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Published on: 27 July 2012

Statement No: 905

STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL (PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE ENVIRONMENTAL PROTECTION ACT 1986)

MAGELLAN LEAD CARBONATE PROJECT, WILUNA

- **Proposal:** The proposal includes an open-cut lead carbonate mine and processing facilities 30 kilometres west of the Wiluna townsite. The lead carbonate concentrate produced at the mine-site is transported in sealed bags within locked shipping containers by road from the mine-site to Leonora and then by rail to the Port of Fremantle where it is exported.
- Proponent: Magellan Metals Pty Ltd (ACN 075 523 661)
- **Proponent Address:** 96 Welshpool Road, WELSHPOOL WA 6106

Assessment Number: 1868

Previous Assessment Numbers: 1262, 1690 and 1773

Report of the Environmental Protection Authority: Report 1415

Previous Report of the Environmental Protection Authority: Report 996, 1276 and 1314

Previous Statement Numbers: 559 (Published on 28 November 2000) and 783 (Published on 2 February 2009)

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is subject to the following conditions and procedures, which replace and supersede all previous conditions and procedures of Statement 559, Statement 783, and the Interim Implementation Conditions (Published on 23 February 2011):

1 Proposal Implementation

1-1 The proponent shall implement the proposal as documented and described in Schedule 1 of this statement subject to the conditions and procedures of this statement.

2 **Proponent Nomination and Contact Details**

- 2-1 The proponent for the time being nominated by the Minister for Environment under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal.
- 2-2 The proponent shall notify the Chief Executive Officer of the Office of the Environmental Protection Authority (CEO) of any change of the name and address of the proponent for the serving of notices or other correspondence within 20 business days of such change.

3A Time limit on Shipments through Fremantle Port

3A-1 The proponent shall not ship lead carbonate through Fremantle Port beyond five years from the date of publication of this statement.

3 Compliance Reporting

- 3-1 The proponent shall prepare and maintain a Compliance Assessment Plan to the satisfaction of the CEO.
- 3-2 The proponent shall assess compliance with conditions contained in this Statement in accordance with the Compliance Assessment Plan referred to in condition 3-1.
- 3-3 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.
- 3-4 The proponent shall advise the CEO of any potential non-compliance within five business days of that potential non-compliance being known to the Proponent.
- 3-5 The proponent shall submit to the CEO a compliance assessment report no later than 31 March annually addressing the previous twelve month period from 1 January to 31 December inclusive or other period as agreed by the CEO. The compliance assessment report shall:
 - 1. be endorsed by the proponent's Managing Director or in his absence the company secretary, or other person approved by the CEO;
 - 2. include a statement as to whether the proponent has complied with the conditions;
 - 3. identify all potential non-compliances and describe corrective and preventative actions taken;
 - 4. be made publicly available in accordance with the approved compliance assessment plan; and

- 5. indicate any proposed changes to the compliance assessment plan required by condition 3-1.
- 3-6 The proponent shall ensure that the Minister for Environment and the reference group referred to in condition 17-1 is notified that the compliance assessment report required by condition 3-5 is available.

4 Bagging and Shipping Container Management

- 4-1 The proponent shall ensure that lead carbonate concentrate (other than quantities of less than 30 kilograms removed for product testing purposes) which is to be removed from the mine-site is dealt with only in accordance with the following procedures:
 - 1. Prior to being removed from the mine-site, lead carbonate concentrate shall be:
 - a. Placed into double laminated water-proof and sieve proof bags which are sealed so as to prevent the release of lead carbonate concentrate from the bag; and
 - b. All visible dust shall be removed from the exterior of the bags immediately before they are placed in a clean shipping container which when loaded is locked, so that the only material containing lead carbonate concentrate is in sealed bags within the container when the container leaves the mine-site.
 - 2. The locked shipping containers shall be transported by road to a designated area in Leonora and then by rail from Leonora to Fremantle Port on the road/rail transport route identified generally in Figures 1 to 16, unless a change in route is approved by the CEO on advice of the Department of Transport and Department of Health. The locked shipping containers shall be stored in a secure manner at Leonora and at Fremantle Port prior to being loaded onto vessels for export;
 - 3. Unless required by a public official or public authority acting with lawful authority or the Independent Inspector pursuant to condition 16-1 (3), the shipping containers shall be kept locked and the seals on the bags shall not be broken between the time when the shipping container leaves the mine-site and the time it is removed from the State;
 - 4. The moisture content of the lead carbonate concentrate in the sealed bags shall be at least 7.5% at the time the shipping container leaves the mine-site;
 - 5. The shipping containers shall only be lifted by top-lifting equipment at all times after being loaded with sealed bags of lead carbonate concentrate and locked;

- 6. All bags shall be inspected by the Independent Inspector engaged under condition 16 after they are sealed and immediately before they are loaded into a shipping container and all containers shall be inspected by the Independent Inspector engaged under condition 16 before being removed from the mine site;
- 7. No damaged double laminated water-proof and sieve proof bags which could compromise the containment of lead carbonate concentrate, shall be used for bagging lead carbonate concentrate;
- 8. The weight of the sealed double laminated water-proof and sieve proof bags loaded with lead carbonate concentrate shall not be above 2,000 kilograms prior to loading into shipping container; and
- 9. No damaged shipping containers, which could compromise the containment of lead carbonate, shall be used to transport sealed double laminated water-proof and sieve proof bags containing lead carbonate concentrate from the mine-site.
- 4-2 Prior to removing shipping containers containing lead carbonate concentrate from the mine-site at any time from the date of publication of this Statement, the proponent shall prepare and submit to the CEO, for approval and on the advice of the Department of Mines and Petroleum, an Environmental Management Program which makes provision for the following matters in a manner which is consistent with the requirements of condition 4-1 and condition 5:
 - 1. document standards, guidelines and codes of practice relating to the management of lead carbonate concentrate;
 - 2. detail procedures to be applied in the mining, processing and storage areas at the mine-site to minimise disturbance of lead carbonate concentrate and to ensure that the release to the environment is minimised;
 - 3. detail procedures to be applied for the packaging and transport of the lead carbonate concentrate from the mine-site through to export from Fremantle Port, including the use of top-lifting equipment for the lifting of the shipping containers;
 - 4. detail the process which will be applied to ensure ongoing assessment of the risk of lead carbonate contamination, including environmental biological monitoring to evaluate the environmental risks and determine appropriate control measures; and
 - 5. detail the existing storage and ship loading facilities at Fremantle Port which are being used for lead carbonate concentrate, including:
 - a. equipment to be used;

- b. procedures and monitoring programs in place to identify potential pathways for lead carbonate concentrate to enter the environment; and
- c. where equipment, management or revised procedures are found to pose a risk to the safe storage and ship loading of the lead carbonate concentrate, additional equipment, management or revised procedures are to be identified and acquired or implemented.
- 4-3 The proponent shall implement the Environmental Management Program required by condition 4-2.
- 4-4 Revisions to the Environmental Management Program may be approved by the CEO on the advice of the Department of Mines and Petroleum.
- 4-5 The proponent shall implement revisions of the Environmental Management Program approved under condition 4-4.

5 Prevention of Discharge of Lead Carbonate

5-1 The proponent shall ensure that no lead carbonate which is transported from the mine-site to Fremantle port is discharged from within the shipping containers and causes environmental harm as identified at monitoring sites detailed in Schedule 2.

6 Downstream Processing Report

- 6-1 The proponent shall provide by 31 January 2013 to the CEO a report detailing options for downstream processing of lead carbonate concentrate. The report shall:
 - 1. detail and benchmark the available options against best environmental practice;
 - 2. detail all point and fugitive emission sources from a selected technology;
 - 3. identify applicable emission limits for point and fugitive emissions sources identified in condition 6-1(2); and
 - 4. provide potential locations for the downstream processing plant.
- 6-2 The proponent shall ensure that the report required by condition 6-1 is peer reviewed by an independent expert acceptable to the CEO prior to it being provided to the CEO.

7 Shipping Container Cleanliness

7-1 Shipping containers shall be free of all visible mud containing lead carbonate prior to being removed from the mine-site and prior to being loaded onto the train at Leonora.

8 Sampling Program

8-1 The proponent shall conduct a Sampling Program to determine total lead in air, dust, soil and sediment. The description of the sampling, the location and frequency of sampling, the sampling method and reporting units are to be done in accordance with the table below:

Description	Locations of sampling (as shown in Figures 2 to 16)	Frequency of sampling	Units of reporting	Sampling Method
Rainwater tank sampling	WATTRS01 – WATTRS19	Six-monthly, during January/February and July/August	mg/L	A/NZS 5667.1:1998 (or its updates)
Static dust sampling	SDMTRS01 - SDMTRS07, SDMTRS20 and SDMTRS21	Monthly	mg/m ² / month	AS/NZS 3580.10.1: 2003 (or its updates)
Static dust sampling	SDMTRS08 - SDMTRS19	Six-monthly, during March/April and September/Octobe r	mg/m ² / month	AS/NZS 3580.10.1: 2003 (or its updates)
High volume air sampling	Passenger Terminal and Berth 12	One continuous 24 hour period every six days, plus one extra continuous 24 hours period within the six days during unloading or loading of Magellan shipping containers	μg/m ³	AS/NZS 3580.1.1:2 007 (or its updates) AS/NZS 3580.9.3:2 003 (or its updates)
Soil sampling	DMTRS01 – DMTRS251	Annually, during July/August	mg/kg	AS4874-2000 (or its updates)
Drainage sump sampling	SUMPTRS01, SUMPTRS02, SUMPTRS03(A), SUMPTRS03(B), SUMPTRS04(A), SUMPTRS04(B), SUMPTRS05 - SUMPTRS13	Six-monthly, during March/April and September/Octobe r	mg/kg	If sufficient material is available, three samples will be taken from the top 20 mm of sediment and then combined into a composite sample for analysis.

Description	Locations of sampling (as shown in Figures 2 to 16)	Frequency of sampling	Units of reporting	Sampling Method
Benthic sediment sampling	P1-P12, DP1 – DP7 and CO2	Six-monthly, during January/February and July/August	mg/kg (dry weight)	Manual of Standard Operating Procedures
				for Environmental Monitoring against the Cockburn Sound
				Environmental Quality Criteria (2003 – 2004) Environmental Protection Authority Report 20 January
				2005 (or its updates)

- 8-2 The proponent shall ensure that samples taken in accordance with condition 8-1 are analysed by a NATA accredited analytical laboratory for each specific analyte.
- 8-3 The CEO may approve the ceasing of the Sampling Program, or parts thereof, referred to in condition 8-1 in the event that the transportation of lead carbonate concentrate ceases.
- 8-4 The CEO may approve changes to the Sampling Program, or parts thereof, referred to in condition 8-1 in response to the results of monitoring over a given time period, as approved by the CEO.

9 Sampling Analysis and Reporting Timing Obligations

- 9-1 The proponent shall ensure that all monitoring samples collected pursuant to condition 8 are dispatched to a NATA accredited analytical laboratory in accordance with condition 8-2 within the timeframe specified below:
 - 1. no later than the next business day following collection for samples collected within the Perth Metropolitan Region; and
 - 2. no later than five business days of being collected for samples collected outside of the Perth Metropolitan Region.
- 9-2 Where analysis of a sample undertaken in accordance with condition 8 indicates a result above the lead baseline trigger level for the relevant site (as detailed in Schedule 2), the proponent shall ensure the relevant sample is dispatched to a NATA accredited laboratory to be isotopically tested no later than the next business day after the proponent receives the certificate

of analysis confirming that the relevant sample result is above the lead baseline trigger level for the sample site, detailed in Schedule 2.

- 9-3 The Managing Director of the proponent, or in his absence the company secretary, or other person approved by the CEO, shall ensure that a copy of the certificates of analysis of all monitoring results which are above the lead baseline trigger level for a site are reported to the Office of the Environmental Protection Authority, Department of Environment and Conservation, Department of Health, Department of Mines and Petroleum, Department of Transport, Fremantle Port Authority and the relevant local authority, no later than the next business day following receipt of the results by the proponent.
- 9-4 The Managing Director of the proponent, or in his absence the company secretary, or other person approved by the CEO, shall ensure that a copy of the certificates of analysis for isotopic testing showing that the lead is not Magellan lead is provided to the Office of the Environmental Protection Authority, Department of Environment and Conservation, Department of Health, Department of Mines and Petroleum, Department of Transport, Fremantle Port Authority and the relevant local authority, no later than the next business day following receipt by the proponent.
- 9-5 Where isotopic testing confirms that monitoring results for a site are above the lead baseline trigger levels and show the presence of Magellan lead the Managing Director of the proponent, or a member of the board authorised by the board to do so, shall ensure that a copy of the certificates of analysis for isotopic testing is provided to the Office of the Environmental Protection Authority, Department of Environment and Conservation, Department of Health, Department of Mines and Petroleum, Department of Transport, Fremantle Port Authority and the relevant local authority, no later than the next business day following receipt by the proponent.
- 9-6 The proponent shall provide the Office of the Environmental Protection Authority with a report, in a format approved by the CEO, within the first five business days following the end of every quarter from recommencement of operations, which includes:
 - 1. details of all monitoring samples collected in the preceding three months;
 - 2. a record of dates when ship loading of Magellan lead has occurred and the number of containers loaded;
 - 3. copies of certificates of analysis and chains of custody for all monitoring results received in the preceding three months; and
 - 4. a comparison of all results against the lead baseline trigger levels detailed in Schedule 2 for the preceding three months.

- 9-7 The proponent shall ensure that a summary of the results obtained from the sampling program detailed in condition 8-1 and isotopic testing detailed in condition 9-2 are made publicly available within five business days of receipt of the results or as required by the CEO.
- 9-8 The proponent shall report all results of the Sampling Program as required by condition 8-1 to the reference group referred to in condition 17-1 at least once every calendar year.
- 9-9 The proponent shall revise the lead baseline trigger levels at any of the sites, outlined in Schedule 2, on the advice of the CEO where monitoring results show that the lead baseline trigger level has been exceeded and isotopic testing of the site samples demonstrate that Magellan lead is not present at the sample site. The latest monitoring result may become the new lead baseline trigger level does not exceed the lead baseline trigger level defined in point b in condition 20 for the particular sampling type (that is, benthic sediment sampling, soil sampling etc).
- 9-10 The CEO may approve changes to the sampling analysis and reporting timelines, referred to in condition 9 in response to the results of monitoring over a given time period, as approved by the CEO.

