



# Noise Management Plan

## Woodlawn Zinc Copper Project

### Document Review/Change History

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**1. INTRODUCTION**

**1.1. Background**

The Woodlawn Zinc-Copper mine (the Project) is located approximately 7 km northwest of Tarago in New South Wales (NSW) within Special (Crown and Private Land) Mining Lease no. 20 (SML20) as shown in Plan 1, Appendix 1.

The existing noise environment for the Project was described in detail in the Project Environmental Assessment (EA) (Parsons Brinkerhoff 2012). The original Noise Management Plan (NMP) was completed by Pacific Environment Pty Limited in 2014 before Heron developed a noise and blast management combined management plan. With the construction phase of the project, as approved by the original Project Approval and subsequent modifications now complete, this version provides updates for the project going forward for noise management. Blast management has been segregated into a separate management plan.

This NMP forms one component of the overall Project Environmental Management Strategy (EMS). The EMS includes several commitments and associated management plans which together form the basis for the ongoing operation of the Project. The EMS and associated management plans will be updated as required to reflect any changes to the Project.

**1.2. Scope and objectives**

The purpose of this NMP is to document the control measures and management initiatives to minimise noise impacts during operation of the Project. The overall objectives for the NMP are to:

- Implement the commitments made in the EA, including specific Conditions of Approval (CoA) and the Statement of Commitments (SoC).
- Ensure compliance with relevant environmental legislation.
- Manage noise related risks associated with the Project.
- Provide for continuous improvement in noise control performance.
- Provide a mechanism to identify and correct areas of non-compliance.

**1.3. Consultation**

This plan was originally drafted by Heron following consultation with government and non-government organisations. DEVELOP has since revised the plan with additional consultation where required and applicable depending on the update. A consultation log is provided in Appendix 2 which will be updated as required during the ongoing operation of the Project. The NMP was originally approved in 2017 (Appendix 3).

**1.4. Legislation**

Legislation relevant to noise management includes:

- Environmental Planning and Assessment Act 1979 (EP&A Act)
- Protection of the Environment Operations Act 1997 (POEO Act)

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The Project is governed by the following:

- Project Approval: as issued in 2013 and amended in 2016 and 2017. Document ID: 07\_0143MOD2
- Environment Protection License (EPL): 20821 as issued by the NSW Environmental Protection Agency (EPA)
- Special Mining Lease (SML): 20

### 1.5. Guidelines and standards

The NSW and Australian government provide a range of guidelines and standards relevant to noise monitoring and management. These guidelines provide general information on acceptable noise levels and associated monitoring methods, as well as methods to achieve current best practice. These sources are presented in Section 6 and have been referred to in the preparation of this plan where applicable.

### 1.6. Project approval requirements

The NMP has been developed in accordance with the Project Approval and Statement of Commitments (SOC). Table 1-1 outlines these conditions and commitments, including reference to where each are addressed.

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**Table 1-1 Conditions of approval and statement of commitments relating to noise**

