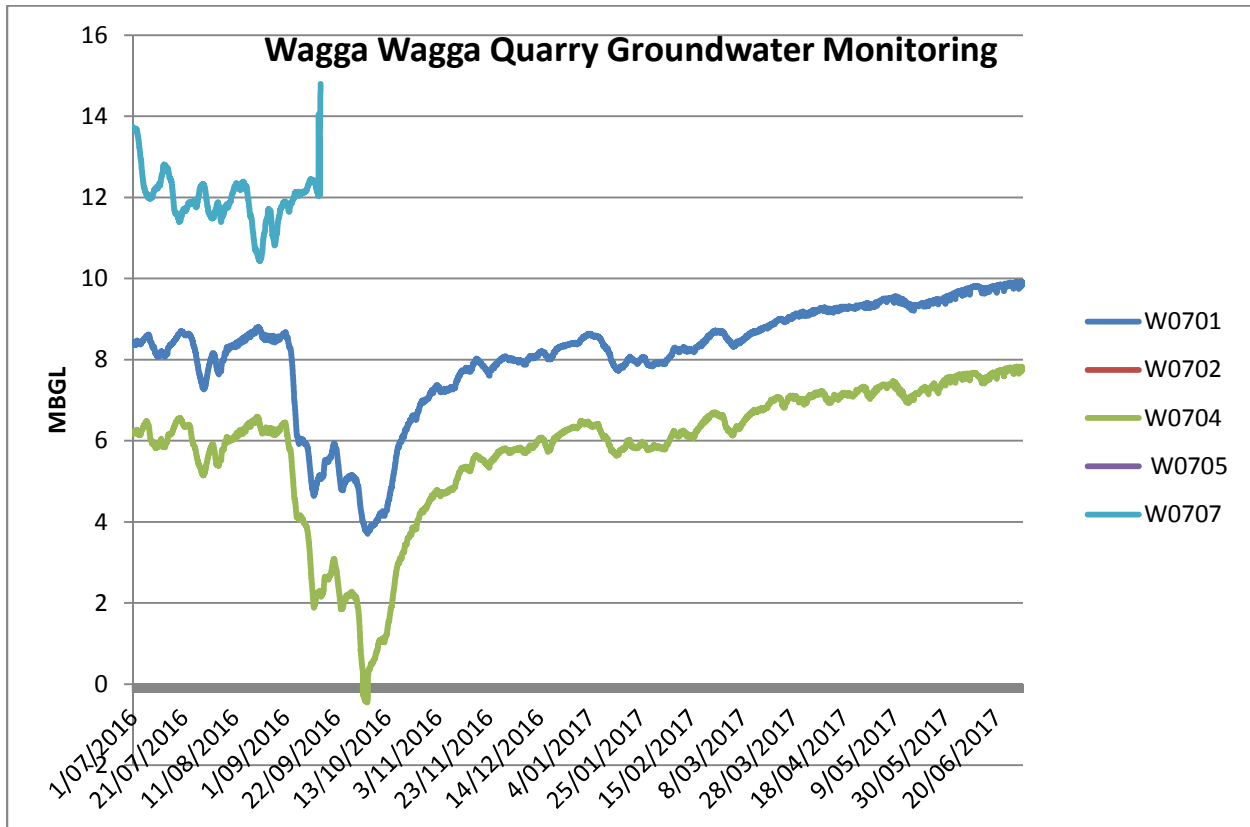


Figure 12: Groundwater Monitoring Bore Results

5.5.2.1 Groundwater Data

The groundwater level drawdown data is shown in **Table 25**. The groundwater level drawn down difference between the standing water levels (SWL) at the time of the borehole construction and the averages for 2016-2017 indicates that bore W0701 and W0704 experienced an increase in SWL and therefore a positive gain in groundwater levels as opposed to the EIS predicted drawdown losses shown in the last row of **Table 25**.

The drawdown groundwater level difference between the standing water levels (SWL) at the time of the borehole construction and the averages for 2016-2017 indicates that bore W0707 has experienced a decrease in SWL and therefore a loss in groundwater level. Please note that W0707 has incomplete data due to faulty datalogger hardware which was also affected by site management of the September 2016 flooding event.

The flooding events during September and October 2016 can be seen in the sharp dip indicated in W0701 and W0704 which has since stabilised, shown in **Figure 12**.

Table 25: Comparison of groundwater drawn down levels

	SWL (AHD)m				
	W0701	W0702	W0704	W0705	W0707
Average July 2016 – June 2017	169.09	N/A	169.77	N/A	165.95
Bore Construction	167.58	167.5	167.17	167.39	167.64
Predicted Oct 2015	166.59	164.98	165.78	157.6	167.32
Observed drawdown (-ve(loss), +ve(gain))	1.51	N/A	2.60	N/A	-1.69
Predicted drawdown (-ve(loss), +ve(gain))	-0.99	-2.52	-1.39	-9.79	-0.32

5.5.3 Surface Water Analysis

Water is tested monthly from the “Settling Pond” and the “River”. All results during the reporting period comply with the 50 mg/L EPL limits with the highest recorded levels being 46 mg/L for the “River” and 7mg/L for the “Settling Pond”.