10 Monitoring Triggers, Contingency Measures and Ceasing Transport

- 10-1 The proponent shall report against the lead baseline trigger levels outlined in Schedule 2 (or any revised lead baseline trigger level approved in accordance with condition 9-9) and where monitoring shows that the results are above the lead baseline trigger level the proponent shall carry out isotopic testing required by condition 9-2.
- 10-2 The proponent shall immediately cease transport of any further lead carbonate concentrate if the results of the isotopic testing undertaken in accordance with condition 9-2 show the presence of Magellan lead at a sample site.
- 10-3 Where isotopic testing shows that the result of monitoring samples above the lead baseline trigger level for a sample show the presence of Magellan lead, the proponent shall design an investigation in consultation with the Department of Mines and Petroleum and the Department of Environment and Conservation, on the advice of the Department of Health to determine the source and extent of the lead and initiate a review of the packing and transport procedures.
- 10-4 If the proponent ceases transport of lead carbonate concentrate in accordance with condition 10-2, it may only recommence transport in accordance with a Re-commencement Plan approved by the CEO.
- 10-5 The Re-commencement Plan, to be prepared by the proponent, must include the following:

- 1. the reasons for the ceasing of transport;
- 2. the source of, and the extent of, the Magellan lead detected;
- 3. the results of a review of packaging and transport procedures;
- 4. the plans of any clean-up required pursuant to condition 11-1 or results thereof if completed; and
- 5. management and monitoring measures for the re-commencement of transport.

11 Emergency Response Plan

- 11-1 In the event that lead carbonate concentrate is discharged into the environment at any point between the mine-site and the shipping containers being removed from the State, the proponent shall implement the Emergency Response Plan (Strategen, June 2009) approved on 13 August 2009.
- 11-2 Revisions to the Emergency Response Plan may be approved by the CEO, on advice of the Fire and Emergency Service Authority, the Port Authority and relevant Local Governments.
- 11-3 The proponent shall implement revisions of the Emergency Response Plan approved pursuant to condition 11-1.

12 Quality Control for Sampling and Analysis

- 12-1 Prior to removing shipping containers containing lead carbonate concentrate from the mine-site at any time from the date of publication of this Statement, the proponent shall engage a third party expert approved by the CEO to carry out an evaluation of the sampling methodology and analysis methodology for all sample types required by condition 8.
- 12-2 The proponent shall demonstrate that the recommendations listed in the sampling and analysis evaluation required by condition 12-1 have been implemented or reasons provided why the recommendations cannot be implemented to the CEO prior to removing shipping containers containing lead carbonate concentrate from the mine-site at any time from the date of publication.

13 Ongoing Audits of the Environmental Management Program

13-1 The proponent shall appoint an independent third party approved by the CEO to undertake a compliance/assurance audit in accordance with an audit scope approved by the CEO, and provide a report on, the implementation of, or parts thereof, the Environmental Management Program as required by

condition 4-2 and recommend changes to practices, processes and infrastructure.

- 13-2 The proponent shall demonstrate that the recommendations listed in the compliance/assurance audit required by condition 13-1 have been implemented or reasons provided why the recommendations cannot be implemented to the CEO within six months of the date of the compliance/assurance audit.
- 13-3 The proponent shall ensure that the audits will be undertaken at three monthly intervals and the reports provided to the CEO within 20 business days of the end of the three monthly periods, with the first report to be submitted within four months from the recommencement of operations, unless otherwise approved by the CEO.

14 Ongoing Audits of the Sampling Program

- 14-1 The proponent shall appoint an independent third party approved by the CEO to undertake a compliance/assurance audit in accordance with an audit scope approved by the CEO, and provide a report on, the implementation of the Sampling Program as required by condition 8, the sampling analysis and reporting timing obligations as required by condition 9 and the monitoring triggers, contingency measures and the ceasing of transport required by condition 10 and recommend any changes.
- 14-2 The proponent shall demonstrate that the recommendations listed in the compliance/assurance audit required by condition 14-1 have been implemented or reasons provided why the recommendations cannot be implemented to the CEO within six months of the date of the compliance/assurance audit.
- 14-3 The proponent shall ensure that the audits will be undertaken at three monthly intervals and the reports provided to the CEO within 20 business days of the end of the three monthly periods, with the first report to be submitted within four months from the recommencement of removing shipping containers containing lead carbonate concentrate from the mine-site, unless otherwise approved by the CEO.

15 Audit Reports to be Made Publicly Available

15-1 The proponent shall ensure that all reports received from the independent third parties engaged under conditions 13 and 14 are made publicly available on the proponent's website within 30 business days of the end of the three monthly period.

16 Independent Inspector

16-1 Prior to removing shipping containers containing lead carbonate concentrate from the mine-site at any time from the date of publication of this Statement, the proponent is to engage the services of, and provide necessary funding

for, an independent inspector, to be approved by the CEO. The inspector is to be engaged and funded to undertake the following in an independent manner:

- 1. Visually inspect all bags of lead carbonate concentrate, after they are sealed, immediately prior to loading into shipping containers, for the presence of material containing lead carbonate outside the sealed bags. Where material containing lead carbonate is visible on the bag, it shall be revacuumed and rechecked prior to being loaded into the shipping container;
- 2. Visually inspect all shipping containers, after they are loaded and locked and immediately prior to their removal from the mine-site, for material containing lead carbonate on the outside of the shipping containers;
- 3. Carry out random dust monitoring inside shipping containers, by:
 - 1. randomly selecting at least 1% of containers averaged over a quarter of a calendar year, without the knowledge of the proponent;
 - 2. placing dust monitors inside the selected containers prior to their removal from the mine-site; and
 - 3. removing the dust monitors at the Port of Fremantle, and making available the samples obtained for analysis to test for the presence of lead carbonate dust.
- 4. Carry out quality assurance procedures as per the recommendations in the '*Review of Analytical Procedures Used and Data Produced by SGS Australia Pty Ltd for the Magellan Metals Pty Ltd 'Lead in Shipping Container Monitoring'* (Laboratory Quality Management Services, 2011) for all random dust monitoring inside shipping containers; and
- 5. Recording observations of:
 - 1. any visible lead carbonate mud on the outside of containers pursuant to condition 16-1(2); and
 - any visible lead carbonate concentrate inside the shipping container and outside of the bags in those containers opened at Fremantle ports pursuant to condition 16-1(3);

and report immediately to the proponent.

16-2 Prior to removing shipping containers of lead carbonate concentrate from the mine-site at any time from the date of publication of this Statement, the proponent shall establish and document the detailed roles and responsibilities of the inspector engaged under condition 16, to the

satisfaction of the CEO, in consultation with the Department of Environment and Conservation and the Department of Mines and Petroleum.

17 Reporting of Inspections and Monitoring

17-1 The proponent shall ensure that all reports received from the Independent Inspector engaged under condition 16-1 are provided no later than the next business day to the CEO and to an appropriate reference group with relevant community representation, as determined by the Minister for Environment, and made publicly available on the proponent's website within five business days. Until otherwise determined by the Minister, the reference group shall be the Fremantle Ports Inner Harbour Community Liaison Group, established by the Fremantle Port Authority.

18 Financial Assurance

- 18-1 As security for the due and punctual observance and performance by the proponent of the requirements of condition 11-1, the proponent shall, prior to removing shipping containers of lead carbonate concentrate from the minesite at any time from the date of publication of this Statement, provide to the CEO, to be replaced every five years in accordance with condition 18-2, a financial assurance for the benefit of both the Minister and the CEO and which is in the form of an unconditional and irrevocable bank guarantee, from a guarantor acceptable to the CEO and in a form acceptable to the CEO, in the amount specified in condition 18-2.
- 18-2 The financial assurance shall be for an initial amount of AU\$5 million and shall be substituted every five years after the provision of the first guarantee with the fixed initial amount of each successive guarantee being indexed to inflation (being the Consumer Price Index, Perth).
- 18-3 In the event that the guarantor referred to in condition 18-1 terminates its liability under the bank guarantee by paying to the Minister or the CEO the balance of the financial assurance remaining unpaid, the CEO will hold the financial assurance (being the amount paid by the guarantor upon termination), as security for the due and punctual observance and performance by the proponent of the requirements of condition 11-1, in an interest bearing account nominated by the CEO, with the interest accruing for the benefit of the Minister or the CEO.
- 18-4 The financial assurance may be called on or used in accordance with section 86E of the *Environmental Protection Act 1986* if the proponent fails to implement the proposal in accordance with condition 11-1.
- 18-5 The financial assurance shall be discharged by the CEO and the Minister when the CEO has given the proponent written notice pursuant to section 86F(1) of the *Environmental Protection Act 1986*.

19 Environmental Risk Assessment

- 19-1 Prior to removing shipping containers containing lead carbonate concentrate from the mine-site at any time from the date of publication of this Statement, and then annually thereafter, the proponent shall carry out a risk assessment following methodology detailed in AS/NZS 4360:2004, of all key aspects of the project regarding the potential pathways for lead carbonate contamination including:
 - 1. mining and processing;
 - 2. storage;
 - 3. bagging and loading;
 - 4. transport; and
 - 5. port operations

and report on the findings to the CEO.

20 Definitions

In this statement, unless the contrary intention appears:

"AS/NZS 5667.1:1998" means Australian/New Zealand Standard AS/NZS 5667.1:1998 Water quality—Sampling Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.

"AS/NZS 3580.10.1:2003" means Australian/New Zealand Standard AS/NZS 3580.10.1:2003 Methods for sampling and analysis of ambient air – Determination of particulate matter – Deposition matter – Gravimetric method.

"AS/NZS 3580.9.3:2003" means Australian/New Zealand Standard AS/NZS 3580.9.3:2003 Methods for sampling and analysis of ambient air – Determination of suspended particulate matter – Total suspended particulate matter (TSP) – High-volume sampler gravimetric method.

"AS/NZS 4360:2004" means Australian/New Zealand Standard AS/NZS 4360:2004 Risk management.

"AS 3580.1.1 – 2007" means Australian Standard AS 3580.1.1 – 2007 Methods for sampling and analysis of ambient air Part 1.1: Guide to siting air monitoring equipment.

AS/NZS 3580.1.1:2007 means Australian/New Zealand Standard AS/NZS 3580.1.1:2007 Methods for sampling and analysis of ambient air - Guide to siting air monitoring equipment.

"AS4874-2000" means Australian Standard AS 4874 - 2000 Guide to investigation of potentially contaminated soil.

"baseline trigger levels	" means as described in the following table:
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Type of	Baseline Trigger Level (Total Lead)
sampling	
Benthic Sediment Sampling	 a. As described in 'Lead Baseline Trigger Level' in Schedule 2; or any revision approved by the Minister for Environment on advice of the CEO; or b. 50 mg/kg (dry weight), whichever is lower.
Drainage Sump Sampling	 a. As described in 'Lead Baseline Trigger Level' in Schedule 2; or any revision approved by the Minister for Environment on advice of the CEO; or b. 1500 mg/kg (dry weight), whichever is lower
Soil Sampling	 a. As described in 'Lead Baseline Trigger Level' in Schedule 2; or any revision approved by the Minister for Environment on advice of the CEO; or b. 1,500 mg/kg (dry weight), whichever is lower.
Rainwater Tank Sampling	 a. As described in 'Lead Baseline Trigger Level' in Schedule 2; or any revision approved by the Minister for Environment on advice of the CEO; or b. 0.01 mg/L, whichever is lower.
High Volume Air Sampling	 a. As described in 'Lead Baseline Trigger Level' in Schedule 2; or any revision approved by the Minister for Environment on advice of the CEO; or b. 0.5 μg/m³ whichever is lower.
Static Dust Sampling	 As described in 'Lead Baseline Trigger Level' in Schedule 2; or any revision approved by the Minister for Environment on advice of the CEO.
Shipping Container air sampling	20 μg/m ³

"business day" means a day that is not a Saturday, a Sunday or a public holiday in Western Australia.

"Immediately" means at once; instantly.

ISO14001 means the International Organization for Standardization – *ISO14001:2004 Environmental Management Systems -- Requirements with guidance for use* or its updates.

"Magellan lead" means lead that originates from the mine-site.

"mg/kg" means milligrams per kilogram.

"mg/L" means milligrams per litre.

"mg/m²/month" means milligrams per square metre per month.

"mine-site" means the boundaries of mining tenement numbers M53/502, M53/503 and M53/504.

NATA means the National Association of Testing Authorities, Australia.

"Perth Metropolitan Region" means the area defined by the Perth Metropolitan Region Scheme map (Western Australian Planning Commission), as amended from time to time.

" μ g/m³" means micrograms per cubic metre for normal conditions of 0 degrees and 21kpa.

Notes

- 1. Where a condition states "on advice of the Office of the Environmental Protection Authority", the Office of the Environmental Protection Authority will provide that advice to the proponent.
- 2. The Office of the Environmental Protection Authority may seek advice from other agencies or organisations, as required, in order to provide its advice to the Department of Environment and Conservation.
- 3. The Minister for Environment will determine any dispute between the proponent and the Office of the Environmental Protection Authority over the fulfilment of the requirements of the conditions.
- 4. The proponent is required to conduct the project subject to requirements of a Works Approval and Licence for this project under the provisions of Part V of the *Environmental Protection Act 1986*.

[Signed 26 July 2012]

HON BILL MARMION MLA MINISTER FOR ENVIRONMENT; WATER

Schedule 1

The Proposal (Assessment No. 1262, 1690 and 1773)

The development of an open-cut mine, waste rock dump, tailings storage facilities, associated infrastructure, and processing facilities approximately 30 kilometres west of Wiluna.

Lead carbonate concentrate produced at the mine will be contained in sealed bulk bags with a double-laminated wall within locked steel shipping containers and transported by road to Leonora and then by rail to the Port of Fremantle, where it will be exported.

A gas-fired power station and accommodation camp are constructed to service the mine-site.

The mining operations are being supplied with water from a borefield south-east of the mine.

The proposal location is shown in Figure 1, the sampling sites are shown in Figures 2 to 16 and the general arrangement of the mine and process facilities are shown in Figures 17 and 18.

The key proposal characteristics are presented in Table 1.