Condition ID	Condition description	Where Addressed						
Schedule 4 Condition 5	<p>The Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 4 at any residence on privately-owned land.</p> <p><i>Table 4: Noise Criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th>Receivers</th> <th>Day/Evening /Night (<i>L<sub>Aeq</sub>(15-minute)</i>)</th> <th>Night (<i>L<sub>A1</sub>(max)</i>)</th> </tr> </thead> <tbody> <tr> <td>All residential receivers</td> <td>35</td> <td>45</td> </tr> </tbody> </table> <p>Note: After the first review of any EPL granted for this project under Section 78 of the POEO Act, nothing in this approval prevents the EPA from imposing stricter noise limits on the mining operations on site under the EPL. Appendix 6 sets out the meteorological conditions under which these criteria apply, and the requirements for evaluating compliance with these criteria.</p> <p>However, these criteria do not apply if the Proponent has an agreement with the relevant owner(s) to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement.</p>	Receivers	Day/Evening /Night ( <i>L<sub>Aeq</sub>(15-minute)</i> )	Night ( <i>L<sub>A1</sub>(max)</i> )	All residential receivers	35	45	Section 4.1
Receivers	Day/Evening /Night ( <i>L<sub>Aeq</sub>(15-minute)</i> )	Night ( <i>L<sub>A1</sub>(max)</i> )						
All residential receivers	35	45						
Schedule 4 Condition 6	The Proponent shall implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational, low frequency and road noise from the project, to the satisfaction of the Secretary.	Section 4.2						
Schedule 4 Condition 7	<p>The Proponent shall prepare and implement a Noise Management Plan for the project to the satisfaction of the Secretary. The plan must:</p> <p>(a) be prepared in consultation with the EPA, and submitted to the Secretary for approval prior to commencing construction on the site;</p> <p>(b) describe the measures that would be implemented to minimise noise generated by the project, including road noise at the St Andrews Anglican Church;</p> <p>(c) include a monitoring program that:</p> <ul style="list-style-type: none"> <li>uses attended monitoring to evaluate the performance of the project;</li> <li>includes a protocol for determining exceedances of the criteria identified in Table 3;</li> <li>evaluates and reports on the effectiveness of the noise management system on site; and</li> </ul> <p>(d) describe how noise management and monitoring on the site would be integrated with the Woodlawn Landfill.</p>	<p>This plan</p> <p>Section 1.3</p> <p>Section 4.2</p> <p>Section 3.2 Section 4.1.1 Section 5.23.3</p> <p>Section 3.2</p>						
Schedule 5 Condition 1	Within two weeks of obtaining monitoring results showing:	Section 4.3						

Condition ID	Condition description	Where Addressed
Schedule 6 Condition 3	(a) an exceedance of any relevant noise criteria in Schedule 4, the Proponent shall notify affected landowners and/or tenants in writing of the exceedance, and provide regular monitoring results to each of these affected parties until the project is again complying with the relevant criteria	
	The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:	
	(a) a description of: <ul style="list-style-type: none"> <li>• the relevant statutory requirements (including any relevant approval, licence or lease conditions);</li> <li>• any relevant limits or performance measures/criteria;</li> </ul> the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures;	Section 1.4 & 1.5  Section 4 Section 4
	(b) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	Section 4.2
	(c) a program to monitor and report on the: <ul style="list-style-type: none"> <li>• impacts and environmental performance of the project;</li> <li>• effectiveness of any management measures (see b above);</li> </ul>	This plan & overarching EMS
	(d) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Section 4.3
	(e) a protocol for managing and reporting any: <ul style="list-style-type: none"> <li>• incidents and complaints;</li> <li>• non-compliances with statutory requirements and exceedances of the impact assessment criteria and/or performance criteria; and</li> </ul>	Section 5
	(f) a protocol for periodic review of the plan.	Section 5.5
Schedule 6, Condition 8	The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any approved plans of the conditions of this approval.	Section 5.2
Appendix 5 Condition 1	The noise criteria in Table 3 of the conditions are to apply under all meteorological conditions except the following: <ul style="list-style-type: none"> <li>(a) during periods of rain or hail;</li> <li>(b) average wind speed at microphone height exceeds 5 m/s;</li> <li>(c) wind speeds greater than 3 m/s measured at 10 m above ground level; or</li> <li>(d) temperature inversion conditions greater than 3°C/100 m.</li> </ul>	Section 4.1

<b>Condition ID</b>	<b>Condition description</b>	<b>Where Addressed</b>
Appendix 5 Condition 2	Except for wind speed at microphone height, the data to be used for determining meteorological conditions shall be that recorded by the meteorological station located on the site.	Section 3.3
Appendix 5 Condition 3	Unless otherwise agreed with the Secretary, monthly attended monitoring is to be used to evaluate compliance with the relevant conditions of this approval.	Section 3
Appendix 5 Condition 4	Unless otherwise agreed with the Secretary, this monitoring is to be carried out in accordance with the relevant requirements for reviewing performance set out in the NSW Industrial Noise Policy (as amended from time to time), in particular the requirements relating to: (a) monitoring locations for the collection of representative noise data; (b) meteorological conditions during which collection of noise data is not appropriate; (c) equipment used to collect noise data, and conformity with Australian Standards relevant to such equipment; and (d) modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration.	Section 3
Statement of Commitments Item 8B	TriAusMin would consult with representatives from the St Andrews Anglican Church (Tarago) to further investigate potential noise impacts from Project operational traffic during the hours of 6am-7am. If the consultation concludes significant impacts are expected then TriAusMin would explore reasonable and feasible mitigation measures, in consultation with the Church.	Section 4.2
Statement of Commitments Item 8C	A negotiated agreement would be prepared between TriAusMin and Veolia for managing construction and operational noise impacts on the Woodlawn and Cowley Hills properties. Staff training strategies to be implemented during construction and operation would also have specific focus on minimising noise impacts on these properties.	Section 2.1.1