5.5.3.1 Comparison with previous years reporting periods

Table 26: Comparison between previous reporting periods

Reporting Year	Exceedances
2015 - 2016	Nil
2016 - 2017	Nil

5.6 Rehabilitation

5.6.1 Overview

The site operates in accordance with the Wagga Wagga Quarry Flora and Fauna Management Plan. The site has not conducted any vegetation clearance during the reporting period.

5.6.1.1 Status

Self-seeding has been the predominant rehabilitation strategy applied at Wagga Wagga quarry. Mature *Eucalyptus camaldulensis* dominate the banks of the Murrumbidgee River. Pollination by insects, birds and small mammals, enables the species to release numerous fertilised seeds per year. If the conditions are acceptable, these seeds will germinate into viable saplings. The succession of vegetation in these areas will develop soil structure integrity and promote associated ecological system benefits.

The Project has engaged manual seedling over the river bank repaired area. Seed base of native grasses has been established with preliminary pleasing results. Planting of Red River

Gums has been completed at the river bank repair works. Red River Gum is a species that is planted in accordance with the *Rehabilitation Management Plan*.

5.6.1.2 Weed Management

Wagga Wagga quarry will continue to operate as is current, which does not include active spraying or removal of weeds on site. Should weeds alter in terms of the species on site, or the spread of weeds, the quarry management will assess site applicable weed maintenance/removal measures.

5.6.2 Statutory Requirements

5.6.2.1 Project Approval

The Project Approval requires a Rehabilitation Management Plan. The Statement of Commitments stipulates the following (see **Section 5.6.2.2 Statement of Commitments** for further details);

- Vegetation Clearance Management Plan
- Revegetation Plan
- Feral Animal Control Management Plan
- Weed Management Plan

5.6.2.2 Statement of Commitments

The Project Approval includes a Statement of Commitments from the Proponent.

In order to minimise the impact of vegetation clearing the proponent will commission and commence a Vegetation Clearance Management Plan, Revegetation Plan, Feral Animal Control Management Plan, and Weed Management Plan prior to commencement of quarrying activities. These plans will be developed by a suitably qualified and experienced person and take into consideration the following:

- *Implications of meta-population dynamics*
- *Implications of transitional zone dynamics*
- *Episodic high disturbance events*
- *Loss of functional role of species*
- *Clearing of native vegetation; and removal of dead wood and dead trees*
- *Bush rock removal*
- *Invasion of exotic perennial grasses*
- *Predation by European Red Fox , Feral Cats, and Rabbits*

5.6.2.3 Biodiversity/Rehabilitation Management Plans

Flora and Fauna management plan for the Hanson Wagga Wagga Quarry Extension Project. The contents of this report will include a Vegetation Clearance Management Plan, Revegetation Plan, Feral Animal Control Management Plan and Weed Management Plan.

Table 27: Performance against the Biodiversity/Rehabilitation Management Plans

Objective Outlined in Management Plan	Compliance over the reporting period
Clearing of native vegetation, hollow stumps and fallen timber	
Any hollow logs currently present within Cell 1 of the proposal will be removed and stockpiled for use in restoration following the completion of extraction at each stage. Logging waste will be stockpiled on the outer of Cell 1 (to the North-East) away from the area which is to be excavated for the quarry pit.	<i>Logs were re-allocated on site.</i>
Vegetation to be retained outside of the extraction areas will be fenced off to protect it from machinery.	<i>Rehabilitation area has been fenced off. Vegetation is excluded by the strategic construction and use of haul roads on site and identified workings areas, preventing off road transit.</i>
Top soil will be stockpiled and used in rehabilitation work as each stage is exhausted. It is expected that Cell 1 and about 80m to the south will be filled back to the existing ground level and revegetated on completion of extraction in Cell 1. The remainder of Cells 2 and 3 will be flooded and used for water storage upon their completion of extraction.	<i>Top soil is stockpiled when it is not used for works on site directly. Cell 1 has not been exhausted and therefore the majority of this recommendation has not been triggered.</i>
Quarry sand and gravel material will be extracted using a 40T excavator and material will be transported to the crushing plant in the south of the property via 35T dump trucks.	<i>Noted.</i>
The banks of each stage will be revegetated with native plant species similar to the surrounding vegetation community (river red gum forest/woodland), ultimately resulting in a series of dams similar to the restored area in the north-west of the existing Pit 1.	<i>Not yet triggered.</i>
A fauna expert/trained wildlife rescue person will be called in the event that any wildlife is found during the removal of the hollow bearing tree within Cell 4. This person will be trained in handling and identification of a range of fauna, particularly birds and bats and be vaccinated for rabies as protection against the bat lyssavirus.	<i>Not triggered</i>
Revegetation and prevention of feral animals	
Baiting of rabbits, foxes and cats within the confines of the quarry as required.	<i>Not required during the reporting period</i>