Table 1: Key P	Proposal Charac	teristics Table
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Project Characteristic	Quantities/Description
Life of the project (mine production)	Up to 10 years
Size of ore body	Not more than 8.2 million tonnes
Depth of mine pit	Not more than 50 metres
Area of disturbance (including access)	Not more than 320 hectares
Major components:	
• Open pit	55 hectares
Waste dumps	138 hectares
 Infrastructure (plant site water supply, roads, accommodation camp, etc) 	57 hectares
 Tailings storage facilities 	70 hectares
TOTAL AREA	320 hectares
Tailings storage facility (2 cells)	Combined total capacity of 4 million tonnes
Ore mining rate	1 million tonnes per year (maximum)
Solid waste materials	2.4 million tonnes per year (maximum)

Project Characteristic	Quantities/Description
Water supply:	
Source	Calcrete and chert aquifers southeast of the mine-site
 Maximum hourly requirement 	170 kilolitres per hour
 Maximum annual requirement 	1.5 million kilolitres per annum
Lead concentrate transport	Road to Leonora and then rail to the Port of Fremantle in sealed bulk bags within locked steel shipping containers (Figure 1).
Power generation	Natural gas – up to 139 terajoules per annum
Fuel storage:	
Capacity	50 kilolitres of storage
Quantity used	1.8 million litres per year (approximately)

Figures (attached)

- Figure 1 Location of the Magellan Lead Carbonate Project, including transport route (specific details of the transport route are indentified in Figures 2 to 16)
- Figure 2 Transport route and sampling sites Mine-site to Wiluna
- Figure 3 Transport route and sampling sites Wiluna to Leonora
- Figure 4 Transport route and sampling sites Leonora
- Figure 5 Transport route and sampling sites Leonora to Kalgoorlie
- Figure 6 Transport route and sampling sites Kalgoorlie
- Figure 7 Transport route and sampling sites Kalgoorlie to Southern Cross
- Figure 8 Transport route and sampling sites Southern Cross
- Figure 9 Transport route and sampling sites Southern Cross to Kellerberrin
- Figure 10 Transport route and sampling sites Merredin
- Figure 11 Transport route and sampling sites Kellerberrin to Midland
- Figure 12 Transport route and sampling sites Kellerberrin
- Figure 13 Transport route and sampling sites Northam
- Figure 14 Transport route and sampling sites Midland
- Figure 15 Transport route and sampling sites Midland to Fremantle
- Figure 16 Transport route and sampling sites Fremantle
- Figure 17 General arrangement of the Magellan Lead Carbonate Project
- Figure 18 Magellan Lead Carbonate Project plant layout



Figure 1 Location of the Magellan Lead Carbonate Project, including the transport route (specific details of the transport route are identified in Figures 2-16)



Figure 2 Transport route and sampling sites – Mine-site to Wiluna



Figure 3 Transport route and sampling sites – Wiluna to Leonora



Figure 4Transport route and sampling sites – Leonora



Figure 5 Transport route and sampling sites – Leonora to Kalgoorlie



Figure 6 Transport route and sampling sites – Kalgoorlie



Figure 7 Transport route and sampling sites – Kalgoorlie to Southern Cross



Figure 8Transport route and sampling sites – Southern Cross



Figure 9 Transport route and sampling sites – Southern Cross to Kellerberrin



Figure 10 Transport route and sampling sites – Merredin



Figure 11 Transport route and sampling sites – Kellerberrin to Midland



Figure 12 Transport route and sampling sites – Kellerberrin



Figure 13 Transport route and sampling sites – Northam



Figure 14 Transport route and sampling sites – Midland



Figure 15 Transport route and sampling sites – Midland to Fremantle



Figure 16 Transport route and sampling sites – Fremantle



Figure 17 General arrangement of the Magellan Lead Carbonate Project



Figure 18 Magellan Lead Carbonate Project plant layout
Schedule 2

Soil Sampling

Soil Site	WGS84 East	WGS84 North	Site Location	Lead Baseline Trigger Level
		Unit of Measure	ement	mg/kg
DMTRS01	792743	7060941	Mine to Wiluna	69
DMTRS02	204474	7058310	Mine to Wiluna	80
DMTRS03	213120	7055743	Mine to Wiluna	33
DMTRS04	223327	7055326	Mine to Wiluna	36
DMTRS05	222387	7048207	Wiluna to Leonora	27
DMTRS06	224583	7038858	Wiluna to Leonora	24
DMTRS07	229681	7030283	Wiluna to Leonora	20
DMTRS08	233941	7021241	Wiluna to Leonora	7
DMTRS09	238904	7012571	Wiluna to Leonora	12
DMTRS10	243982	7004011	Wiluna to Leonora	13
DMTRS11	249473	6995954	Wiluna to Leonora	22
DMTRS12	253330	6986739	Wiluna to Leonora	10
DMTRS13	254139	6976372	Wiluna to Leonora	13
DMTRS14	254305	6968324	Wiluna to Leonora	17
DMTRS15	256456	6958563	Wiluna to Leonora	15
DMTRS16	256016	6949717	Wiluna to Leonora	15
DMTRS17	258394	6939549	Wiluna to Leonora	13
DMTRS18	257418	6930393	Wiluna to Leonora	10
DMTRS19	261192	6921246	Wiluna to Leonora	15
DMTRS20	266271	6913106	Wiluna to Leonora	17
DMTRS21	274079	6907225	Wiluna to Leonora	16
DMTRS22	282203	6901419	Wiluna to Leonora	11
DMTRS23	289582	6895196	Wiluna to Leonora	11
DMTRS24	296184	6887142	Wiluna to Leonora	16
DMTRS25	304282	6882275	Wiluna to Leonora	22
DMTRS26	312125	6876130	Wiluna to Leonora	13
DMTRS27	317790	6868001	Wiluna to Leonora	9
DMTRS28	319897	6858772	Wiluna to Leonora	10
DMTRS29	323269	6849590	Wiluna to Leonora	16
DMTRS30	324162	6839884	Wiluna to Leonora	17

DMTRS31	325049	6830127	Wiluna to Leonora	16	
DMTRS32	329720	6821420	Wiluna to Leonora 30		
DMTRS33	332200	6811960	Wiluna to Leonora	19	
DMTRS34	336121	6805728	Leonora	42	
DMTRS35	336194	6805661	Leonora	82	
DMTRS36	336247	6805555	Leonora	205	
DMTRS37	336343	6805300	Leonora	245	
DMTRS38	336369	6805237	Leonora	178	
DMTRS39	336393	6805163	Leonora	72	
DMTRS40	336688	6804526	Leonora	38	
DMTRS41	336754	6803953	Leonora	40	
DMTRS42	336722	6803448	Leonora	239	
DMTRS43	336742	6802929	Leonora	60	
DMTRS44	339882	6799578	Leonora	35	
DMTRS45	350134	6799194	Leonora to Menzies	23	
DMTRS46	354893	6794056	Leonora to Menzies	20	
DMTRS47	352712	6785422	Leonora to Menzies	44	
DMTRS48	351580	6775052	Leonora to Menzies	23	
DMTRS49	351510	6764892	Leonora to Menzies	14	
DMTRS50	353618	6754862	Leonora to Menzies	20	
DMTRS51	346211	6748748	Leonora to Menzies	23	
DMTRS52	338605	6741938	Leonora to Menzies	15	
DMTRS53	332395	6735705	Leonora to Menzies	13	
DMTRS54	325051	6728418	Leonora to Menzies	24	
DMTRS55	317647	6721114	Leonora to Menzies	26	
DMTRS56	309805	6714665	Menzies	75	
DMTRS57	309474	6713190	Menzies	150	
DMTRS58	312484	6705560	Menzies	25	
DMTRS59	315825	6695884	Menzies to Kalgoorlie	10	
DMTRS60	318756	6686513	Menzies to Kalgoorlie	19	
DMTRS61	322672	6677746	Menzies to Kalgoorlie	8	
DMTRS62	322008	6667654	Menzies to Kalgoorlie	19	
DMTRS63	324272	6657937	Menzies to Kalgoorlie	14	
DMTRS64	330561	6650207	Menzies to Kalgoorlie	14	
DMTRS65	335966	6642835	Menzies to Kalgoorlie	18	
DMTRS66	339444	6631974	Menzies to Kalgoorlie	40	
DMTRS67	343381	6624181	Menzies to Kalgoorlie	37	
DMTRS68	349023	6616577	Menzies to Kalgoorlie	14	

DMTRS69	351037	6606863	Menzies to Kalgoorlie	19
DMTRS70	353084	6599778	Kalgoorlie	32
DMTRS71	353294	6599238	Kalgoorlie	45
DMTRS72	353430	6598765	Kalgoorlie	24
DMTRS73	353717	6598341	Kalgoorlie	126
DMTRS74	353597	6597960	Kalgoorlie	89
DMTRS75	353193	6597467	Kalgoorlie	431
DMTRS76	352622	6597027	Kalgoorlie	31
DMTRS77	352150	6596451	Kalgoorlie	44
DMTRS78	351867	6596116	Kalgoorlie	25
DMTRS79	351545	6595761	Kalgoorlie	16
DMTRS80	351189	6595385	Kalgoorlie	62
DMTRS81	350666	6595044	Kalgoorlie	26
DMTRS82	350167	6594767	Kalgoorlie	26
DMTRS83	349805	6594437	Kalgoorlie	25
DMTRS84	349107	6593984	Kalgoorlie	23
DMTRS85	348287	6593467	Kalgoorlie	14
DMTRS86	347841	6593182	Kalgoorlie	61
DMTRS87	340488	6589047	Kalgoorlie to Southern Cross	22
DMTRS88	331028	6586674	Kalgoorlie to Southern Cross	34
DMTRS89	321210	6585574	Kalgoorlie to Southern Cross 2	
DMTRS90	311962	6581892	Kalgoorlie to Southern Cross	12
DMTRS91	300999	6581064	Kalgoorlie to Southern Cross	18
DMTRS92	292455	6578582	Kalgoorlie to Southern Cross	14
DMTRS93	284611	6582902	Kalgoorlie to Southern Cross	7
DMTRS94	275439	6583501	Kalgoorlie to Southern Cross	7
DMTRS95	265756	6581875	Kalgoorlie to Southern Cross	8
DMTRS96	255884	6582759	Kalgoorlie to Southern Cross	6
DMTRS97	247014	6587303	Kalgoorlie to Southern Cross	18
DMTRS98	237184	6586140	Kalgoorlie to Southern Cross	28
DMTRS99	228409	6585694	Kalgoorlie to Southern Cross	25
DMTRS100	220001	6580399	Kalgoorlie to Southern Cross	15
DMTRS101	784345	6582934	Kalgoorlie to Southern Cross	19
DMTRS102	774403	6583272	Kalgoorlie to Southern Cross	11
DMTRS103	764580	6584877	Kalgoorlie to Southern Cross	15
DMTRS104	754966	6585420	Kalgoorlie to Southern Cross	21
DMTRS105	745369	6587219	Kalgoorlie to Southern Cross	21
DMTRS106	736580	6583871	Kalgoorlie to Southern Cross	11

DMTRS107	729295	6578215	Kalgoorlie to Southern Cross	16
DMTRS108	723722	6569863	Kalgoorlie to Southern Cross	11
DMTRS109	723156	6559976	Kalgoorlie to Southern Cross	19
DMTRS110	722316	6550108	Kalgoorlie to Southern Cross	11
DMTRS111	720462	6544748	Southern Cross	46
DMTRS112	720212	6544399	Southern Cross	16
DMTRS113	719761	6543765	Southern Cross	23
DMTRS114	719489	6543442	Southern Cross	19
DMTRS115	718139	6541218	Southern Cross to Merredin	11
DMTRS116	708848	6538876	Southern Cross to Merredin	21
DMTRS117	699535	6535795	Southern Cross to Merredin	24
DMTRS118	692371	6530755	Southern Cross to Merredin	13
DMTRS119	683876	6528650	Southern Cross to Merredin	5
DMTRS120	674687	6529421	Southern Cross to Merredin	30
DMTRS121	664992	6527526	Southern Cross to Merredin	6
DMTRS122	658258	6526090	Southern Cross to Merredin	5
DMTRS123	648985	6528448	Southern Cross to Merredin	11
DMTRS124	639379	6526010	Southern Cross to Merredin	21
DMTRS125	633618	6521095	Southern Cross to Merredin	24
DMTRS126	626490	6517373	Southern Cross to Merredin	13
DMTRS127	622867	6516024	Merredin	145
DMTRS128	622310	6516069	Merredin	87
DMTRS129	621767	6516114	Merredin	81
DMTRS130	621189	6516158	Merredin	249
DMTRS131	620715	6516262	Merredin	144
DMTRS132	620166	6516335	Merredin	34
DMTRS133	619603	6516399	Merredin	37
DMTRS134	619111	6516184	Merredin	35
DMTRS135	616523	6515220	Merredin	35
DMTRS136	608214	6513169	Merredin to Kellerberrin	30
DMTRS137	599092	6510549	Merredin to Kellerberrin	33
DMTRS138	590453	6505613	Merredin to Kellerberrin	52
DMTRS139	580807	6501530	Merredin to Kellerberrin	620
DMTRS140	571404	6500370	Merredin to Kellerberrin	48
DMTRS141	568994	6500101	Kellerberrin	103
DMTRS142	568441	6500035	Kellerberrin	92
DMTRS143	567874	6499947	Kellerberrin	66
DMTRS144	567342	6499855	Kellerberrin	42

DMTRS145	561828	6498743	Kellerberrin	21	
DMTRS146	553238	6500021	Kellerberrin to Northam	19	
DMTRS147	544431	6499028	Kellerberrin to Northam	196	
DMTRS148	534616	6499244	Kellerberrin to Northam	197	
DMTRS149	524657	6498417	Kellerberrin to Northam	29	
DMTRS150	514868	6500082	Kellerberrin to Northam	28	
DMTRS151	505161	6502440	Kellerberrin to Northam	42	
DMTRS152	496031	6499439	Kellerberrin to Northam	16	
DMTRS153	486318	6499411	Kellerberrin to Northam	23	
DMTRS154	476965	6498924	Northam	18	
DMTRS155	470684	6498261	Northam	852	
DMTRS156	470085	6498256	Northam	43	
DMTRS157	469620	6498330	Northam	180	
DMTRS158	469086	6498602	Northam	623	
DMTRS159	468509	6499035	Northam	25	
DMTRS160	467822	6499226	Northam	51	
DMTRS161	462225	6498732	Northam	17	
DMTRS162	454352	6504256	Toodyay	27	
DMTRS163	450191	6508480	Toodyay	13	
DMTRS164	450070	6508751	Toodyay	45	
DMTRS165	449725	6509018	Toodyay	31	
DMTRS166	449177	6509142	Toodyay	34	
DMTRS167	445253	6509265	Toodyay to Midland	26	
DMTRS168	438675	6506482	Toodyay to Midland	18	
DMTRS169	434452	6508113	Toodyay to Midland	20	
DMTRS170	412403	6488969	Toodyay to Midland	17	
DMTRS171	408005	6482857	Toodyay to Midland	85	
DMTRS172	408583	6473315	Toodyay to Midland	19	
DMTRS173	408785	6472667	Toodyay to Midland	58	
DMTRS174	408806	6471996	Toodyay to Midland	28	
DMTRS175	409045	6471284	Toodyay to Midland	37	
DMTRS176	408698	6470505	Toodyay to Midland	30	
DMTRS177	408118	6470341	Toodyay to Midland	30	
DMTRS178	407475	6470525	Toodyay to Midland	212	
DMTRS179	406831	6470708	Toodyay to Midland	100	
DMTRS180	405613	6471060	Toodyay to Midland	62	
DMTRS181	406225	6470936	Midland to Hazelmere	273	
DMTRS182	404765	6471113	Midland to Hazelmere	103	