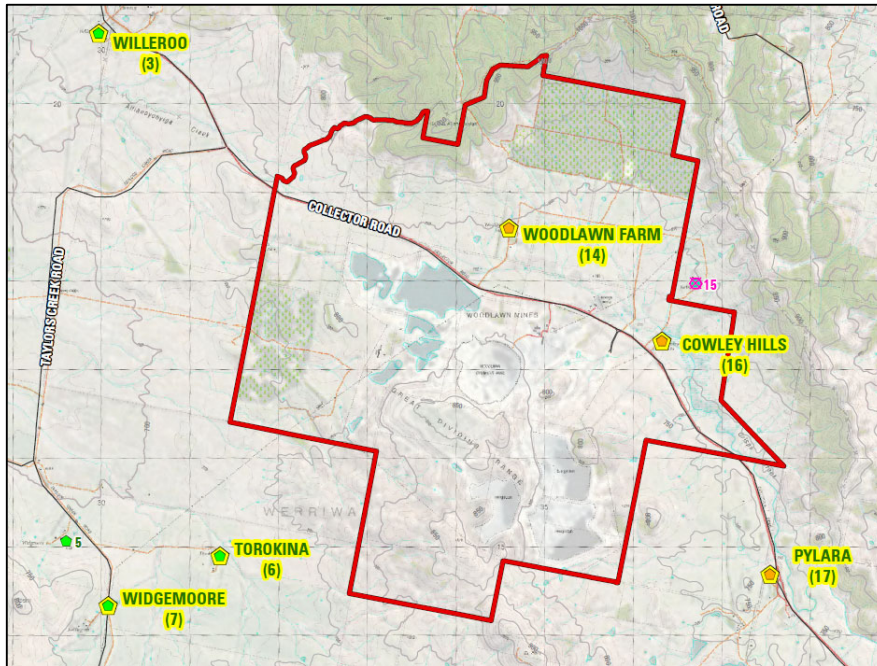
**2. POTENTIAL NOISE SOURCES AND IMPACTS**

**2.1. Receptors**

The Project site is located in a rural setting with adjacent commercial land users (Veolia) and some private rural residences further away. These are summarised in Table 2-2 and presented in Table 2-2.

**Table 2-2 Project residential receivers**

Location	Approximate distance from Project (m)	Classification	Current owner
Woodlawn Farm	1400	Residence	Veolia
Cowley Hills	700	Residence	Veolia
Pylara	3200	Residence	Veolia
Willeroo	6000	Residence	Private
Torokina	4400	Residence	Private
Widgemoore	6000	Residence	Private



**Figure 2-1 Location of residential receivers (extract from EA)**

Noise monitoring at Torokina was not carried out as part of initial EA surveys due to accessibility. Similarly, it was unable to be accessed in 2024 for an additional survey (refer to Section 2.2). Widgemoore, as the next closest property, has therefore been adopted to assess impacts and complete ongoing monitoring.

**2.1.1. Interaction with Veolia**

A Cooperation Agreement exists between both the operators of the mine and the bioreactor (Veolia) which guides the management of operational impacts including noise. The agreement also acknowledges that each party is entitled to carry out their activities in each respective area of operations which may cause nuisance or be considered offensive industries. This includes the creation of noise. It details the process of resolving any issues or complaints between parties without involving government agencies. DEVELOP acknowledges there may be additional obligations to Veolia as detailed in this or other internal agreements which are not included in this NMP.