Areas outside the quarry pit areas that are revegetated, including the riparian vegetation along the Murrumbidgee River, will be fenced to prevent cattle from entering. Fences will be maintained in good repair and will be regularly patrolled. The use of barbed wire will be avoided as squirrel gliders and other fauna are known to become tangled and could suffer a long and painful death.	<i>The fences around the property were replaced following the 2012 Floods. The fences are inspected by quarry staff approximately every quarter. In addition, the adjacent landholder inspects fencing regularly as part of his cattle farming operations.</i>
Revegetation will allow a natural regrowth of trees, shrubs and groundcovers. River Red Gums are likely to spread from local seed, however shrubs and groundcovers may need to be planted. Only species natural to the River Red Gum Forest/Woodland will be planted.	<i>Noted</i>
New hauls roads will be constructed to eliminate and impact on existing riparian habitats.	<i>The site uses designated haul roads</i>
Weed management control	
Systematic surveys and inspections of land within the control area.	<i>Quarry manager informally surveys the site for weeds on a regular basis.</i>
Plan strategic weed management programs for the control area and keep records of such programs	<i>During the 2014 – 2015 reporting period, Wagga Wagga Quarry was inspected for weeds by Wagga Wagga City Local Council. It was deemed that no significant weeds were identified on site and general hygiene practises on site were deemed satisfactory and actual excavation area free of weed material.</i>
Treat weeds with an herbicide registered for control in the manner according to the label or any permit for that herbicide.	<i>During the 2014 – 2015 reporting period, Wagga Wagga Quarry was inspected for weeds by Wagga Wagga City Local Council. It was deemed that no significant weeds were identified on site and general hygiene practises on site were deemed satisfactory and actual excavation area free of weed material.</i>
Coordinate the implementation of weed management plans.	<i>Noted.</i>
Control Re-growth annually.	<i>Noted.</i>

5.6.2.4 Vegetation Management Plan for the Riverbank Repair

A Vegetation Management Plan for the Riverbank Repair was prepared June 2013 by Geoff Cunningham Natural Resource Consultants Pty Ltd.

Table 28: Performance against the Vegetation Management Plan for the Riverbank Repair

VMP Requirement	Action
The River Red Gums to be established should be grown from locally sourced seed to ensure that the establishing trees have the same genetic qualities as the River Red Gums that are already growing in the vicinity.	<i>In progress.</i>
The trees should be planted from the top of the bank [levee] to the point where the natural growth of the gallery trees ends closer to the river's normal channel. Figure 1 shows the area that is proposed to be planted on both the inside [quarry side] face of the repaired bank and on the river side.	<i>In progress.</i>
A suggested irregular spacing is between 5 and 10 metres.	<i>Noted.</i>
Around each planted seedling an area 3m x 3m square should be protected by rock armouring comprised of stones about 15cm in diameter.	<i>Not implemented. This is considered to be a low risk threat. Fallen tree logs may be substituted where appropriate.</i>
Each seedling should also be protected by a welded mesh tree guard to protect it from grazing by rabbits, kangaroos and wayward sheep or cattle.	<i>In progress.</i>
WITHOUT FAIL, the Quarry Manager should have the tree guards removed as soon as there is an indication that the site is about to experience a flood or high river level. The guards should be progressively removed as the river rises and then replaced at it falls.	<i>Not yet triggered.</i>
Any seedlings that die should be immediately replaced as should any that are washed out by floodwater.	<i>In progress.</i>
Any introduced shrubs and trees such as Blackberry, Briar Rose, fruit trees, exotic ornamentals or Willows should be treated with herbicide to remove them from the area being revegetated as soon as they appear.	<i>Not yet triggered.</i>
A maintenance period of four years should apply to the works proposed. This should allow the planted trees to establish sufficiently to allow the tree guards and star pickets to be removed and an adequate ground cover to establish.	<i>Not yet triggered.</i>

5.7 Community Relations

5.7.1 Stakeholder and Community Consultation

The Wagga Wagga Quarry Community Consultative Committee (WWQCC) was established in accordance with the NSW Government *Guidelines for Establishing and Operating a Community Consultative Committee for Mining Projects* (Guidelines), (Department of Planning 2007). The committee is made up of representatives of the following:

- Riverview Estate – 4 representatives
- Hanson – 2 representatives, plus a minute taker
- Chair – Independent Chair
- Wagga Wagga City Council – 1 representative

There have been two CCC meetings held during the reporting period (17 November 2016 & 23 May 2017). It was agreed upon that further CCC Meetings should be held annually as of 17 November 2016. The Minutes of the Community Consultative Committee Meetings are publicly available on the Hanson website.

6 INCIDENT REPORTING

Hanson shall notify the relevant government authorities of any incident associated with the Quarry immediately after the Company becomes aware of the incident, as per the Wagga Wagga Quarry Pollution Incident Response Management Plan. Within 7 days of the date of the incident, Hanson will provide the relevant agencies with a detailed report on the incident.

There have been no reportable incidents in the last reporting period.