DMTRS183	404476	6470259	Midland to Hazelmere	25	
DMTRS184	404447	6469422	Midland to Hazelmere	12	
DMTRS185	404529	6468997	Midland to Hazelmere 4		
DMTRS186	404651	6468518	Midland to Hazelmere	7	
DMTRS187	405001	6467167	Hazelmere to Welshpool	23	
DMTRS188	404871	6466673	Hazelmere to Welshpool	13	
DMTRS189	404709	6466140	Hazelmere to Welshpool	15	
DMTRS190	404624	6465332	Hazelmere to Welshpool	31	
DMTRS191	404769	6464586	Hazelmere to Welshpool	30	
DMTRS192	404783	6464043	Hazelmere to Welshpool	14	
DMTRS193	404661	6463302	Hazelmere to Welshpool	61	
DMTRS194	404549	6462699	Hazelmere to Welshpool	54	
DMTRS195	404398	6461992	Hazelmere to Welshpool	50	
DMTRS196	404171	6461411	Hazelmere to Welshpool	41	
DMTRS197	403648	6460923	Welshpool to Canning Vale	20	
DMTRS198	403449	6459850	Welshpool to Canning Vale	416	
DMTRS199	403459	6459274	Welshpool to Canning Vale	14	
DMTRS200	403448	6458713	Welshpool to Canning Vale	1500	
DMTRS201	403215	6458240	Welshpool to Canning Vale	11	
DMTRS202	402975	6457603	Welshpool to Canning Vale	8	
DMTRS203	402988	6457124	Welshpool to Canning Vale	11	
DMTRS204	402993	6456753	Welshpool to Canning Vale	16	
DMTRS205	402391	6455462	Welshpool to Canning Vale	29	
DMTRS206	402037	6455049	Welshpool to Canning Vale	13	
DMTRS207	401241	6454065	Welshpool to Canning Vale	15	
DMTRS208	400224	6453058	Welshpool to Canning Vale	21	
DMTRS209	399608	6452462	Welshpool to Canning Vale	43	
DMTRS210	398959	6451791	Canning Vale	16	
DMTRS211	398528	6451407	Canning Vale	11	
DMTRS212	397957	6451133	Canning Vale	115	
DMTRS213	397358	6451000	Canning Vale	9	
DMTRS214	396385	6450780	Canning Vale	14	
DMTRS215	393937	6449791	Jandakot	58	
DMTRS216	392497	6449033	Jandakot	20	
DMTRS217	391951	6448761	Jandakot	5	
DMTRS218	391555	6448543	Jandakot	7	
DMTRS219	391366	6448392	South Lake	9	
DMTRS220	390742	6448007	South Lake	18	
DMTRS221	390285	6447690	South Lake	9	
DMTRS222	389788	6447483	South Lake	7	

DMTRS223	389186	6447076	South Lake	9
DMTRS224	388860	6446747	Yangebup	10
DMTRS225	388362	6446249	Yangebup	11
DMTRS226	387897	6445838	Yangebup	18
DMTRS227	386547	6446042	Yangebup	216
DMTRS228	386313	6446706	Yangebup	31
DMTRS229	385733	6447090	Spearwood	39
DMTRS230	385193	6447366	Spearwood	58
DMTRS231	384787	6447428	Spearwood	18
DMTRS232	384471	6447609	Spearwood	18
DMTRS233	383901	6447712	Spearwood	60
DMTRS234	383380	6447952	Coogee	11
DMTRS235	382939	6448869	Coogee	86
DMTRS236	382593	6449247	Coogee	18
DMTRS237	382355	6449767	Coogee	1500
DMTRS238	382301	6450404	Fremantle	47
DMTRS239	382130	6451052	Fremantle	810
DMTRS240	382074	6451506	Fremantle	150
DMTRS241	381907	6452126	Fremantle	219
DMTRS242	381375	6452414	Fremantle	81
DMTRS243	381204	6452777	Fremantle	139
DMTRS244	381667	6453251	Fremantle	99
DMTRS245	382015	6453711	Fremantle	157
DMTRS246	382320	6454174	Fremantle	747
DMTRS247	382331	6454585	Fremantle	75
DMTRS248	381880	6454855	Fremantle	38
DMTRS249	381249	6454321	Fremantle	114
DMTRS250	381162	6454166	Fremantle	53
DMTRS251	386967	6445619	Fremantle	10

Rainwater Tank Sampling

Water Site	WGS84 East	WGS84 North	Location	Lead Baseline Trigger Level
	Un	it of Measurem	ent	mg/L
WATTRS01	336655	6802942	Leonora	0.008
WATTRS02	336843	6804068	Leonora	0.01*
WATTRS03 [^]	352034	6596278	Kalgoorlie	0.01*
WATTRS04 [^]	352157	6596128	Kalgoorlie	0.01*
WATTRS05	352754	6597236	Kalgoorlie	<0.005
WATTRS06	351950	6595879	Kalgoorlie	<0.005
WATTRS07	720719	6543688	Southern Cross	<0.005
WATTRS08	720938	6543075	Southern Cross	<0.005
WATTRS09	719963	6544548	Southern Cross	<0.005
WATTRS10	621748	6516043	Merredin	0.01*
WATTRS11	621619	6516566	Merredin	0.01*
WATTRS12	567121	6499734	Kellerberrin	<0.005
WATTRS13	567853	6500062	Kellerberrin	0.01*
WATTRS14	468592	6498816	Northam	0.01*
WATTRS15	469392	6498694	Northam	<0.005
WATTRS16	406243	6471016	Midland	0.009
WATTRS17	404494	6470844	Midland	0.01*
WATTRS18	382375	6450549	South Fremantle	0.01*
WATTRS19	382203	6454981	North Fremantle	0.01*

Static Dust Sampling

Site Number	AGD84 Easting	AGD84 Northing	Site Location	Lead Baseline Trigger Level
	Un	it of Measurem	ent	mg lead /m²/mth"
SDMTRS01	381591	6454322	Fremantle Port	1.07
SDMTRS02	380982	6453828	Fremantle Port	2.74
SDMTRS03	380654	6453299	Fremantle Port	2.66
SDMTRS04	381543	6453336	Fremantle Port	3.37
SDMTRS05	382178	6454397	Fremantle Port	1.51
SDMTRS06	405452	6470914	Midland	0.62
SDMTRS07	406993	6470568	Midland	0.73
SDMTRS08	470535	6498088	Northam	2.70
SDMTRS09	470035	6498119	Northam	0.74
SDMTRS10	567496	6499779	Kellerberrin	0.47
SDMTRS11	568471	6499812	Kellerberrin	4.34
SDMTRS12	616399	6515069	Merredin	0.50
SDMTRS13	616365	6515108	Merredin	0.87
SDMTRS14	720172	6544365	Southern Cross	0.53
SDMTRS15	720130	6544381	Southern Cross	0.89
SDMTRS16	352008	6596301	Kalgoorlie	0.52
SDMTRS17	348972	6593826	Kalgoorlie	4.06
SDMTRS18	336266	6805106	Leonora	3.34
SDMTRS19	336227	6805096	Leonora	1.56
SDMTRS20	381777	6454719	Fremantle	1.11
SDMTRS21	382184	6453541	Fremantle	1.47

High-volume Air Sampling

Site Reference	AGD84 Easting	AGD84 Northing	Lead Baseline Trigger Level µg/m³
Passenger Terminal	381755	6453509	0.500
Berth 12	382306	6454502	

Benthic Sediment Sampling

Site Number	AGD84	AGD84	Lead Baseline Trigger
	Easting	Northing	Level

	Unit of Measurem	mg/kg (dry weight)	
P1	381834	6454392	19
P2	381739	6454292	14
P3	381710	6454249	11
P4	381692	6454234	10
P5	381620	6454134	9
P6	381578	6454075	3
P7	381517	6454014	8
P8	381481	6453980	7
P9	381478	6453942	18
P10	381416	6453892	21
P11	381357	6453810	16
P12	381350	6453802	16
DP1	381285	6453743	29
DP2	381271	6453707	44
DP3	381237	6453671	24
DP4	381228	6453626	19
DP5	381115	6453515	17
DP6	381021	6453418	20
DP7	381076	6453460	16
CO2	381078	6454402	2

Drainage Sump Sampling

Site Number	AGD84 Easting	AGD84 Northing	Lead Baseline Trigger Level
Unit of Measurement			mg/kg
SUMPTRS01	381362	6454316	43
SUMPTRS02	381356	6454306	42
SUMPTRS03(A)	381345	6454291	51
SUMPTRS03(B)	381345	6454291	100
SUMPTRS04(A)	381334	6454278	55
SUMPTRS04(B)	381334	6454278	102
SUMPTRS05 381329		6454255	35
SUMPTRS06	381346	6454300	559

Air Quality in Container Sampling

Lead Baseline Trigger Level is 20 µg/m³.

SUMPTRS07

SUMPTRS08

SUMPTRS09

SUMPTRS10

SUMPTRS11

SUMPTRS12

SUMPTRS13

Note: The baseline trigger levels are likely to change as further monitoring is carried out

Attachment 1 to Ministerial Statement 905

Change to proposal under s45C of the Environmental Protection Act 1986

This Attachment replaces Schedule 1 in Ministerial Statement 905.

Proposal: Magellan Lead Carbonate Project

Proponent: Rosslyn Hill Mining Pty Ltd

The Proposal (Assessment No. 1868)

The development of an open-cut mine, waste rock dump, tailings storage facilities, associated infrastructure, and processing facilities approximately 30 kilometres west of Wiluna.

Lead carbonate concentrate produced at the mine will be contained in sealed bulk bags with a double-laminated wall within locked steel shipping containers and transported by road to Leonora and then by rail to the Port of Fremantle, where it will be exported.

Changes to:

- disturbance area,
- ore mining rate,
- production of solid waste materials,
- maximum annual water supply,
- life of project,
- water supply source,
- maximum hourly requirement of water,
- power generation,
- fuel storage; and
- amendments to Figures, locations and lead baseline trigger levels in Schedule 2

Key Characteristics Table: This table replaces Table 1 in Schedule 1

Element	Description of proposal	Description of approved change to proposal
Life of the Project (mine production)	Up to 10 years	Removed as not a key characteristic relevant to the environment.
Size of ore body	Not more than 8.2 million tonnes	Not more than 8.2 million tonnes
Depth of mine pit	Not more than 50 metres	Not more than 50 metres
Area of disturbance (including access)	Not more than 320 hectares	Not more than 405 hectares
Major components: • Open pit	55 hectares	92 hectares

	100 1		
 Waste dumps 	138 nectares	170 nectares	
 Infrastructure (plant site water supply, roads, accommodation camp, etc) 	57 hectares	58 hectares	
 Tailings storage facilities 	70 hectares	85 hectares	
TOTAL AREA	320 hectares	405 hectares	
Tailings storage facility (2 cells)	Combined total capacity of 4 million tonnes	Combined total capacity of 4 million tonnes	
Ore mining rate	1 million tonnes per year (maximum)	Removed as managed by other regulatory authorities	
Solid waste materials	2.4 million tonnes per year (maximum)	Removed as managed by other regulatory authorities	
Water supply:			
Source	Calcrete and chert aquifers southeast of the mine-site	Removed as managed by other regulatory authorities.	
 Maximum hourly requirement 	170 kilolitres per hour	Removed as managed by other regulatory authorities.	
 Maximum annual requirement 	1.5 million kilolitres per annum	2.5 gigalitres	
Lead concentrate transport	Road to Leonora and then rail to the Port of Fremantle in sealed bulk bags within locked steel shipping containers (Figure 1)	Road to Leonora and then rail to the Port of Fremantle in sealed bulk bags within locked steel shipping containers (Figure 1)	
Power generation	Natural gas – up to 139 terajoules per annum	Removed as managed by other regulatory authorities.	
Fuel storage:			
Capacity	50 kilolitres of storage	Removed as managed by other regulatory authorities.	
Quantity used	1.8 million litres per year (approximately)	Removed as managed by other regulatory authorities.	

Note: Text in **bold** in the Key Characteristics Table, indicates change/s to the proposal.

All figures are deleted and replaced with the following:

- Figure 1 Location of the Magellan Lead Carbonate Project, including transport route (specific details of the transport route are identified in Figures 2 16).
- Figure 2 Transport route and sampling sites Wiluna
- Figure 3 Transport route and sampling sites Wiluna to Leonora
- Figure 4 Transport route and sampling sites Leonora
- Figure 5 Transport route and sampling sites Leonora to Kalgoorlie
- Figure 6 Transport route and sampling sites Kalgoorlie
- Figure 7 Transport route and sampling sites Kalgoorlie to Southern Cross
- Figure 8 Transport route and sampling sites Southern Cross
- Figure 9 Transport route and sampling sites Southern Cross to Merredin to Kellerberrin
- Figure 10 Transport route and sampling sites Merredin

Figure 11 Transport route and sampling sites – Kellerberrin to Northam to Midland

- Figure 12 Transport route and sampling sites Kellerberrin
- Figure 13 Transport route and sampling sites Northam
- Figure 14 Transport route and sampling sites Midland
- Figure 15 Transport route and sampling sites Midland to Fremantle
- Figure 16 Transport route and sampling sites Fremantle
- Figure 17 Transport route and sampling sites Fremantle Port
- Figure 18 General arrangement of the Magellan Lead Carbonate Project
- Figure 19 Magellan Lead Carbonate Project plant layout

[Signed 19 December 2013]

Dr Paul Vogel CHAIRMAN Environmental Protection Authority under delegated authority



Figure 1 Location of the Magellan Lead Carbonate Project, including transport route (specific details of the transport route are identified in Figures 2 – 16).



Figure 2 Transport route and sampling sites – Wiluna



Figure 3 Transport route and sampling sites – Wiluna to Leonora



Figure 4 Transport route and sampling sites – Leonora



Figure 5 Transport route and sampling sites – Leonora to Kalgoorlie



Figure 6 Transport route and sampling sites – Kalgoorlie



Figure 7 Transport route and sampling sites – Kalgoorlie to Southern Cross



 Figure 8
 Transport route and sampling sites – Southern Cross



Figure 9 Transport route and sampling sites – Southern Cross to Merredin to Kellerberrin



Figure 10 Transport route and sampling sites – Merredin



Figure 11 Transport route and sampling sites – Kellerberrin to Northam to Midland



Figure 12 Transport route and sampling sites – Kellerberrin



Figure 13 Transport route and sampling sites – Northam



Figure 14 Transport route and sampling sites – Midland



Figure 15 Transport route and sampling sites – Midland to Fremantle



Figure 16 Transport route and sampling sites – Fremantle



Figure 17 Transport route and sampling sites – Fremantle Port



Figure 18 General arrangement of the Magellan Lead Carbonate Project



Figure 19 Magellan Lead Carbonate Project plant layout

Attachment 2 to Ministerial Statement 905

Change to proposal under s45C of the Environmental Protection Act 1986

This Attachment replaces Schedule 2 in Ministerial Statement 905.