**2.2. Baseline noise environment**

A revised baseline of the noise environment was completed due to various factors including time that has lapsed since the initial survey completed for the 2012 EA, changes to potential noise sources, and increases to traffic volumes on surrounding roads. DEVELOP engaged a noise consultant and consulted with property owners to complete attended and unattended noise monitoring at the same locations as the initial EA (Section 2.1). Like the 2012 EA survey access to Torokina was again not possible. It also included noise monitoring at the Tarago Anglican Church to address conclusions made in the EA considering there was an absence of any actual noise monitoring data. The survey was completed between 4 and 18 December 2024 before the mine re-started with the following conclusions:

- Background noise levels have increased at all locations other than Willeroo and Pylara which was attributed to increase in traffic on surrounding local roads and highways.
- The lowest rating background levels at Widgemoore, Wileroo and Pylara are already comparable to the levels that the EA predicted for the Project. Therefore, these locations could be more sensitive to noise increases once the mine re-starts.
- The background noise levels measured at the Anglican Church were higher during the day and evening locations than any other locations attributable to its location in Tarago and proximity to the main road and other buildings.

The monitoring data was used to calculate updated rating background levels which will be useful to compare additional monitoring to.

**2.3. Operating hours**

Operating hours, as approved can be seen in Table 2-3.

**Table 2-3      Operating hours**

<b>Activity</b>	<b>Operating Hours</b>
Construction and rehabilitation	7am to 7pm, 7 days per week
Mining, maintenance and processing operations	24 hours, 7 days per week
Transportation of ore concentrate from the site	7am to 10pm, 7 days per week

Note that the EA identified noise impacts relating to construction including construction of the processing facility, administration block, Tailings Storage Facility (TSF4) and the box cut. Construction of these components are now complete; therefore, further reference is not made to construction noise or management in this NMP.

**2.4. Potential sources**

A list of plant and infrastructure expected to be used in the operational phase of the Project is presented in Table 1-1, alongside their typical sound power levels.

**Table 2-4 Potential noise sources**

<b>Operational works and plant</b>	<b>Sound power level (dBA)</b>
Haul Truck (x2) <sup>1</sup>	117
B-Double	105
Grader	109
Water cart	111
Front end loader	115
Conveyors (x10)	82 per meter
Conveyor drive (x7)	93
Crusher	120
Bins	110
Ball mill	105
Vibrating screens	113
Vent fan (400kW)	118
Paste plant	113
Concrete batch plant	13
Concentrator shed	101 <sup>2</sup>
ISA mills	94 <sup>2</sup>
Flotation	90 <sup>2</sup>

<sup>1</sup>Up to 4 haul trucks for hauling ore or waste rock associated with the project. The assessment assumes one haul truck for the ore to ROM route and one haul truck for the waste rock to dump route in a worst case 15 minute period  
<sup>2</sup>Calculated breakout noise level assuming internal level of 85dBA for ISA mills and flotation and an FEL operating with the concentrator shed

**2.5. Potential impacts**

Unattended noise monitoring was completed as part of the EA at the closest residential receivers to the Project as summarised in Section 2.1. Cumulative impacts of approved adjacent developments at the time of the EA’s drafting were also considered. In relation to operational noise, the EA concluded that:

- Winds blowing from the site to receivers are not a feature of the area during the day or evenings.
- Noise generated during operations is expected to comply at all receivers apart from Woodlawn Farm, and more so at Cowley Hills. While the exceedance at Woodlawn Farm would be barely audible to the human ear, the exceedance at Cowley Hills was predicted to be larger.
- During noise enhancing north-east winds, noise levels at the privately owned residential receiver ‘Torokina’ was predicted at the criteria level.

In relation to noise because of traffic volumes the EA concluded that:

- Operational impacts of traffic noise were expected to comply with the *NSW Road Noise Policy* (NSW EPA, 2011) criteria under all conditions. However, under full production, there was a potential exceedance at St Andrews Anglican Church, Tarago due to the increased flow over a one-hour period caused by the morning employee shift change over. As per the *NSW Road Noise Policy* the criteria for places of worship apply only during periods of use. Mitigation measures considering this are included in Section 4.2.
- The relative increase of noise on the roads surrounding the Project during operation would be well below the *NSW Road Noise Policy* (NSW EPA, 2011) criteria and were considered acceptable for the project.
- An increase in noise relating to traffic volumes was identified when cumulative impacts were assessed. This increase was due to heavy vehicle movements from other sources, rather than the Project. Given offset distances from the road to residential properties, it was concluded that this increase would be compliant with *NSW Road Noise Policy* (NSW EPA, 2011) with no specific additional mitigation measures required.