7 CONCLUSION

Hanson has incorporated environmental monitoring and management as an integral component in the operations at Wagga Wagga Quarry. This is shown in Project Approval compliance and lack of complaints pertaining to the project. Hanson's major concern since the 2016 flooding event has been the repair of the riverbank to ensure project compliance and facilitation of the return to standard quarry practices. This reporting period has documented structural completion of these works and the implementation of the *Water Management Improvement Program*.

The project will continue extraction in cell 1 during the next reporting period utilising the same extraction and processing methods.

Hanson's Wagga Wagga Quarry has been operating based on a collegial relationship between the surrounding amenity, community and environment and will endeavour to continue this over the project life.

Appendix A

Transport Movements

Wagga Wagga Quarry Annual Review

07.2016..03.2017

3509 WAGGA QUARRY

Table

Calendar year	Calendar month	Calendar day	No of Divs	0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24
2017	1	9/01/2017	10										1	3	2	1	3		1									
		10/01/2017	1																									
		11/01/2017	11										4	1	2	1	1	2										
		12/01/2017	2									1					1											
		13/01/2017	6											3	2			1										
		14/01/2017	2									1	1															
		16/01/2017	22									3	3	5	2	4		5										
		17/01/2017	9									1	3			1	2	1	1									
		18/01/2017	10									2	2	1	2	1		1	1									
		19/01/2017	18									3	1	1	3	1	1		3		4	1						
		20/01/2017	12									2	1	1	1	4	1	1	1									
		21/01/2017	1											1														
		23/01/2017	6											2	2	1			1									
		24/01/2017	9									2	1		2													
		25/01/2017	12									3	1	1	3	1	1	1	1		2							
		27/01/2017	7									2	1	1	1													
		30/01/2017	17									4	3	1	1		2	3		1								
		31/01/2017	5									1				1			2	1								
		Result	160									26	24	20	22	19	10	16	14	8	1							
	2	1/02/2017	12									2	1	2	1	1	2	3										
		2/02/2017	22									2	2	6	4	2	2	3	1									
		3/02/2017	15									4	1		2	1		5	1	1								
		4/02/2017	6									1		2	1	2												
		6/02/2017	16									2	1	2	3		4	1	2	1								
		7/02/2017	25								1	3	4	4	1	2	1	4	2	3								
		8/02/2017	21									2	3	1	3	3	3	1	3	2								
		9/02/2017	16									2	2	4	2	1	2	2		1								
		10/02/2017	12									3	1		4		1		1	2								
		13/02/2017	11									3			2	1		2	3									
		14/02/2017	15									2	2		1		2	3	3	2								
		15/02/2017	16									1	1	3	2		2	4	2	1								
		16/02/2017	18									1	3	1	2	4	2	2	2	1								
		17/02/2017	13									3	2	3	1		2		1	1								
		18/02/2017	6									3	1	1	1		1											
		20/02/2017	9									2	1	1	1			2	1		1							
		21/02/2017	13									2	2	3	3			1	2	2								
		22/02/2017	22									2	2	3	1	1	2	1	5	5								
		23/02/2017	14									2	1	1	1	3	2	3		1								
		24/02/2017	13									1	1	1	2	1		3	2	2								
		25/02/2017	2										1				1											
		27/02/2017	8									1	2	1			1		3									
		28/02/2017	15									6	1	3	2	1				2								
		Result	320								1	40	40	38	39	30	28	39	37	27	1							
	3	1/03/2017	19									2	5		5		5	4	3									
		2/03/2017	27						1			2	3	2	3	5	3	3	5									
		3/03/2017	16									1	2		1	2	4	1	5									
		4/03/2017	1															1										
		6/03/2017	20									1	4	2	3	1	1	4	3	1								
		7/03/2017	10									2	1	2	1	1	2		1									
		8/03/2017	19									4	2		4	1	3	3	2									
		9/03/2017	22											2	3	2	3	5	4	3								
		10/03/2017	24									4	3	2	2		1	6	4	2								
		13/03/2017	18									2		2	4	4	1	4	1									
		14/03/2017	17										1	3	2			2	5	4								
		15/03/2017	12									1	1	1	1	2			3	2	1							
		16/03/2017	24									2	3	4	2	3		2	4	4								
		17/03/2017	21									4	3	2	2			2	5	3								
		18/03/2017	5										1	2	1													
		20/03/2017	14									1	1	2		2		2	3	3								
		21/03/2017	8									2	1		2	1		2										
		22/03/2017	8									3	1	3		1												
		23/03/2017	12									1	1	3	3	1	1	1		1								
		24/03/2017	5											2				1	1	1								
		25/03/2017	4											1	2	1												
		27/03/2017	23									4	3	3	3	3	3	2	2									
		28/03/2017	21									5	3	4	1	2	1	2	3									
		29/03/2017	14									3	1	2	1	2			2	3								
		30/03/2017	17										1	3	1		1	1	5	5								
		31/03/2017	21									2	4	2	1	2	3	1	4	2								
		Result	402							1		46	45	49	43	42	27	49	65	34	1							
	Result		882							1	1	112	109	107	104	91	65	104	116	69	3							
2016	7	1/07/2016	12									2	3			1	1	2		1								
		2/07/2016	6										2		1	1												
		4/07/2016	8									1		2	3					2								