Schedule 2 is deleted and replaced with the following:

Table 1 Soil Sampling Lead Baseline Trigger Level	
Table 2 Drainage Sump Sampling Lead Baseline Trigger Level	
Table 3 Rainwater Tank Sampling Lead Baseline Trigger Level	
Table 4 Benthic Sediment Sampling Lead Baseline Trigger Lev	el
Table 5 Static Dust Sampling Lead Baseline Trigger Level	
Table 6 High-volume Air Sampling Lead Baseline Trigger Level	
Table 7 Air Quality in Container Sampling Lead Baseline Trigge	r Level

Note: Column title "Lead Baseline Trigger Level" has been amended to read "Initial Lead Baseline Trigger Level" in all tables.

[Signed 19 December 2013]

Dr Paul Vogel CHAIRMAN Environmental Protection Authority under delegated authority

Table 1 Soil Sampling Lead Baseline Trigger Level

Site Number	AGD84 Easting	AGD84 Northing	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/kg)
DMTRS01	792743	7060941	Mine to Wiluna	69
DMTRS02	204474	7058310	Mine to Wiluna	80
DMTRS03	213120	70555743	Mine to Wiluna	33
DMTRS04	223327	7055326	Mine to Wiluna	36
DMTRS05	222387	7048207	Wiluna to Leonora	27
DMTRS06	224583	7038858	Wiluna to Leonora	24
DMTRS07	229681	7030283	Wiluna to Leonora	20
DMTRS08	233941	7021241	Wiluna to Leonora	7
DMTRS09	238904	7012571	Wiluna to Leonora	13
DMTRS10	243982	7004011	Wiluna to Leonora	13
DMTRS11	249473	6995954	Wiluna to Leonora	22
DMTRS12	253330	6986739	Wiluna to Leonora	11
DMTRS13	254139	6976372	Wiluna to Leonora	13
DMTRS14	254305	6968324	Wiluna to Leonora	17
DMTRS15	256456	6958563	Wiluna to Leonora	15
DMTRS16	256016	6949717	Wiluna to Leonora	15
DMTRS17	258394	6939549	Wiluna to Leonora	13
DMTRS18	257418	6930393	Wiluna to Leonora	10
DMTRS19	261192	6921246	Wiluna to Leonora	18
DMTRS20	266271	6913106	Wiluna to Leonora	17
DMTRS21	274079	6907225	Wiluna to Leonora	16
DMTRS22	282203	6901419	Wiluna to Leonora	11
DMTRS23	289582	6895198	Wiluna to Leonora	11
DMTRS24	296184	6887142	Wiluna to Leonora	16
DMTRS25	304282	6882275	Wiluna to Leonora	22
DMTRS26	312125	6876130	Wiluna to Leonora	13
DMTRS27	317790	6868001	Wiluna to Leonora	9
DMTRS28	319897	6858772	Wiluna to Leonora	10
DMTRS29	323269	6849590	Wiluna to Leonora	16
DMTRS30	324162	6839884	Wiluna to Leonora	17
DMTRS31	325049	6830127	Wiluna to Leonora	16
DMTRS32	329720	6821420	Wiluna to Leonora	30
DMTRS33	332200	6811960	Wiluna to Leonora	19
DMTRS34	336121	6805728	Leonora	42
DMTRS35	336194	6805861	Leonora	82
DMTRS36	336247	6805555	Leonora	205
DMTRS37	336343	6805300	Leonora	245
DMTRS38	336369	6805237	Leonora	178
Site	AGD84	AGD84		Initial Lead Baseline Trigger Level (Unit of Measurement:
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Number	Easting	Northing	Site Location	mg/kg)
DMTRS39	336393	6805163	Leonora	12
DMTRS40	330088	6804526	Leonora	38
DMTR541	336754	6803953	Leonora	40
DMTR542	336722	6803448	Leonora	239
DMTR543	336742	6802929	Leonora	60
DMTRS44	339882	6799578		35
DMTRS45	350134	6799194	Leonora to Menzies	23
DMTRS46	354893	6794056	Leonora to Menzies	20
DMTRS47	352712	6785422	Leonora to Menzies	44
DMTRS48	351580	6775052	Leonora to Menzies	24
DMTRS49	351510	6764892	Leonora to Menzies	14
DMTRS50	353618	6754862	Leonora to Menzies	20
DMTRS51	346211	6748748	Leonora to Menzies	23
DMTRS52	338605	6741938	Leonora to Menzies	15
DMTRS53	332395	6735705	Leonora to Menzies	13
DMTRS54	325051	6728418	Leonora to Menzies	24
DMTRS55	317647	6721114	Leonora to Menzies	26
DMTRS56	309805	6714665	Menzies	75
DMTRS57	309474	6713190	Menzies	150
DMTRS58	312484	6705560	Menzies	25
DMTRS59	315825	6695884	Menzies to Kalgoorlie	10
DMTRS60	318756	6686513	Menzies to Kalgoorlie	19
DMTRS61	322672	6677746	Menzies to Kalgoorlie	9
DMTRS62	322008	6667654	Menzies to Kalgoorlie	19
DMTRS63	324272	6657937	Menzies to Kalgoorlie	14
DMTRS64	330561	6650207	Menzies to Kalgoorlie	14
DMTRS65	335966	6642835	Menzies to Kalgoorlie	18
DMTRS66	339444	6631974	Menzies to Kalgoorlie	40
DMTRS67	343381	6624181	Menzies to Kalgoorlie	37
DMTRS68	349023	6616577	Menzies to Kalgoorlie	14
DMTRS69	351037	6606863	Menzies to Kalgoorlie	19
DMTRS70	353084	6599778	Kalgoorlie	56
DMTRS71	353294	6599238	Kalgoorlie	45
DMTRS72	353430	6598765	Kalgoorlie	48
DMTRS73	353717	6598341	Kalgoorlie	126
DMTRS74	353597	6597960	Kalgoorlie	89
DMTRS75	353193	6597467	Kalgoorlie	431
DMTRS76	352622	6597027	Kalgoorlie	31
DMTRS77	352150	6596451	Kalgoorlie	44
DMTRS78	351867	6596116	Kalgoorlie	25

				Initial Lead Baseline Trigger Level
Site	AGD84	AGD84	Site Leastion	(Unit of Measurement:
DMTRS79	351545	6595761	Kalgoorlie	16
DMTRS80	351189	6595385	Kalgoorlie	87
DMTRS81	350666	6595044	Kalgoorlie	26
DMTRS82	350167	6594767	Kalgoorlie	26
DMTRS83	349805	6594437	Kalgoorlie	25
DMTRS84	349107	6593984	Kalgoorlie	35
DMTRS85	348287	6593467	Kalgoorlie	14
DMTRS86	347841	6593182	Kalgoorlie	61
DMTRS87	340488	6589047	Kalgoorlie to Southern Cross	22
DMTRS88	331028	6586674	Kalgoorlie to Southern Cross	34
DMTRS89	321210	6585574	Kalgoorlie to Southern Cross	22
DMTRS90	311962	6581892	Kalgoorlie to Southern Cross	12
DMTRS91	300999	6581064	Kalgoorlie to Southern Cross	18
DMTRS92	292455	6578582	Kalgoorlie to Southern Cross	14
DMTRS93	284611	6582902	Kalgoorlie to Southern Cross	7
DMTRS94	275454	6583401	Kalgoorlie to Southern Cross	2
DMTRS95	265756	6581875	Kalgoorlie to Southern Cross	8
DMTRS96	255884	6582759	Kalgoorlie to Southern Cross	6
DMTRS97	247014	6587303	Kalgoorlie to Southern Cross	18
DMTRS98	237184	6586140	Kalgoorlie to Southern Cross	28
DMTRS99	228409	6585694	Kalgoorlie to Southern Cross	25
DMTRS100	220001	6580399	Kalgoorlie to Southern Cross	15
DMTRS101	784345	6582934	Kalgoorlie to Southern Cross	19
DMTRS102	774403	6583272	Kalgoorlie to Southern Cross	11
DMTRS103	764580	6584877	Kalgoorlie to Southern Cross	15
DMTRS104	754966	6585420	Kalgoorlie to Southern Cross	21
DMTRS105	745369	6587219	Kalgoorlie to Southern Cross	21
DMTRS106	736580	6583871	Kalgoorlie to Southern Cross	11
DMTRS107	729295	6578215	Kalgoorlie to Southern Cross	16
DMTRS108	723722	6569863	Kalgoorlie to Southern Cross	11
DMTRS109	723156	6559976	Kalgoorlie to Southern Cross	19
DMTRS110	722316	6550108	Kalgoorlie to Southern Cross	11
DMTRS111	720462	6544748	Southern Cross	46
DMTRS112	720212	6544399	Southern Cross	16
DMTRS113	719761	6543765	Southern Cross	23
DMTRS114	719489	6543442	Southern Cross	19
DMTRS115	718139	6541218	Southern Cross to Merredin	11
DMTRS116	708848	6538876	Southern Cross to Merredin	21
DMTRS117	699535	6535795	Southern Cross to Merredin	24
DMTRS118	692371	6530755	Southern Cross to Merredin	13

Site	AGD84	AGD84		Initial Lead Baseline Trigger Level (Unit of Measurement:
Number	Easting	Northing	Site Location	mg/kg)
DMTRS119	683876	6528650	Southern Cross to Merredin	5
DMTRS120	674687	6529421	Southern Cross to Merredin	30
DMTRS121	664992	6527526	Southern Cross to Merredin	6
DMTRS122	658258	6526090	Southern Cross to Merredin	5
DMTRS123	648985	6528448	Southern Cross to Merredin	11
DMTRS124	639379	6526010	Southern Cross to Merredin	21
DMTRS125	633618	6521095	Southern Cross to Merredin	24
DMTRS126	626490	6517373	Southern Cross to Merredin	13
DMTRS127	622867	6516024	Merredin	145
DMTRS128	622310	6516069	Merredin	87
DMTRS129	621767	6516114	Merredin	81
DMTRS130	621189	6516158	Merredin	249
DMTRS131	620715	6516262	Merredin	144
DMTRS132	620166	6516335	Merredin	34
DMTRS133	619603	6516399	Merredin	37
DMTRS134	619111	6516184	Merredin	35
DMTRS135	616523	6515220	Merredin	35
DMTRS136	608214	6513169	Merredin to Kellerberrin	30
DMTRS137	599092	6510549	Merredin to Kellerberrin	33
DMTRS138	590453	6505613	Merredin to Kellerberrin	52
DMTRS139	580807	6501530	Merredin to Kellerberrin	620
DMTRS140	571404	6500370	Merredin to Kellerberrin	48
DMTRS141	568994	6500101	Kellerberrin	103
DMTRS142	568441	6500035	Kellerberrin	92
DMTRS143	567874	6499947	Kellerberrin	66
DMTRS144	567342	6499855	Kellerberrin	42
DMTRS145	561828	6498743	Kellerberrin	21
DMTRS146	553238	6500021	Kellerberrin to Northam	19
DMTRS147	544431	6499028	Kellerberrin to Northam	196
DMTRS148	534616	6499244	Kellerberrin to Northam	197
DMTRS149	524657	6498417	Kellerberrin to Northam	29
DMTRS150	514868	6500082	Kellerberrin to Northam	28
DMTRS151	505161	6502440	Kellerberrin to Northam	42
DMTRS152	496031	6499439	Kellerberrin to Northam	16
DMTRS153	486318	6499411	Kellerberrin to Northam	23
DMTRS154	476965	6498924	Northam	18
DMTRS155	470684	6498261	Northam	852
DMTRS156	470085	6498256	Northam	43
DMTRS157	469620	6498330	Northam	180
DMTRS158	469086	6498602	Northam	623

Site	AGD84	AGD84		Initial Lead Baseline Trigger Level (Unit of Measurement:
Number	Easting	Northing	Site Location	mg/kg)
DMTRS159	400309	6499035	Northam	25
DMTRS160	407022	6499220	Northam	51
DMTRS161	402223	6504256		17
DMTRS162	404002	6504236	Toodyay	42
DMTRS163	450191	6508480	Toodyay	15
DMTRS164	450070	6500019	Toodyay	45
DMTRS165	449723	6500142	Toodyay	31
DMTRS166	449177	6500365	Toodyov to Midland	34 26
DMTRS167	440200	6509205	Toodyay to Midland	20
DMTRS160	430073	6508442		10
DIVITES109	434452	6488060	Toodyay to Midland	20
DMTRS170	412403	6488969	Toodyay to Midland	17
DIVITES171	418005	0482857	Toodyay to Midland	99
DMTRS172	408583	6473315	Toodyay to Midland	19
DIVITES173	408785	6472667	Toodyay to Midland	58
DMTRS174	408806	6471996	Toodyay to Midland	28
DMTRS175	409045	6471284	Toodyay to Midland	37
DMTRS176	408698	6470505	Toodyay to Midland	43
DMTRS1//	408118	6470341	Toodyay to Midland	30
DMTRS178	407475	6470525	Toodyay to Midland	212
DMTRS1/9	406831	6470708	Toodyay to Midland	100
DMTRS180	405613	6471060	I oodyay to Midland	62
DMTRS181	406225	6470936	Midland to Hazelmere	273
DMTRS182	404765	6471113	Midland to Hazelmere	103
DMTRS183	404476	6470259	Midland to Hazelmere	25
DMTRS184	404447	6469422	Midland to Hazelmere	15
DMTRS185	404529	6468997	Midland to Hazelmere	45
DMTRS186	404651	6468518	Midland to Hazelmere	7
DMTRS187	405001	6467167	Hazelmere to Welshpool	23
DMTRS188	404871	6466673	Hazelmere to Welshpool	13
DMTRS189	404709	6466140	Hazelmere to Welshpool	16
DMTRS190	404624	6465332	Hazelmere to Welshpool	31
DMTRS191	404769	6464586	Hazelmere to Welshpool	30
DMTRS192	404783	6464043	Hazelmere to Welshpool	14
DMTRS193	404661	6463302	Hazelmere to Welshpool	61
DMTRS194	404549	6462699	Hazelmere to Welshpool	54
DMTRS195	404398	6461992	Hazelmere to Welshpool	50
DMTRS196	404171	6461411	Hazelmere to Welshpool	43
DMTRS197	403648	6460923	Welshpool to Canning Vale	20
DMTRS198	403449	6459850	Welshpool to Canning Vale	416