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**3. NOISE MONITORING PROGRAM**

**3.1. Background**

The noise monitoring program, as required by the Project Conditions, has been reviewed and updated with the following considerations:

- The co-operation agreement (refer to Section 2.1.1)
- The results of the 2024 noise survey (refer to Section 2.2)
- The ownership of the residences adjacent to the Project (refer to Section 2.1)

As per the current Project approval, noise monitoring will occur monthly initially from commencement of processing operations. Where ongoing monitoring results do not indicate noise non-compliance a reduction in monitoring frequency and locations will be considered.

**3.2. Noise monitoring**

Monthly attended noise monitoring will be used to evaluate compliance with the relevant conditions of the project approval. This will be carried out at the locations which were identified in the baseline survey (refer to Section 2.2) as potentially being the most sensitive receptors to the mine re-starting:

- Widgemoor
- Willeroo
- Pylara

Additional ad-hoc monitoring will also be completed at Woodlawn Farm and Cowley Hills for comparison to the model, however, it is noted that distinguishing noise impacts between the different site users will be difficult given the increases to the noise level independent of the Project. The locations were selected based on the predicted impacts identified in the EA, accessibility, and to provide consistency with Veolia’s Noise Management Plan (dated 2018). It is noted that to DEVELOP’s knowledge Veolia do not currently complete any noise monitoring, therefore, there is no active noise monitoring program that DEVELOP can integrate with at this time. If this changes this management plan will be updated accordingly.

**3.3. Methodology**

All short-duration attended noise monitoring will be carried out in accordance with the applicable guidelines and policies, including (but not limited to) *AS 1055-1997 Acoustics - Description and measurement of environmental noise*, and the NSW EPA’s *Noise Policy For Industry, 2017*.

The following will be undertaken as part of the short-duration attended noise monitoring:

- Locations will be cited for the collection of representative noise data.
- Monitoring will be undertaken using a Type 1 integrating sound level meter with 1/3 octave banding and will be set to A-weighting (fast response).
- It will be completed by an appropriately trained person in accordance with DEVELOP’s noise monitoring procedure with data recorded on the corresponding field sheet.
- Best practice methodology will be implemented as needed to ensure the noise being monitored can be attributed to the Project, where possible. If not possible, comments on the noise will be recorded alongside the readings as per below.

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- Any significant Project related noise sources as well as other extraneous noise sources such as other industrial operations and/or local traffic will be recorded if noticed during monitoring.
- If the wind speed exceeds 5m/sec at microphone height during the measurement period, noise measuring will cease until the wind speed decreases to below this rate.
- The maximum (L<sub>Amax</sub>), average maximum (L<sub>A10</sub>) and the energy equivalent (L<sub>Aeq</sub>) intrusive noise level from mining operations over a 15 minute measurement period will be recorded. In addition, the operator will quantify and characterise the overall levels of ambient noise (i.e. L<sub>Amax</sub>, L<sub>A1</sub>, L<sub>A10</sub>, L<sub>A50</sub>, L<sub>A90</sub>, L<sub>A99</sub>, L<sub>Amin</sub> and L<sub>Aeq</sub>) over the 15 minute measurement interval.
- Instrument calibration will be checked before and after each survey.
- Wind speed at microphone height will be recorded during the monitoring. All other meteorological conditions will be retrieved by the on-site meteorological station which records in 10 minute intervals.

Any modifications to noise data collected, including for the exclusion of extraneous noise and/or penalties for modifying factors apart from adjustments for duration will be completed in accordance with the NSW EPA's *Noise Policy For Industry, 2017*. Comments are recorded for each minute and any extraneous noises heard throughout the monitoring to assist with this processing post data collection.