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3509 WAGGA QUARRY

Table	Calendar year	Calendar month	Calendar day	Truck	Total Tare Weight	No of Dlys	0	0 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 13	13 to 14	14 to 15	15 to 16	16 to 17	17 to 18	18 to 19	19 to 20	20 to 21	21 to 22	22 to 23	23 to 24		
	2017	4	1/04/2017	ZX	41,24 TO	2												1		1													
	2017	4	3/04/2017	FOL2991	18,76 TO	1															1												
	2017	4	3/04/2017	PCA2855	14,32 TO	5										1	1	1	1		1												
	2017	4	3/04/2017	ZX	41,24 TO	13											3		4		2	3		1									
	2017	4	4/04/2017	FOL2991	18,76 TO	2															1												
	2017	4	4/04/2017	PCA2849	14,56 TO	7										1	1	1	1	1	1	1											
	2017	4	4/04/2017	ZX	41,24 TO	10											3	2		1	1	2	1										
	2017	4	5/04/2017	PCA2849	14,56 TO	6										1	1			1	1	1											
	2017	4	5/04/2017	ZX	41,24 TO	14											2		2	1	2			3	4								
	2017	4	6/04/2017	FOL2991	18,76 TO	2											1																
	2017	4	6/04/2017	PCA2849	14,56 TO											1	1		1	1		1	1										
	2017	4	6/04/2017	PCA2855	14,32 TO	1												1															
	2017	4	6/04/2017	PCA3465	16,98 TO	2															2												
	2017	4	6/04/2017	ZX	41,24 TO	13											2	2	1	6								2					
	2017	4	7/04/2017	PCA2855	14,32 TO	2														1	1												
	2017	4	7/04/2017	ZX	41,24 TO	4										1				1													
	2017	4	8/04/2017	ZX	41,24 TO	4													1									2					
	2017	4	10/04/2017	FOL23CB	8,30 TO	2																											
	2017	4	10/04/2017	PCA2849	14,56 TO	6										1	1		1	1													
	2017	4	10/04/2017	ZX	41,24 TO	4																											
	2017	4	11/04/2017	PCA2849	14,56 TO	5											1					2	1	1									
	2017	4	11/04/2017	PCA2855	14,32 TO	1																1	1	1									
	2017	4	11/04/2017	ZX	41,24 TO	11												2	2	3	2			1	1								
	2017	4	12/04/2017	FOL2F03	16,30 TO	2												1															
	2017	4	12/04/2017	PCA2849	14,56 TO	8										1	1			2			1	1	2								
	2017	4	12/04/2017	PCA2855	14,32 TO	2													2														
	2017	4	12/04/2017	ZX	41,24 TO	5											1			2													
	2017	4	13/04/2017	PCA2849	14,56 TO	8										1	1	1	1	1			1	2									
	2017	4	13/04/2017	PCA2855	14,32 TO	2																											
	2017	4	13/04/2017	ZX	41,24 TO	4												1	1	1		1											
	2017	4	18/04/2017	PCA2849	14,56 TO	2											1																
	2017	4	18/04/2017	PCA2855	14,32 TO	3											1	1															
	2017	4	18/04/2017	ZX	41,24 TO	9										3	2				1												
	2017	4	19/04/2017	PCA2849	14,56 TO	1												1															
	2017	4	19/04/2017	PCA2855	14,32 TO	1																											
	2017	4	19/04/2017	ZX	41,24 TO	5											1	2			1												
	2017	4	20/04/2017	PCA2849	14,56 TO	4										1	1			1	1												
	2017	4	20/04/2017	PCA2855	14,32 TO	1																											
	2017	4	20/04/2017	ZX	41,24 TO	7										1			2	3													
	2017	4	21/04/2017	FOL2F03	16,30 TO	1												1															
	2017	4	21/04/2017	PCA2849	14,56 TO	1										1																	

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Appendix B

Air and Water Monitoring

Wagga Wagga Quarry Annual Review

HANSON EPA LICENSE CONDITIONS - Public Monitoring Register

Date	License No.	Site Name	Monitoring Location	Test Type	Result	Comments	EPA contact
15 Jun 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.3		
15 Jun 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
15 Jun 2016	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	2.0		
15 Jun 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.7		
15 Jun 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	<0.2		
15 Jun 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	0.7		
15 Jun 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	4.8		
15 Jun 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	5.5		
15 Jun 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.8		
15 Jun 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.2		
15 Jun 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.0		
15 Jun 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
15 Jun 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
15 Jun 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	307.0		
15 Jun 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.3		
15 Jun 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
15 Jun 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	178.0		
15 Jun 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	8.3		
15 Jun 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	46.0		
15 Jul 2016	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
15 Jul 2016	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	0.6		
15 Jul 2016	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
15 Jul 2016	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	0.5		
15 Jul 2016	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	0.5		
15 Jul 2016	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	0.6		
15 Jul 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	1.0		
15 Jul 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	1.2		
15 Jul 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Jul 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.6		
15 Jul 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	0.7		
15 Jul 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	302.0		
15 Jul 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.0		
15 Jul 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
15 Jul 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	213.0		
15 Jul 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.8		
15 Jul 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	19.0		
15 Aug 2016	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	0.2		
15 Aug 2016	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
15 Aug 2016	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	0.9		
15 Aug 2016	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	<0.2		