Site	AGD84 Fasting	AGD84	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement:
DMTRS199	403459	6459274	Welshpool to Canning Vale	14
DMTRS200	403448	6458713	Welshpool to Canning Vale	1500
DMTRS201	403215	6458240	Welshpool to Canning Vale	11
DMTRS202	402975	6457603	Welshpool to Canning Vale	8
DMTRS203	402988	6457124	Welshpool to Canning Vale	11
DMTRS204	402993	6456753	Welshpool to Canning Vale	16
DMTRS205	402391	6455462	Welshpool to Canning Vale	29
DMTRS206	402037	6455049	Welshpool to Canning Vale	13
DMTRS207	401241	6454065	Welshpool to Canning Vale	17
DMTRS208	400224	6453058	Welshpool to Canning Vale	21
DMTRS209	399608	6452462	Welshpool to Canning Vale	43
DMTRS210	398959	6451791	Canning Vale	18
DMTRS211	398528	6451407	Canning Vale	16
DMTRS212	397957	6451133	Canning Vale	115
DMTRS213	397358	6451000	Canning Vale	9
DMTRS214	396385	6450780	Canning Vale	14
DMTRS215	393937	6449791	Jandakot	58
DMTRS216	392497	6449033	Jandakot	29
DMTRS217	391951	6448761	Jandakot	5
DMTRS218	391555	6448543	Jandakot	7
DMTRS219	391366	6448392	South Lake	9
DMTRS220	390742	6448007	South Lake	18
DMTRS221	390285	6447690	South Lake	9
DMTRS222	389788	6447483	South Lake	13
DMTRS223	389186	6447076	South Lake	9
DMTRS224	388860	6446747	Yangebup	10
DMTRS225	388362	6446249	Yangebup	11
DMTRS226	387897	6445838	Yangebup	18
DMTRS227	386547	6446042	Yangebup	216
DMTRS228	386313	6446706	Yangebup	31
DMTRS229	385733	6447090	Spearwood	39
DMTRS230	385193	6447366	Spearwood	58
DMTRS231	384787	6447428	Spearwood	18
DMTRS232	384471	6447609	Spearwood	18
DMTRS233	383901	6447712	Spearwood	60
DMTRS234	383380	6447952	Coogee	11
DMTRS235	382939	6448869	Coogee	86
DMTRS236	382593	6449247	Coogee	18
DMTRS237	382355	6449767	Coogee	1500
DMTRS238	382301	6450404	Fremantle	47

Site	AGD84	AGD84		Initial Lead Baseline Trigger Level (Unit of Measurement:
Number	Easting	Northing	Site Location	mg/kg)
DMTRS239	382130	6451052	Fremantle	810
DMTRS240	382074	6451506	Fremantle	150
DMTRS241	381907	6452126	Fremantle	219
DMTRS242	381375	6452414	Fremantle	170
DMTRS243	381204	6452777	Fremantle	139
DMTRS244	381667	6453251	Fremantle	210
DMTRS245	382015	6453711	Fremantle	157
DMTRS246	382320	6454174	Fremantle	747
DMTRS247	382331	6454585	Fremantle	128
DMTRS248	381880	6454855	Fremantle	42
DMTRS249	381249	6454321	Fremantle	114
DMTRS250	381162	6454166	Fremantle	53
DMTRS251	386967	6445619	Yangebup	10

Site Number	AGD84 Easting	AGD84 Northing	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/kg)
SUMPTRS01	381362	6454316	55
SUMPTRS02	381356	6454306	96
SUMPTRS03 (A)	381345	6454291	70
SUMPTRS03 (B)	381345	6454291	106
SUMPTRS04 (A)	381334	6454278	69
SUMPTRS04 (B)	381334	6454278	102
SUMPTRS05	381329	6454255	77
SUMPTRS06	381346	6454300	559
SUMPTRS07	381356	6454322	128
SUMPTRS08	381326	6454251	403
SUMPTRS09	380965	6453790	128
SUMPTRS10	380967	6453805	234
SUMPTRS11	380973	6453823	140
SUMPTRS12	380682	6453265	262
SUMPTRS13	380671	6453286	195

Table 2 Drainage Sump Sampling Lead Baseline Trigger Level

Site Number	AGD84 Easting	AGD84 Northing	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/L)
WATTRS01	336655	6802942	Leonora	0.01
WATTRS02	336843	6804068	Leonora	0.01
WATTRS03 ^	352034	6596278	Kalgoorlie	0.01
WATTRS04 ^	352157	6596128	Kalgoorlie	0.01
WATTRS05	352754	6597236	Kalgoorlie	<0.005
WATTRS06	351950	6595879	Kalgoorlie	0.01
WATTRS07	720719	6543688	Southern Cross	<0.005
WATTRS08	720938	6543075	Southern Cross	<0.007
WATTRS09	719963	6544548	Southern Cross	<0.005
WATTRS10	621748	6516043	Merredin	0.01
WATTRS11	621619	6516566	Merredin	0.01
WATTRS12	567121	6499734	Kellerberrin	<0.005
WATTRS13	567853	6500062	Kellerberrin	0.01
WATTRS14	468592	6498816	Northam	0.01
WATTRS15	469392	6498694	Northam	<0.005
WATTRS16	406234	6471016	Midland	0.01
WATTRS17	404494	6470844	Midland	0.01
WATTRS18	382375	6450549	South Fremantle	0.01
WATTRS19	382203	6454981	North Fremantle	0.01

Table 3 Rainwater Tank Sampling Lead Baseline Trigger Level

Site Number	AGD84 Easting	AGD84 Northing	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/kg dry weight)
P1	381834	6454392	19
P2	381739	6454292	14
P3	381710	6454249	22
P4	381692	6454234	10
P5	381620	6454134	22
P6	381578	6454075	7
P7	381517	6454014	8
P8	381481	6453980	13
P9	391478	6453942	18
P10	381416	6453892	21
P11	381357	6453810	16
P12	381350	6453802	17
DP1	381285	6453743	29
DP2	381271	6453707	44
DP3	381237	6453671	24
DP4	381228	6453626	19
DP5	381115	6453515	24
DP6	381021	6453418	23
DP7	381076	6453460	19
CO2	381078	6454402	3

Table 4 Benthic Sediment Sampling Lead Baseline Trigger Level

Table 5	Static Dust Sam	pling Lead	Baseline 1	Friaaer	Level

Site Number	AGD84 Easting	AGD84 Northing	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/m ² /month)
SDMTRS01	381591	6454322	Fremantle Port	1.07
SDMTRS02	380982	6453828	Fremantle Port	2.74
SDMTRS03	380654	6453299	Fremantle Port	2.66
SDMTRS04	381543	6453336	Fremantle Port	3.37
SDMTRS05	382178	6454397	Fremantle Port	2.40
SDMTRS06	405453	6470920	Midland	2.20
SDMTRS07	406993	6470568	Midland	0.84
SDMTRS08	470535	6498088	Northam	2.70
SDMTRS09	470035	6498119	Northam	1.00
SDMTRS10	567496	6499779	Kellerberrin	0.50
SDMTRS11	568471	6499812	Kellerberrin	4.00*
SDMTRS12	616399	6515069	Merredin	0.50
SDMTRS13	616365	6515108	Merredin	0.87
SDMTRS14	720172	6544365	Southern Cross	2.30
SDMTRS15	720130	6544381	Southern Cross	2.60
SDMTRS16	352094	6596375	Kalgoorlie	0.10
SDMTRS17	348972	6593826	Kalgoorlie	4.00*
SDMTRS18	336308	6805100	Leonora	3.34
SDMTRS19	336275	6805150	Leonora	1.56
SDMTRS20	281777	6454719	Fremantle	1.40
SDMTRS21	382012	6453696	Fremantle	0.30

*Reduced to National Environment Protection Measure (NEPM) air quality standards

Table 6High-volume Air Sampling Lead Baseline Trigger Level

Site Reference	AGD84 Easting	AGD84 Northing	Initial Lead Baseline Trigger Level (Unit of Measurement: μg/m ³)
Passenger Terminal	381755	6453509	0.500
Berth 12	382306	6454502	0.500

Table 7 Air Quality in Container Sampling Lead Baseline Trigger Level

Initial Lead Baseline Trigger Level (Unit of Measurement: μg/m³)	
20.00	

Attachment 3 to Ministerial Statement 905

Change to proposal approved under section 45C of the Environmental Protection Act 1986

This Attachment replaces the Key Characteristics Table and Figures 17, 18 and 19 of Attachment 1 amending Schedule 1 of Ministerial Statement 905

Proposal: Magellan Lead Carbonate Project

Proponent: Rosslyn Hill Mining Pty Ltd

Changes:

- Increase in disturbance area;
- Establishment of a 'Development Envelope';
- Ability to locate infrastructure as needed within the Development Envelope;
- Increase in capacity of Tailings Storage Facility (TSF);
- Removal of 'Size of orebody'; and
- 'Depth of mine pit' authorised to "Above groundwater table"

Table 1: Summary of the Proposal

Proposal Title	Magellan Lead Carbonate Project
Short Description	The development of an open-cut mine, waste rock dump, tailings storage facilities, associated infrastructure, and processing facilities approximately 30 kilometres west of Wiluna.
	Lead carbonate concentrate produced at the mine will be contained in sealed bulk bags with a double-laminated wall within locked steel shipping containers and transported by road to Leonora and then by rail to the Port of Fremantle, where it will be exported.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent
Size of ore body		Not more than 8.2 million tonnes	Removed as not a key characteristic relevant to the environment.
Depth of mine pit		Not more than 50 metres	Above groundwater table
Area of disturbance (including access)	Figure 18 Coordinates as described in Table 4	Not more than 405 hectares	Not more than 456ha within a Development Envelope of 2094ha

Major	Within Development		
 Open pit Waste dumps Infrastructure (plant site water supply, roads, accommodation camp. etc) 	Envelope	92 hectares 170 hectares 58 hectares	124ha 170ha 77ha
 Tailings storage facilities TOTAL AREA 		85 hectares 405 hectares	85 ha 456 ha
Tailings storage facility (2 cells)	Within Development Envelope	Combined total capacity of 4 million tonnes	Combined total capacity of 10.4Mt
Water supply: Maximum annual requirement 		2.5 gigalitres	2.5 GL
Lead concentrate transport	Figure 1	Road to Leonora and then rail to the Port of Fremantle in sealed bulk bags within locked steel shipping containers (Figure 1)	Road to Leonora and then rail to the Port of Fremantle in sealed bulk bags within locked steel shipping containers (Figure 1)

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
km	kilometre
GL	gigalitre
Mt	Million tonnes

GDA 94 (MGA) Zone 50 coordinates to delineate the approved development enveloped			t envelope
Coordinate No.	Easting	Northing	
1	795141.29	7066150.87	
2	795142.89	7065151.25	
3	795141.39	7064151.98	
4	795138.85	7063650.98	
5	797142.35	7063654.46	
6	797139.33	7062154.73	
7	795705.59	7062152.71	
8	795675.51	7060853.20	
9	793641.88	7060853.20	
10	793641.87	7061652.56	
11	792641.34	7061653.48	
12	792640.26	7063153.35	
13	791640.69	7063153.59	
14	791628.58	7063911.66	
15	790821.83	7063933.82	
16	790850.90	7065161.16	
17	790871.58	7066155.95	
18	795141.29	7066150.87	

Table 4: Development Envelope Coordinates

Figures (attached) -

Figure 17 of Attachment 1 (amending Schedule 1) is deleted and replaced withFigure 17Transport route and sampling sites - Fremantle Port

Figure 18 of Attachment 1 (amending Schedule 1) is deleted and replaced withFigure 18Proposal Development Envelope

Figure 19 of Attachment 1 (amending Schedule 1) is deleted and not replaced.

[Signed 9 December 2014]

Dr Paul Vogel CHAIRMAN Environmental Protection Authority under notice of delegation dated 24 November 2004



Figure 17: Transport route and sampling sites - Fremantle Port



Figure 18: Proposal Development Envelope

Attachment 4 to Ministerial Statement 905

Change to proposal approved under section 45C of the Environmental Protection Act 1986

This Attachment replaces Table 4 of Attachment 2 amending Schedule 2 in Ministerial Statement 905.

Proposal: Magellan Lead Carbonate Project Proponent: Rosslyn Hill Mining Pty Ltd

Changes:

• Amended Benthic Sediment Sampling Table

Table 4 of Attachment 2 is deleted and replaced with:

Table 4Benthic Sediment Sampling Lead Baseline Trigger Level (as approved
under Condition 8)

Site Number	GDA94 Easting	GDA94 Northing	Lead Baseline Trigger Level (Unit of Measurement: mg/kg dry weight)
P1	381078	6454414	19
P2	381285	6453755	14
P3	381271	6453719	22
P4	381237	6453683	10
P5	381228	6453638	22
P6	381115	6453527	7
P7	381021	6453430	11
P8	381076	6453472	13
P9	381834	6454404	18
P10	381739	6454304	21
P11	381710	6454261	35
P12	381692	6454246	17
DP1	381620	6454146	29
DP2	381578	6454087	44
DP3	381517	6454026	24
DP4	381481	6453992	19
DP5	381478	6453954	43
DP6	381416	6453904	23
DP7	381357	6453822	19
CO2	381350	6453814	3

[Signed 9 December 2014]

Dr Paul Vogel CHAIRMAN

CHAIRMAN Environmental Protection Authority under notice of delegation dated 24 November 2004

NOTICE OF INTERIM IMPLEMENTATION CONDITIONS

Section 46A Environmental Protection Act 1986

Proposal:	Magellan Lead Carbonate Project
Proponent:	Rosslyn Hill Mining Pty Ltd
Proponent Address:	Suite 1D, 21 Teddington Road, Burswood WA 6100

Statement to which this notice relates: Statement 905 dated 27 July 2012

Pursuant to section 46A(1) of the *Environmental Protection Act 1986*, the following interim implementation conditions in this Notice are to have effect instead of implementation conditions 18-1, 18-2, 18-3, 18-4, and 18-5 of Statement 905 dated 27 July 2012.

These Interim Implementation Conditions are to be read in conjunction with Statement 905 and are to have effect until a further statement is published under section 45(5) as applied by section 46(8) of the *Environmental Protection Act 1986*. All other conditions of Statement 905 continue to have effect.

18 Financial Assurance

- 18-1 As security for the due and punctual observance and performance by the proponent of the requirements of condition 11-1, the proponent shall, prior to removing shipping containers of lead carbonate concentrate from the minesite at any time from the date of publication of this Statement, provide to the CEO, to be replaced every five years in accordance with condition 18-2, a financial assurance for the benefit of both the Minister and the CEO and which is in the form of an unconditional and irrevocable bank guarantee, from a guarantor acceptable to the CEO and in a form acceptable to the CEO, in the amount specified in condition 18-2.
- 18-2 The financial assurance shall be for an initial amount of AU\$5 million and shall be substituted every five years after the provision of the first guarantee with the fixed initial amount of each successive guarantee being indexed to inflation (being the Consumer Price Index, Perth).
- 18-3 In the event that the guarantor referred to in condition 18-1 terminates its liability under the bank guarantee by paying to the Minister or the CEO the balance of the financial assurance remaining unpaid, the CEO will hold the

financial assurance (being the amount paid by the guarantor upon termination), as security for the due and punctual observance and performance by the proponent of the requirements of condition 11-1, in an interest bearing account nominated by the CEO, with the interest accruing for the benefit of the Minister or the CEO.