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**4. NOISE COMPLIANCE**

**4.1. Compliance criteria**

In accordance with Schedule 4, Condition 5 of the Project Approval, DEVELOP will ensure that any noise generated by the Project does not exceed the criteria in Table 4-5 at any residence on privately-owned land. Given the increase in noise across most sites and the fact that Veolia owned residences are instead managed internally (refer to Section 2.1.1) this criteria does not apply to dwellings within the mining lease.

**Table 4-5 Noise criteria db(A)**

Receivers	Day / Evening / Night (LAeq 15 minute)	Night (LA1Max)
All residential receivers	35	45

Note: After the first review of any EPL granted for this project under Section 78 of the Protection of the Environment Operations Act 1997 (POEO Act), nothing in this approval prevents the EPA from imposing stricter noise limits on the mining operations on site under the EPL.  
 LAeq — The ‘equivalent continuous noise level’, sometimes also described as the ‘energy-averaged noise level’. This may be likened to a ‘noise dose’, representing the cumulative effects of all the noise events occurring in the relevant time period.

As specified in Appendix 5 of the Project Approval, and the NSW EPA Noise Policy for Industry (EPA 2017), the criteria in Table 4-5 does not apply when there are non-standard weather effects such as:

- Periods of rain or hail;
- Temperature inversion conditions greater than 3 °C/100m and wind speeds up to 2 m/s at 10m above ground level;
- Less than 40% cloud cover and the wind speed (at 10 m height) is less than 1.0 m/s during the period from 6 pm to 7 am in non-arid areas;
- Average wind speeds greater than 5 m/s measured at microphone height; or
- Wind speeds greater than 3 m/s measured at 10 m above ground level.

**4.1.1. Protocol for determining an exceedance**

An exceedance of criteria (refer to Table 4-5) applies when all of the below are met:

1. The data is valid and collected standard weather conditions.
2. There is an exceedance of criteria at a private/ non Veolia owner property.
3. The individual noise contribution from the premises is exceeding the criteria by itself (rather than in conjunction with)

Additional noise monitoring of identified site sources may also be completed in order to verify the exceedance is attributable to project operations.

**4.2. Management and mitigation measures**

Reasonable and feasible noise management measures will be implemented to minimise the noise generated from the project. These include:

- Performance of noise checks on plant and equipment during the commissioning phase to confirm compliance with the noise model.
- Implementation of attenuation or mitigation measures on any items found to be in excess of that adopted in the noise model to ensure compliance with the noise assessment criteria contained in the Project Approval.
- Identification and rectification of equipment which is generating excess noise. For example damaged exhaust mufflers, noisy bearings, squeaky conveyor rollers etc.
- Minimising impact noise such as drop heights and metal on metal impacts.
- Undertaking loud activities outside noise sensitive periods. For example early morning, evening and night time, especially where operating nearer to sensitive residences.
- Beeping reversing alarms replaced with reverse squawker alarms.
- Operate mobile and stationary equipment with covers in place.
- Regularly inspect and maintain equipment to ensure it is in good working order.
- Engineering noise controls such as noise barriers and acoustic enclosures to be implemented as required.
- Operation of equipment in accordance with manufacturer’s instructions.
- Operation of crushers only during daylight hours where possible.
- Completion of attended noise monitoring to verify performance and compliance as detailed in Section 3.2.

The EA describes the potential for an exceedance at the St Andrew’s Anglican Church in Tarago. This was identified as only occurring during shift change over times in the morning. A review of the Tarago Times indicates that Church services are occurring only at 9:30 AM on Sundays which is outside of this impact time. Additional mitigation measures have been developed to ensure noise is minimised at this sensitive receptor:

- Instruct employees to limit engine revs and speed in residential areas.
- Instruct truck drivers to limit engine revving, exhaust brakes and heavy braking when on the public road network especially when accessing the site via Tarago.
- Instruct truck drivers to always maintain best operational practices; and
- Keep truck drivers informed of designated vehicle routes, parking locations, acceptable delivery hours or other relevant practices (for example, minimising the use of engine brakes).

The mitigation measures above are included in the Transport Code of Conduct as part of the Road Transport Protocol (ENW-008-PL).

**4.3. Trigger, Action and Response Plan**

A Trigger, Action and Response Plan (TARP) for noise has been developed to assist with noise management for the Project during operations. The TARP for is presented in Table 4-6.