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Date	License No.	Site Name	Monitoring Location	Test Type	Result	Comments	EPA contact
15 Aug 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.3		
15 Aug 2016	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	0.4		
15 Aug 2016	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	0.2		
15 Aug 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	0.8		
15 Aug 2016	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	1.0		
15 Aug 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.4		
15 Aug 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	0.3		
15 Aug 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	0.7		
15 Aug 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	0.6		
15 Aug 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	1.3		
15 Aug 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
15 Aug 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
15 Aug 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	0.6		
15 Aug 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	302.0		
15 Aug 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.3		
15 Aug 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	7.0		
15 Aug 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	196.0		
15 Aug 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.9		
15 Aug 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	24.0		
15 Sep 2016	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.5		
15 Sep 2016	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	36.6		
15 Sep 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	37.2		
15 Sep 2016	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.8		
15 Sep 2016	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	38.0		
15 Sep 2016	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	<0.2		
15 Sep 2016	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	0.4		
15 Sep 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	0.6		
15 Sep 2016	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
15 Sep 2016	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	1.3		
15 Sep 2016	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.3		
15 Sep 2016	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.4		
15 Sep 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	0.7		
15 Sep 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
15 Sep 2016	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	1.4		
15 Sep 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	2.7		
15 Sep 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	27.8		
15 Sep 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	30.5		
15 Sep 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	2.6		
15 Sep 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	33.0		
15 Sep 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.5		
15 Sep 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	27.2		
15 Sep 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	27.8		
15 Sep 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	3.0		
15 Sep 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	30.8		
15 Sep 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	288.0		
15 Sep 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	7.2		
15 Sep 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
15 Sep 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	179.0		
15 Sep 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.3		
15 Sep 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	3.0		
15 Oct 2016	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.7		
15 Oct 2016	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	1.0		

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Date	License No.	Site Name	Monitoring Location	Test Type	Result	Comments	EPA contact
15 Oct 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.6		
15 Oct 2016	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Oct 2016	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
15 Oct 2016	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.3		
15 Oct 2016	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	<0.2		
15 Oct 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	0.4		
15 Oct 2016	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Oct 2016	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	0.4		
15 Oct 2016	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.4		
15 Oct 2016	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.6		
15 Oct 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.0		
15 Oct 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Oct 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	1.0		
15 Oct 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	Not Measured		
15 Oct 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	Not Measured		
15 Oct 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	Not Measured		
15 Oct 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	Not Measured		
15 Oct 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	Not Measured		
15 Oct 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.9		
15 Oct 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.6		
15 Oct 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.5		
15 Oct 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Oct 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	1.6		
15 Oct 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	297.0		
15 Oct 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.5		
15 Oct 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
15 Oct 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	153.0		
15 Oct 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	8.0		
15 Oct 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	46.0		
15 Nov 2016	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.7		
15 Nov 2016	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	1.0		
15 Nov 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.6		
15 Nov 2016	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Nov 2016	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
15 Nov 2016	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.3		
15 Nov 2016	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	<0.2		
15 Nov 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	0.4		
15 Nov 2016	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Nov 2016	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	0.4		
15 Nov 2016	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.4		
15 Nov 2016	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.6		
15 Nov 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.0		
15 Nov 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Nov 2016	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	1.0		
15 Nov 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	Not Measured		
15 Nov 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	Not Measured		
15 Nov 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	Not Measured		
15 Nov 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	Not Measured		
15 Nov 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	Not Measured		
15 Nov 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.9		
15 Nov 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.6		
15 Nov 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.5		
15 Nov 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
15 Nov 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	1.6		
15 Nov 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	297.0		
15 Nov 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.5		
15 Nov 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		

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15 Nov 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	153.0		
15 Nov 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	8.0		
15 Nov 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	46.0		
15 Dec 2016	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.5		
15 Dec 2016	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	0.4		
15 Dec 2016	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.0		
15 Dec 2016	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.8		
15 Dec 2016	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
15 Dec 2016	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	1.2		
15 Dec 2016	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	3.0		
15 Dec 2016	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	4.2		
15 Dec 2016	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	3.1		
15 Dec 2016	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	7.3		
15 Dec 2016	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.6		
15 Dec 2016	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	1.1		
15 Dec 2016	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.7		
15 Dec 2016	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	2.2		
15 Dec 2016	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	3.9		
15 Dec 2016	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.6		
15 Dec 2016	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	0.3		
15 Dec 2016	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	0.9		
15 Dec 2016	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	1.1		
15 Dec 2016	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	2.0		
15 Dec 2016	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	1.2		
15 Dec 2016	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.3		
15 Dec 2016	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.5		
15 Dec 2016	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.8		
15 Dec 2016	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	2.3		
15 Dec 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	297.0		
15 Dec 2016	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.5		
15 Dec 2016	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
15 Dec 2016	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	153.0		
15 Dec 2016	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	8.0		
15 Dec 2016	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	17.0		