- 18-4 The financial assurance may be called on or used in accordance with section 86E of the Environmental Protection Act 1986 if the proponent fails to implement the proposal in accordance with condition 11-1.
- 18-5 The financial assurance shall be discharged by the CEO and the Minister when the CEO has given the proponent written notice pursuant to section 86F(1) of the Environmental Protection Act 1986.
- 18-6 The CEO may suspend the requirement for the financial assurance required under condition 18-1 and release the financial assurance if:
 - i. the removal of shipping containers of lead carbonate concentrate from the mine-site is suspended; and;
 - the CEO is satisfied that it will be unlikely the proponent will be required to implement the Emergency Response Plan as required under conditions 11-1 or 11-3 during the time that the removal of shipping containers of lead carbonate concentrate from the mine-site is suspended;
- 18-7 If the CEO agrees to suspend the requirement for the financial assurance required under condition 18-6 the suspension will only be for the period of time that the removal of shipping containers of lead carbonate concentrate from the mine-site is suspended.
- 18-8 Prior to recommencing the removal of shipping containers of lead carbonate concentrate from the mine-site the proponent shall provide a financial assurance to the CEO in accordance with condition 18-1 for the amount specified in condition 18-2 as if the requirement for a financial assurance under condition 18-1 was not suspended.

[Signed 13 May 2015]

HON ALBERT JACOB MLA MINISTER FOR ENVIRONMENT; HERITAGE

Change to proposal approved under section 45C of the Environmental Protection Act 1986

This Attachment replaces Schedule 1, Schedule 2 and all previous Attachments of Ministerial Statement 905

Proposal: Magellan Lead Carbonate Project, Wiluna

Proponent: Rosslyn Hill Mining Pty Ltd

Changes:

- Additional clearing for additional pits, Integrated Waste Landform (IWL) and infrastructure
- Increase in total tailings storage capacity
- Co locating tailings within existing waste rock landform to form an IWL
- Change to Short Description of Proposal to include IWL
- Removal of reference to two Tailings Storage Facility cells
- Update to sampling sites and associated lead baseline trigger levels
- Correction of coordinate errors in Table 4 (Now titled Table 8)
- Change to lead baseline trigger level table numbers to maintain numbering sequence
- Update of Figures 1 to 17 to include amended sample site locations
- Update to Figure 18 to include new authorised disturbance footprint

Table 1: Summary of the Proposal

Proposal Title	Magellan Lead Carbonate Project, Wiluna
Short Description	The development of an open-cut mine, Integrated Waste Landform, associated infrastructure including existing Tailings Storage Facility and processing facilities approximately 30 kilometres west of Wiluna.
	Lead carbonate concentrate produced at the mine will be contained in sealed bulk bags with a double-laminated wall within locked steel shipping containers and transported by road to Leonora and then by rail to the Port of Fremantle, where it will be exported.

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Previously Authorised Extent	Authorised Extent
Area of disturbance (including access)	Figure 18 Coordinates as described in Table 4	Not more than 456 ha within a Development Envelope of 2094 ha	Not more than 580 ha within a Development Envelope of 2094 ha
Major components: • Open pit • Waste dumps	Within Development Envelope	124 ha 170 ha	196 ha 212 ha (including IWL)

Element	Location	Previously Authorised Extent	Authorised Extent
 Infrastructure (plant site water supply, roads, accommodation camp, etc) Tailings storage facilities 		77 ha 85 ha	87 ha 85 ha
TOTAL AREA		456 ha	580 ha
Tailings storage facility (2 cells)	Within Development Envelope	Combined total capacity of 10.4 Mt	Removed to allow tailings to be co-located within Integrated Waste Landform
Tailings Storage	Within Development Envelope	Combined total capacity of 10.4 Mt	Total capacity of 16 Mt

Note: Text in **bold** in Table 2 indicates a change to the proposal.

Table 3: Abbreviations

Abbreviation	Term
ha	hectare
km	kilometre
GL	gigalitre

Table 4: Development Envelope CoordinatesGDA 94 (MGA) Zone 50 coordinates to delineate the approved development envelope

Coordinate	Easting	Northing
No.		
1	795141.29	7066150.87
2	795142.89	7065151.25
3	795141.39	7064151.98
4	795138.85	7063650.98
5	797142.35	7063654.46
6	797139.33	7062154.73
7	795705.59	7062152.71
8	795675.51	7060853.20
9	793641.88	7060853.20
10	793641.87	7061652.56
11	792641.34	7061653.48
12	792640.26	7063153.35
13	791640.69	7063153.59
14	791628.58	7063911.66
15	790821.83	7063933.82
16	790850.90	7065161.16
17	790871.58	7066155.95
18	795141.29	7066150.87

Figures (attached)

- Figure 1 Location of the Magellan Lead Carbonate Project, including transport route (specific details of the transport route are identified in Figures 2 16).
- Figure 2 Transport route and sampling sites Wiluna
- Figure 3 Transport route and sampling sites Wiluna to Leonora
- Figure 4 Transport route and sampling sites Leonora
- Figure 5 Transport route and sampling sites Leonora to Kalgoorlie
- Figure 6 Transport route and sampling sites Kalgoorlie
- Figure 7 Transport route and sampling sites Kalgoorlie to Southern Cross
- Figure 8 Transport route and sampling sites Southern Cross
- Figure 9 Transport route and sampling sites Southern Cross to Merredin to Kellerberrin
- Figure 10 Transport route and sampling sites Merredin
- Figure 11 Transport route and sampling sites Kellerberrin to Northam to Midland
- Figure 12 Transport route and sampling sites Kellerberrin
- Figure 13 Transport route and sampling sites Northam
- Figure 14 Transport route and sampling sites Midland
- Figure 15 Transport route and sampling sites Midland to Fremantle
- Figure 16 Transport route and sampling sites Fremantle
- Figure 17 Transport route and sampling sites Fremantle Port
- Figure 18 Proposal Development Envelope

Table 1 to 7 of Attachment 2, Schedule 2 are deleted and replaced with:

- Table 5
 Soil Sampling Lead Baseline Trigger Level
- Table 6
 Drainage Sump Sampling Lead Baseline Trigger Level
- Table 7
 Rainwater Tank Sampling Lead Baseline Trigger Level
- Table 8
 Benthic Sediment Sampling Lead Baseline Trigger Level
- Table 9
 Static Dust Sampling Lead Baseline Trigger Level
- Table 10 High-volume Air Sampling Lead Baseline Trigger Level
- Table 11 Air Quality in Container Sampling Lead Baseline Trigger Level

Note: Text in **bold** in Tables 5, 7, and 10 indicates a change to location of sampling site. Text in bold in Table 8 indicates a correction of coordinates.

[Signed 19 August 2016]

Dr Tom Hatton

CHAIRMAN Environmental Protection Authority under delegated authority

Approval date: _____



Figure 1 Location of the Magellan Lead Carbonate Project, including transport route (specific details of the transport route are identified in Figures 2 – 16).



Figure 2 Transport route and sampling sites – Wiluna



Figure 3 Transport route and sampling sites – Wiluna to Leonora



Figure 4 Transport route and sampling sites – Leonora



Figure 5 Transport route and sampling sites – Leonora to Kalgoorlie



Figure 6 Transport route and sampling sites – Kalgoorlie



Figure 7 Transport route and sampling sites – Kalgoorlie to Southern Cross



Figure 8 Transport route and sampling sites – Southern Cross



Figure 9 Transport route and sampling sites – Southern Cross to Merredin to Kellerberrin



Figure 10 Transport route and sampling sites – Merredin



Figure 11 Transport route and sampling sites – Kellerberrin to Northam to Midland



Figure 12 Transport route and sampling sites – Kellerberrin



Figure 13 Transport route and sampling sites – Northam


Figure 14 Transport route and sampling sites – Midland



Figure 15 Transport route and sampling sites – Midland to Fremantle



Figure 16 Transport route and sampling sites – Fremantle



Figure 17 Transport route and sampling sites – Fremantle Port



Figure 18 Proposal Development Envelope

Table 5 Soil Sampling Lead Baseline Trigger Level

Site Number	AGD84 Fasting	AGD84	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/kg)
DMTRS01	792601	7060788	Mine to Wiluna	69
DMTRS02	204337	7058150	Mine to Wiluna	80
DMTRS03	212983	7055583	Mine to Wiluna	33
DMTRS04	223190	7055166	Mine to Wiluna	36
DMTRS05	222250	7048047	Wiluna to Leonora	27
DMTRS06	224446	7038698	Wiluna to Leonora	24
DMTRS07	229544	7030123	Wiluna to Leonora	20
DMTRS08	233804	7021081	Wiluna to Leonora	7
DMTRS09	238767	7012411	Wiluna to Leonora	13
DMTRS10	243845	7003851	Wiluna to Leonora	17
DMTRS11	249336	6995794	Wiluna to Leonora	22
DMTRS12	253193	6986580	Wiluna to Leonora	11
DMTRS13	254002	6976213	Wiluna to Leonora	13
DMTRS14	254168	6968165	Wiluna to Leonora	19
DMTRS15	256319	6958404	Wiluna to Leonora	17
DMTRS16	255879	6949558	Wiluna to Leonora	15
DMTRS17	258256	6939390	Wiluna to Leonora	13
DMTRS18	257280	6930234	Wiluna to Leonora	40
DMTRS19	261054	6921087	Wiluna to Leonora	18
DMTRS20	266134	6912947	Wiluna to Leonora	17
DMTRS21	273942	6907066	Wiluna to Leonora	28
DMTRS22	282066	6901260	Wiluna to Leonora	11
DMTRS23	289445	6895039	Wiluna to Leonora	14
DMTRS24	296047	6886983	Wiluna to Leonora	16
DMTRS25	304145	6882116	Wiluna to Leonora	22
DMTRS26	311988	6875971	Wiluna to Leonora	13
DMTRS27	317653	6867843	Wiluna to Leonora	38
DMTRS28	319760	6858614	Wiluna to Leonora	10
DMTRS29	323132	6849432	Wiluna to Leonora	62
DMTRS30	324025	6839726	Wiluna to Leonora	20
DMTRS31	324912	6829969	Wiluna to Leonora	16
DMTRS32	329583	6821262	Wiluna to Leonora	30
DMTRS33	332063	6811802	Wiluna to Leonora	19
DMTRS34	335984	6805570	Leonora	42
DMTRS35	336057	6805503	Leonora	82
DMTRS36	336110	6805397	Leonora	205
DMTRS37	336206	6805142	Leonora	245
DMTRS38	336232	6805079	Leonora	178
DMTRS39	336256	6805005	Leonora	72
DMTRS40	336551	6804368	Leonora	38

				Initial Lead Baseline Trigger Level
	AGD84	AGD84		(Unit of Measurement:
Site Number	Easting	Northing	Site Location	mg/kg)
DMTRS41	336617	6803795	Leonora	40
DMTRS42	336585	6803290	Leonora	239
DMTRS43	336605	6802771	Leonora	60
DMTRS44	339745	6799420	Leonora	35
DMTRS45	349997	6799036	Leonora to Menzies	23
DMTRS46A	354763	6794092	Leonora to Menzies	12
DMTRS47A	352503	6785122	Leonora to Menzies	12
DMTRS48A	351423	6775442	Leonora to Menzies	11
DMTRS49A	351353	6764592	Leonora to Menzies	12
DMTRS50A	353633	6754342	Leonora to Menzies	11
DMTRS51	346074	6748590	Leonora to Menzies	23
DMTRS52	338468	6741780	Leonora to Menzies	15
DMTRS53A	331843	6735142	Leonora to Menzies	6
DMTRS54	324914	6728260	Leonora to Menzies	24
DMTRS55	317510	6720956	Leonora to Menzies	26
DMTRS56	309668	6714507	Menzies	75
DMTRS57	309337	6713032	Menzies	150
DMTRS58	312347	6705402	Menzies	25
DMTRS59	315688	6695726	Menzies to Kalgoorlie	10
DMTRS60	318619	6686355	Menzies to Kalgoorlie	19
DMTRS61	322535	6677589	Menzies to Kalgoorlie	9
DMTRS62	321871	6667497	Menzies to Kalgoorlie	19
DMTRS63	324135	6657780	Menzies to Kalgoorlie	14
DMTRS64	330424	6650050	Menzies to Kalgoorlie	14
DMTRS65	335829	6642678	Menzies to Kalgoorlie	18
DMTRS66	339307	6631817	Menzies to Kalgoorlie	40
DMTRS67	343244	6624024	Menzies to Kalgoorlie	37
DMTRS68	348886	6616420	Menzies to Kalgoorlie	14
DMTRS69	350900	6606706	Menzies to Kalgoorlie	19
DMTRS70	352947	6599621	Kalgoorlie	56
DMTRS71	353157	6599081	Kalgoorlie	45
DMTRS72	353293	6598608	Kalgoorlie	48
DMTRS73	353580	6598184	Kalgoorlie	126
DMTRS74	353460	6597803	Kalgoorlie	89
DMTRS75	353056	6597310	Kalgoorlie	431
DMTRS76	352485	6596870	Kalgoorlie	31
DMTRS77	352013	6596294	Kalgoorlie	44
DMTRS78	351730	6595959	Kalgoorlie	25
DMTRS79	351408	6595604	Kalgoorlie	16
DMTRS80	351052	6595228	Kalgoorlie	87
DMTRS81	350529	6594887	Kalgoorlie	26
DMTRS82	350030	6594610	Kalgoorlie	26

				Initial Lead Baseline Trigger Level
	AGD84	AGD84		(Unit of Measurement:
Site Number	Easting	Northing	Site Location	mg/kg)
DIVIT R 503	349000	6502927	Kalgoorlie	20
DMTRS84	348970	6593827	Kalgoonie	30
DMTRS85	348150	6593310	Kaigoonie	14
DMTRS86	347704	6593025		61
DMTRS87	340351	6588890	Kalgoorlie to Southern Cross	22
DMTRS88	330891	6586516	Kalgoorlie to Southern Cross	34
DMTRS89	321073	6585417	Kalgoorlie to Southern Cross	22
DMTRS90	311825	6581735	Kalgoorlie to Southern Cross	12
DMTRS91	300862	6580906	Kalgoorlie to Southern Cross	18
DMTRS92	292318	6578425	Kalgoorlie to Southern Cross	14
DMTRS93	284475	6582745	Kalgoorlie to Southern Cross	7
DMTRS94	275318	6583244	Kalgoorlie to Southern Cross	2
DMTRS95	265620	6581718	Kalgoorlie to Southern Cross	8
DMTRS96	255748	6582602	Kalgoorlie to Southern Cross	6
DMTRS97	246878	6587146	Kalgoorlie to Southern Cross	18
DMTRS98	237048	6585983	Kalgoorlie to Southern Cross	28
DMTRS99	228273	6585537	Kalgoorlie to Southern Cross	25
DMTRS100	219865	6580242	Kalgoorlie to Southern Cross	15
DMTRS101	784204	6582784	Kalgoorlie to Southern Cross	19
DMTRS102	774262	6583122	Kalgoorlie to Southern Cross	11
DMTRS103	764439	6584727	Kalgoorlie to Southern Cross	15
DMTRS104	754825	6585270	Kalgoorlie to Southern Cross	21
DMTRS105	745228	6587069	Kalgoorlie to Southern Cross	21
DMTRS106	736439	6583721	Kalgoorlie to Southern Cross	11
DMTRS107	729154	6578066	Kalgoorlie to Southern Cross	16
DMTRS108	723581	6569713	Kalgoorlie to Southern Cross	11
DMTRS109	723015	6559827	Kalgoorlie to Southern Cross	19
DMTRS110	722175	6549959	Kalgoorlie to Southern Cross	11
DMTRS111	720321	6544599	Southern Cross	46
DMTRS112	720071	6544250	Southern Cross	16
DMTRS113	719620	6543616	Southern Cross	23
DMTRS114	719348	6543293	Southern Cross	73
DMTRS115	717998	6541069	Southern Cross to Merredin	11
DMTRS116	708707	6538727	Southern Cross to Merredin	21
DMTRS117	699394	6535646	Southern Cross to Merredin	24
DMTRS118	692230	6530606	Southern Cross to Merredin	13
DMTRS119	683735	6528501	Southern Cross to Merredin	5
DMTRS120	674547	6529272	Southern Cross to Merredin	30
DMTRS121	664852	6527377	Southern Cross to Merredin	6
DMTRS122	658118	6525941	Southern Cross to Merredin	5
DMTRS123	648845	6528299	Southern Cross to Merredin	11
DMTRS124	639239	6525861	Southern Cross to Merredin	21