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Table 4-6 Noise management TARPs

Event level	Trigger	Action	Response
Level 1	Noise monitoring equal to or less than prescribed criteria	No action required, continue monitoring	None required
Level 2	Noise monitoring results are above the assessment criteria	<p>Review of data and conditions at the time of monitoring including:</p> <ul style="list-style-type: none"> <li>• Weather data from the station and monitoring field sheet</li> <li>• Site activities and plant/machinery operation</li> <li>• Off-site activities and plant/machinery operation</li> <li>• Operating logs for fixed plant and mobile equipment</li> <li>• Accuracy of data and equipment calibration</li> <li>• Monitoring comments as to the likely source of the elevated readings#</li> </ul>	<p>Conduct further monitoring to verify results and project related sources.</p> <p>Implement additional mitigation measures and check existing measures are effective as expected.</p>
Level 3	Noise complaint received	Commence preliminary investigations as soon as practical to determine:	Develop specific mitigation measures which will be presented to the landowner
Level 3	Review of data confirms exceedance of assessment criteria attributed to the Project	<ul style="list-style-type: none"> <li>• Likely causes using information regarding prevailing meteorological conditions.</li> <li>• The nature of activities taking place</li> <li>• Recent noise monitoring results</li> </ul> <p>Conduct additional short-duration attended monitoring in suitable conditions</p>	<p>If site activities are likely source of elevated results, implement mitigation measures.</p> <p>Within two weeks of obtaining monitoring results showing an exceedance of any relevant noise criteria in Schedule 4, notify affected landowners and/ or tenants in writing of the exceedance, and provide regular monitoring results to each of these affected parties until the project is again complying with the relevant criteria</p>
Level 4	Exceedance of criteria is verified and is ongoing	<p>Determine and review the activities that were most likely contributing to the non-compliance.</p> <p>Implement additional mitigation measures including activity reduction or variation to reduce noise generation.</p> <p>Put in place a plan to manage noise in consultation with landholder/ Veolia if required</p>	<p>Report non-compliance to the EPA and DPHI, assign corrective actions, provide investigation report and updates to government agencies where required</p> <p>Notify affected landowners and/ or tenants in writing of the exceedance, and provide regular monitoring results to each of these affected parties until the project is again complying with the relevant criteria</p>

Event level	Trigger	Action	Response
[Redacted]		Undertake further attended noise sampling.	

**5. COMMUNICATION, REPORTING AND REVIEW**

**5.1. Communication**

Effective communication with government agencies, the workforce and the community are important features of the overall Environmental Management Strategy for Woodlawn mine and therefore a key component of each Environmental Management Plan.

DEVELOP is committed to consulting with the wider community and strives to achieve a high standard of community awareness and communication. A Community Consultation Committee (CCC) was established in 2015 as part of the construction phase of the Project and continues to meet regularly to discuss the Project. Further detail regarding stakeholder liaison is included in the Project EMS.

**5.2. Reporting**

All environmental monitoring requirements specified in EPA licences and approvals are undertaken and the data maintained on site in data management systems. Copies are provided for internal review as required by the General Manager. A summary of the data is provided to regulatory authorities as required by statutory approvals. Other data collected as part of projects or auditing procedures are reported internally and externally in accordance with the Environmental Management Strategy verification procedures.

In accordance with Project Approval Schedule 6 Condition 4, an Annual Review will be prepared in accordance with the Department of Planning *Post Approval requirements for state significant mining development Annual Review Guideline* dated October 2015 (or more recent edition if appropriate). A copy of the Annual Review will be made available on the DEVELOP web site as follows: <http://develop.com.au/Woodlawn-sustainability/>

Monitoring data required by the EPL will be reported on the company's web page in accordance with EPA requirements for public disclosure, and as per Schedule 6 Condition 11 of the Project Approval <http://develop.com.au/Woodlawn-sustainability/>. This website report includes the results from the attended noise monitoring completed each month including a comparison against criteria and to the baseline levels for each area in order to evaluate and report on the noise management system.