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Date	License No.	Site Name	Monitoring Location	Test Type	Result	Comments	EPA contact
17 Jan 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.7		
17 Jan 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	0.5		
17 Jan 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.2		
17 Jan 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	1.1		
17 Jan 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	2.3		
17 Jan 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.3		
17 Jan 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	<0.2		
17 Jan 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	0.4		
17 Jan 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.6		
17 Jan 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	1.0		
17 Jan 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.3		
17 Jan 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.4		
17 Jan 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	0.8		
17 Jan 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	2.1		
17 Jan 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	2.8		
17 Jan 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.4		
17 Jan 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	0.2		
17 Jan 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	0.7		
17 Jan 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	1.0		
17 Jan 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
17 Jan 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.8		
17 Jan 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.5		
17 Jan 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.3		
17 Jan 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	1.1		
17 Jan 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	2.4		
17 Jan 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	320.0		
17 Jan 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	8.1		
17 Jan 2017	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
17 Jan 2017	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	89.0		
17 Jan 2017	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.7		
17 Jan 2017	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	26.0		
17 Feb 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.7		
17 Feb 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	0.4		
17 Feb 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.2		
17 Feb 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.6		
17 Feb 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	1.8		
17 Feb 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.7		
17 Feb 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	0.3		
17 Feb 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	1.0		
17 Feb 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.5		
17 Feb 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	1.5		
17 Feb 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.7		
17 Feb 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.8		
17 Feb 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.5		
17 Feb 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	1.5		
17 Feb 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	3.0		
17 Feb 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.8		
17 Feb 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	0.3		
17 Feb 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	1.2		
17 Feb 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	0.9		
17 Feb 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	2.0		
17 Feb 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	1.0		
17 Feb 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.5		

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Date	License No.	Site Name	Monitoring Location	Test Type	Result	Comments	EPA contact
17 Feb 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.5		
17 Feb 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
17 Feb 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	2.2		
17 Feb 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	331.0		
17 Feb 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	7.8		
17 Feb 2017	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	5.0		
17 Feb 2017	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	65.0		
17 Feb 2017	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.2		
17 Feb 2017	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	12.0		
17 Mar 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	1.8		
17 Mar 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	0.4		
17 Mar 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	2.3		
17 Mar 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
17 Mar 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	3.0		
17 Mar 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	1.4		
17 Mar 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	0.4		
17 Mar 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	1.8		
17 Mar 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.6		
17 Mar 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	2.5		
17 Mar 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	1.3		
17 Mar 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.6		
17 Mar 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.9		
17 Mar 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	1.0		
17 Mar 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	2.9		
17 Mar 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	1.6		
17 Mar 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	0.4		
17 Mar 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	2.0		
17 Mar 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	0.8		
17 Mar 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	2.8		
17 Mar 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	1.2		
17 Mar 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.4		
17 Mar 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.6		
17 Mar 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
17 Mar 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	2.0		
17 Mar 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	339.0		
17 Mar 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	7.4		
17 Mar 2017	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/lit)	<2		
17 Mar 2017	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	115.0		
17 Mar 2017	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.3		
17 Mar 2017	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/lit)	16.0		
17 Apr 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	1.2		
17 Apr 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	0.4		
17 Apr 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.6		
17 Apr 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.6		
17 Apr 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	2.2		
17 Apr 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.9		
17 Apr 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	0.3		
17 Apr 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	1.2		
17 Apr 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	0.5		
17 Apr 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	1.8		
17 Apr 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.7		
17 Apr 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.4		
17 Apr 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.1		
17 Apr 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	1.0		
17 Apr 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	2.1		
17 Apr 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.9		
17 Apr 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	0.3		

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17 Apr 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	1.2		
17 Apr 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	1		
17 Apr 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	2.2		
17 Apr 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.8		
17 Apr 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.3		
17 Apr 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.2		
17 Apr 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
17 Apr 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	1.6		
17 Apr 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	338.0		
17 Apr 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	7.7		
17 Apr 2017	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/l)	<2		
17 Apr 2017	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	187.0		
17 Apr 2017	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.8		
17 Apr 2017	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/l)	13.0		
17 May 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	1.2		
17 May 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	<0.2		
17 May 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.3		
17 May 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
17 May 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	1.3		
17 May 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.3		
17 May 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	<0.2		
17 May 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	0.4		
17 May 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
17 May 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	0.4		
17 May 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.6		
17 May 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	<0.2		
17 May 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	0.6		
17 May 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
17 May 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	0.7		
17 May 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.3		
17 May 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	<0.2		
17 May 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	0.4		
17 May 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
17 May 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	0.4		
17 May 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.6		
17 May 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	<0.2		
17 May 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	0.7		
17 May 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
17 May 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	0.8		
17 May 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	335.0		
17 May 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	6.3		
17 May 2017	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/l)	<2		
17 May 2017	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	193.0		
17 May 2017	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	6.6		
17 May 2017	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/l)	11.0		