				Initial Lead Baseline
	AGD84	AGD84		(Unit of Measurement:
Site Number	Easting	Northing	Site Location	mg/kg)
DMTRS125	633478	6520946	Southern Cross to Merredin	24
DMTRS126	626350	6517224	Southern Cross to Merredin	13
DMTRS127	622727	6515875	Merredin	145
DMTRS128	622170	6515920	Merredin	87
DMTRS129	621627	6515965	Merredin	92
DMTRS130	621049	6516009	Merredin	249
DMTRS131	620575	6516113	Merredin	144
DMTRS132	620026	6516186	Merredin	34
DMTRS133	619463	6516250	Merredin	37
DMTRS134	618971	6516035	Merredin	35
DMTRS135	616383	6515071	Merredin	35
DMTRS136	608074	6513020	Merredin to Kellerberrin	30
DMTRS137	598952	6510400	Merredin to Kellerberrin	33
DMTRS138	590313	6505464	Merredin to Kellerberrin	52
DMTRS139	580667	6501381	Merredin to Kellerberrin	620
DMTRS140	571264	6500221	Merredin to Kellerberrin	48
DMTRS141	568854	6499952	Kellerberrin	103
DMTRS142	568301	6499886	Kellerberrin	92
DMTRS143	567734	6499798	Kellerberrin	66
DMTRS144	567202	6499706	Kellerberrin	42
DMTRS145	561688	6498594	Kellerberrin	21
DMTRS146	553098	6499872	Kellerberrin to Northam	19
DMTRS147	544291	6498879	Kellerberrin to Northam	196
DMTRS148	534476	6499095	Kellerberrin to Northam	197
DMTRS149	524517	6498268	Kellerberrin to Northam	29
DMTRS150	514728	6499933	Kellerberrin to Northam	28
DMTRS151	505021	6502291	Kellerberrin to Northam	42
DMTRS152	495891	6499290	Kellerberrin to Northam	16
DMTRS153	486178	6499262	Kellerberrin to Northam	23
DMTRS154	476825	6498775	Northam	18
DMTRS155	470545	6498112	Northam	852
DMTRS156	469946	6498107	Northam	43
DMTRS157	469481	6498181	Northam	180
DMTRS158	468947	6498453	Northam	623
DMTRS159	468370	6498886	Northam	25
DMTRS160	467683	6499077	Northam	51
DMTRS161	462086	6498583	Northam	17
DMTRS162	454213	6504107	Toodyay	27
DMTRS163	450052	6508331	Toodyay	13
DMTRS164	449931	6508602	Toodyay	45
DMTRS165	449586	6508869	Toodyay	31
DMTRS166	449038	6508993	Toodyay	34

				Initial Lead Baseline Trigger Level
	AGD84	AGD84		(Unit of Measurement:
Site Number	Easting	Northing	Site Location	mg/kg)
DMTRS167	445114	6509116	Toodyay to Midland	26
DMTRS168	438536	6506333	Toodyay to Midland	18
DMTRS169	434313	6507964	Toodyay to Midland	26
DMTRS170	412264	6488820	Toodyay to Midland	17
DMTRS171	409865	6482707	Toodyay to Midland	99
DMTRS172	408444	6473166	Toodyay to Midland	160
DMTRS173	408646	6472518	Toodyay to Midland	58
DMTRS174	408667	6471847	Toodyay to Midland	28
DMTRS175	408906	6471135	Toodyay to Midland	37
DMTRS176	408559	6470356	Toodyay to Midland	43
DMTRS177	407979	6470192	Toodyay to Midland	61
DMTRS178	407336	6470376	Toodyay to Midland	212
DMTRS179	406692	6470559	Toodyay to Midland	100
DMTRS180A	405371	6470937	Toodyay to Midland	<1
DMTRS181	406086	6470787	Midland to Hazelmere	273
DMTRS182	404626	6470964	Midland to Hazelmere	103
DMTRS183	404337	6470110	Midland to Hazelmere	25
DMTRS184	404308	6469273	Midland to Hazelmere	15
DMTRS185	404390	6468848	Midland to Hazelmere	45
DMTRS186	404512	6468369	Midland to Hazelmere	7
DMTRS187	404862	6467018	Hazelmere to Welshpool	23
DMTRS188	404732	6466524	Hazelmere to Welshpool	13
DMTRS189	404570	6465991	Hazelmere to Welshpool	16
DMTRS190	404485	6465183	Hazelmere to Welshpool	31
DMTRS191	404630	6464437	Hazelmere to Welshpool	42
DMTRS192	404644	6463894	Hazelmere to Welshpool	14
DMTRS193	404522	6463153	Hazelmere to Welshpool	61
DMTRS194	404410	6462550	Hazelmere to Welshpool	54
DMTRS195	404259	6461843	Hazelmere to Welshpool	50
DMTRS196	404032	6461262	Hazelmere to Welshpool	43
DMTRS197	403509	6460774	Welshpool to Canning Vale	22
DMTRS198	403310	6459701	Welshpool to Canning Vale	416
DMTRS199	403320	6459125	Welshpool to Canning Vale	14
DMTRS200A	403298	6458491	Welshpool to Canning Vale	18
DMTRS201	403076	6458091	Welshpool to Canning Vale	11
DMTRS202	402836	6457454	Welshpool to Canning Vale	8
DMTRS203	402849	6456975	Welshpool to Canning Vale	11
DMTRS204	402854	6456604	Welshpool to Canning Vale	16
DMTRS205	402252	6455313	Welshpool to Canning Vale	29
DMTRS206	401898	6454900	Welshpool to Canning Vale	13
DMTRS207	401102	6453916	Welshpool to Canning Vale	17
DMTRS208	400085	6452909	Welshpool to Canning Vale	21

				Initial Lead Baseline
	AGD84	AGD84		(Unit of Measurement:
Site Number	Easting	Northing	Site Location	`mg/kg)
DMTRS209	399469	6452313	Welshpool to Canning Vale	43
DMTRS210	398820	6451642	Canning Vale	18
DMTRS211	398389	6451258	Canning Vale	16
DMTRS212	397818	6450984	Canning Vale	115
DMTRS213	397219	6450851	Canning Vale	9
DMTRS214	396246	6450631	Canning Vale	14
DMTRS215	393798	6449642	Jandakot	58
DMTRS216	392358	6448884	Jandakot	29
DMTRS217	391812	6448612	Jandakot	5
DMTRS218	391416	6448394	Jandakot	7
DMTRS219	391227	6448243	South Lake	9
DMTRS220	390603	6447858	South Lake	18
DMTRS221	390146	6447541	South Lake	9
DMTRS222	389649	6447334	South Lake	13
DMTRS223	389047	6446927	South Lake	9
DMTRS224	388721	6446598	Yangebup	10
DMTRS225	388223	6446100	Yangebup	11
DMTRS226	387758	6445689	Yangebup	18
DMTRS227	386408	6445893	Yangebup	216
DMTRS228	386174	6446557	Yangebup	55
DMTRS229	385594	6446941	Spearwood	39
DMTRS230	385054	6447217	Spearwood	58
DMTRS231	384648	6447279	Spearwood	18
DMTRS232	384332	6447460	Spearwood	18
DMTRS233	383762	6447563	Spearwood	60
DMTRS234A	383266	6447769	Coogee	9
DMTRS235	382800	6448720	Coogee	86
DMTRS236	382454	6449098	Coogee	18
DMTRS237	382216	6449618	Coogee	1500
DMTRS238	382162	6450255	Fremantle	47
DMTRS239	381991	6450903	Fremantle	810
DMTRS240	381935	6451357	Fremantle	150
DMTRS241	381768	6451977	Fremantle	219
DMTRS242	381236	6452265	Fremantle	170
DMTRS243	381065	6452628	Fremantle	139
DMTRS244	381528	6453102	Fremantle	360
DMTRS245	381876	6453562	Fremantle	157
DMTRS246	382181	6454025	Fremantle	747
DMTRS247	382192	6454436	Fremantle	128
DMTRS248	381741	6454706	Fremantle	42
DMTRS249A	381302	6454405	Fremantle	15
DMTRS250A	381063	6454158	Fremantle	17

				Initial Lead Baseline
				Trigger Level
	AGD84	AGD84		(Unit of Measurement:
Site Number	Easting	Northing	Site Location	mg/kg)
DMTRS251A	386797	6445554	Yangebup	12

Table 6 Drair	Table 6 Drainage Sump Sampling Lead Baseline Trigger Level					
.			Initial Lead Baseline Trigger Level (Unit of Measurement:			
Site Number	AGD84 Easting	AGD84 Northing	mg/kg)			
SUMPTRS01	381363	6454316	56			
SUMPTRS02	381358	6454306	96			
SUMPTRS03 (A)	381346	6454293	70			
SUMPTRS03 (B)	381346	6454293	106			
SUMPTRS04 (A)	381336	6454277	69			
SUMPTRS04 (B)	381336	6454277	102			
SUMPTRS05	381331	6454255	150			
SUMPTRS06	381347	6454299	559			
SUMPTRS07	381357	6454322	128			
SUMPTRS08	381327	6454251	403			
SUMPTRS09	380965	6453790	128			
SUMPTRS10	380967	6453805	234			
SUMPTRS11	380975	6453823	140			
SUMPTRS12	380683	6453285	262			
SUMPTRS13	380673	6453285	195			

Site Number	AGD84 Easting	AGD84 Northing	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/L)
WATTRS01	N/A	N/A	Leonora -Removed	N/A
WATTRS02	336706	6803910	Leonora	0.01
WATTRS03 Ù	351897	6596121	Kalgoorlie	0.01
WATTRS04 Ù	352020	6595971	Kalgoorlie	0.01
WATTRS05	352617	6597079	Kalgoorlie	0.007
WATTRS06	351813	6595722	Kalgoorlie	0.01
WATTRS07	720578	6543539	Southern Cross	<0.005
WATTRS08	720797	6542926	Southern Cross	0.007
WATTRS09	719822	6544399	Southern Cross	<0.005
WATTRS10	621608	6515894	Merredin	0.01
WATTRS11	621479	6516417	Merredin	0.01
WATTRS12	566981	6499585	Kellerberrin	<0.006
WATTRS13	567713	6499913	Kellerberrin	0.01
WATTRS14	468453	6498667	Northam	0.01
WATTRS15	469253	6498545	Northam	0.01
WATTRS16	406095	6470867	Midland	0.01
WATTRS17	404355	6470695	Midland	0.01
WATTRS18	382236	6450400	South Fremantle	0.01
WATTRS19	382064	6454832	North Fremantle	0.01

Table 7 Rainwater Tank Sampling Lead Baseline Trigger Level

			In the sector of December 2. The sector
			Level
			(Unit of Measurement: mg/kg
Site Number	AGD84 Easting	AGD84 Northing	dry weight)
P1	381695	6454255	19
P2	381600	6454155	14
P3	381571	6454112	22
P4	381553	6454097	10
P5	381481	6453997	22
P6	381439	6453938	7
P7	381378	6453877	11
P8	381342	6453843	14
P9	381339	6453805	18
P10	381277	6453755	21
P11	381218	6453673	35
P12	381211	6453665	17
DP1	381146	6453606	29
DP2	381132	6453570	44
DP3	381098	6453534	24
DP4	381089	6453489	19
DP5	380976	6453378	43
DP6	380882	6453281	24
DP7	380937	6453323	19
CO2	380939	6454265	3

 Table 8
 Benthic Sediment Sampling Lead Baseline Trigger Level (as approved under Condition 8)

Site Number	AGD84 Easting	AGD84 Northing	Site Location	Initial Lead Baseline Trigger Level (Unit of Measurement: mg/m²/month)
SDMTRS01	381591	6454322	Fremantle Port	1.30
SDMTRS02	380982	6453828	Fremantle Port	2.74
SDMTRS03	380654	6453299	Fremantle Port	4.00
SDMTRS04	381543	6453336	Fremantle Port	3.37
SDMTRS05	382178	6454397	Fremantle Port	4.80
SDMTRS06	405453	6470920	Midland	2.20
SDMTRS07	406993	6470568	Midland	1.10
SDMTRS08	470535	6498088	Northam	2.70
SDMTRS09	470035	6498119	Northam	1.40
SDMTRS10	567496	6499779	Kellerberrin	0.50
SDMTRS11	568471	6499812	Kellerberrin	4.34
SDMTRS12	616399	6515069	Merredin	1.40
SDMTRS13	616365	6515108	Merredin	1.30
SDMTRS14	720172	6544365	Southern Cross	2.30
SDMTRS15	720130	6544381	Southern Cross	2.60
SDMTRS16	348369	6593506	Kalgoorlie	0.70
SDMTRS17	348972	6593826	Kalgoorlie	4.06
SDMTRS18	336308	6805100	Leonora	3.34
SDMTRS19	336275	6805150	Leonora	2.40
SDMTRS20	281777	6454719	Fremantle	1.40
SDMTRS21	382012	6453696	Fremantle	1.60

Table 9 Static Dust Sampling Lead Baseline Trigger Level

*Reduced to National Environment Protection Measure (NEPM) air quality standards

Table 10 High-volume Air Sampling Lead Baseline Trigger Level

Site Reference	AGD84 Easting	AGD84 Northing	Initial Lead Baseline Trigger Level (Unit of Measurement: µg/m ³)
Passenger Terminal	381616	6453360	0.500
Berth 12	382093	6454456	0.300

Table 11 Air Quality in Container Sampling Lead Baseline Trigger Level

Air Quality in Container Sampling	Initial Lead Baseline Trigger Level (Unit of Measurement: μg/m³)
	20.00