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Date	License No.	Site Name	Monitoring Location	Test Type	Result	Comments	EPA contact
17 Jun 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	0.2		
17 Jun 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	0.4		
17 Jun 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.7		
17 Jun 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	1.0		
17 Jun 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.3		
17 Jun 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	0.2		
17 Jun 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	0.6		
17 Jun 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	1.2		
17 Jun 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
17 Jun 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	0.3		
17 Jun 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	0.8		
17 Jun 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	1.0		
17 Jun 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	0.3		
17 Jun 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.3		
17 Jun 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	<0.2		
17 Jun 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	0.5		
17 Jun 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
17 Jun 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	0.9		
17 Jun 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	341.0		
17 Jun 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Ph (6.5-8.5)	7.7		
17 Jun 2017	2433	Wagga Wagga	Sed Dam	B2 Water - TSS (<50mg/ltr)	5.0		
17 Jun 2017	2433	Wagga Wagga	River	B2 Water - Electrical Conductivity (US/cm)	306.0		
17 Jun 2017	2433	Wagga Wagga	River	B2 Water - Ph (6.5-8.5)	7.9		
17 Jun 2017	2433	Wagga Wagga	River	B2 Water - TSS (<50mg/ltr)	5.0		
17 Jul 2017	2433	Wagga Wagga	Point 1	M2 Air - Ash (gms/sqm/mth)	1.3		
17 Jul 2017	2433	Wagga Wagga	Point 1	M2 Air - Combustable Material	0.4		
17 Jul 2017	2433	Wagga Wagga	Point 1	M2 Air - Insoluble Solids (gms/sqm/mth)	1.6		
17 Jul 2017	2433	Wagga Wagga	Point 1	M2 Air - Soluble Matter (gms/sqm/mth)	0.3		
17 Jul 2017	2433	Wagga Wagga	Point 1	M2 Air - Total Solid Particles (gms/sqm/mth)	2.0		
17 Jul 2017	2433	Wagga Wagga	Point 2	M2 Air - Ash (gms/sqm/mth)	0.8		
17 Jul 2017	2433	Wagga Wagga	Point 2	M2 Air - Combustable Material	1.5		
17 Jul 2017	2433	Wagga Wagga	Point 2	M2 Air - Insoluble Solids (gms/sqm/mth)	2.3		
17 Jul 2017	2433	Wagga Wagga	Point 2	M2 Air - Soluble Matter (gms/sqm/mth)	8.2		
17 Jul 2017	2433	Wagga Wagga	Point 2	M2 Air - Total Solid Particles (gms/sqm/mth)	10.5		
17 Jul 2017	2433	Wagga Wagga	Point 3	M2 Air - Ash (gms/sqm/mth)	0.8		
17 Jul 2017	2433	Wagga Wagga	Point 3	M2 Air - Combustable Material	0.5		
17 Jul 2017	2433	Wagga Wagga	Point 3	M2 Air - Insoluble Solids (gms/sqm/mth)	1.3		
17 Jul 2017	2433	Wagga Wagga	Point 3	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
17 Jul 2017	2433	Wagga Wagga	Point 3	M2 Air - Total Solid Particles (gms/sqm/mth)	1.6		
17 Jul 2017	2433	Wagga Wagga	Point 4	M2 Air - Ash (gms/sqm/mth)	0.5		
17 Jul 2017	2433	Wagga Wagga	Point 4	M2 Air - Combustable Material	<0.2		
17 Jul 2017	2433	Wagga Wagga	Point 4	M2 Air - Insoluble Solids (gms/sqm/mth)	0.6		
17 Jul 2017	2433	Wagga Wagga	Point 4	M2 Air - Soluble Matter (gms/sqm/mth)	0.2		
17 Jul 2017	2433	Wagga Wagga	Point 4	M2 Air - Total Solid Particles (gms/sqm/mth)	0.8		
17 Jul 2017	2433	Wagga Wagga	Point 5	M2 Air - Ash (gms/sqm/mth)	0.9		
17 Jul 2017	2433	Wagga Wagga	Point 5	M2 Air - Combustable Material	0.4		
17 Jul 2017	2433	Wagga Wagga	Point 5	M2 Air - Insoluble Solids (gms/sqm/mth)	1.3		
17 Jul 2017	2433	Wagga Wagga	Point 5	M2 Air - Soluble Matter (gms/sqm/mth)	0.4		
17 Jul 2017	2433	Wagga Wagga	Point 5	M2 Air - Total Solid Particles (gms/sqm/mth)	1.7		
17 Jul 2017	2433	Wagga Wagga	Sed Dam	B2 Water - Electrical Conductivity (US/cm)	334.0		