**5.3. Complaints**

Operational related complaints may be received:

- Directly via the Community Hotline (available 24/7): 1800 371 124
- Directly via the website: <https://www.develop.com.au/contact-us/>
- Directly via the CCC
- Indirectly via government agencies

Following receipt of a noise related complaint, DEVELOP will investigate and respond as per Table 4-6. The Environmental Management System provides further detail on the complaints management procedure. A complaints register is updated monthly and is publicly available on the DEVELOP website.

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**5.4. Incident reporting**

All reasonable and feasible avoidance, and mitigation measures will be carried out to ensure that noise generated by the Project does not exceed the criteria identified in Section 4.1.

If a noise exceedance on privately owned land is recorded and attributable to the Project, it will be reported to the EPA and DPHI within 24 hours of the completion of the investigation. A detailed report will be subsequently provided within 7 days. For Veolia owned land it will be reported to Veolia where required and in accordance with the Cooperation Agreement (refer to Section 2.1.1). Corrective and/or preventative actions will be assigned to relevant Company personnel. Actions will be communicated internally through planning meetings and toolbox talks and outstanding actions will be monitored for their effectiveness upon completion. A copy of the investigation report and regular updates on the status of the identified corrective and/or preventative actions will be provided to the relevant government agencies and, if required, the complainant.

**5.5. Review and continuous improvement**

The NMP will be reviewed and updated annually or in the case of a significant operational change. The review will include an assessment of the effectiveness of control measures and performance against the Plan’s objectives. The objectives of a review are to:

- Maintain compliance with statutory requirements.
- Identify opportunities for improvement in the management plan.
- Incorporate community considerations.

The NMP review will include:

- This document.
- Legislation, approval, license changes.
- Community complaints and enquiries.

As per Schedule 6 Condition 5, DEVELOP will review, and if necessary, revise the NMP within 3 months of:

- the submission of an annual review;
- the submission of an incident report;
- the submission of an audit report; or
- any modification to the conditions of this approval.

Where the review leads to revisions in the NMP, then within 4 weeks of the review the revised document will be submitted to the Secretary for approval.

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Prepared by :	KC	Approved by:	KC	Page 20 of 27

**6. REFERENCES**

*AS 1055:2018 – Acoustics – Description and measurement of environmental noise (replaces AS 1055.1-1997 Acoustics – Description and Measurement of Environmental Noise – General Procedures)*

AS/NZS IEC 61672.1:2019 Electroacoustics – sound level meters- specifications

*International Organisation for Standardisation’s (ISO 9613:1993) Acoustics – Attenuation of Sound During Propagation Outdoors.*

NSW Department of Climate Change and Water’s (DECCW 2009) Interim Construction Noise Guideline (ICNG)

NSW Department of Environment, Climate Change and Water (DECCW, 2011) NSW Road Noise Policy (RNP)

NSW EPA Noise Policy for Industry (EPA 2017) (replaces the NSW Industrial Noise Policy).

NSW EPA (2022). *Approved Methods for the Measurement and Analysis of Environmental Noise in NSW.*

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# Appendix 1 Plans

Document :	ENW-006-PL	Issue Date	04/09/2025	Version#: 13 Rev0
Document Name	Noise Management Plan	Review Date	04/09/2026	
Prepared by :	KC	Approved by:	KC	Page 22 of 27

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







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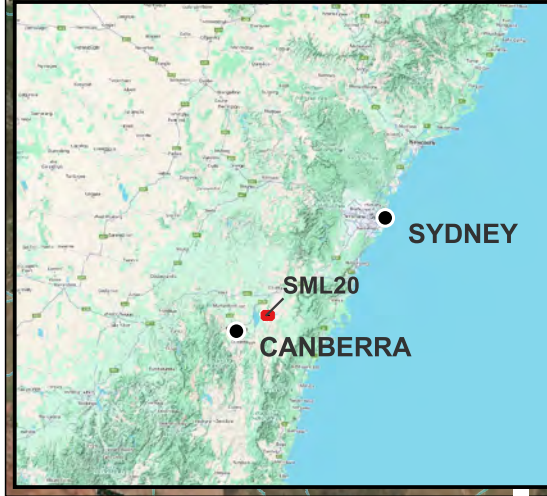
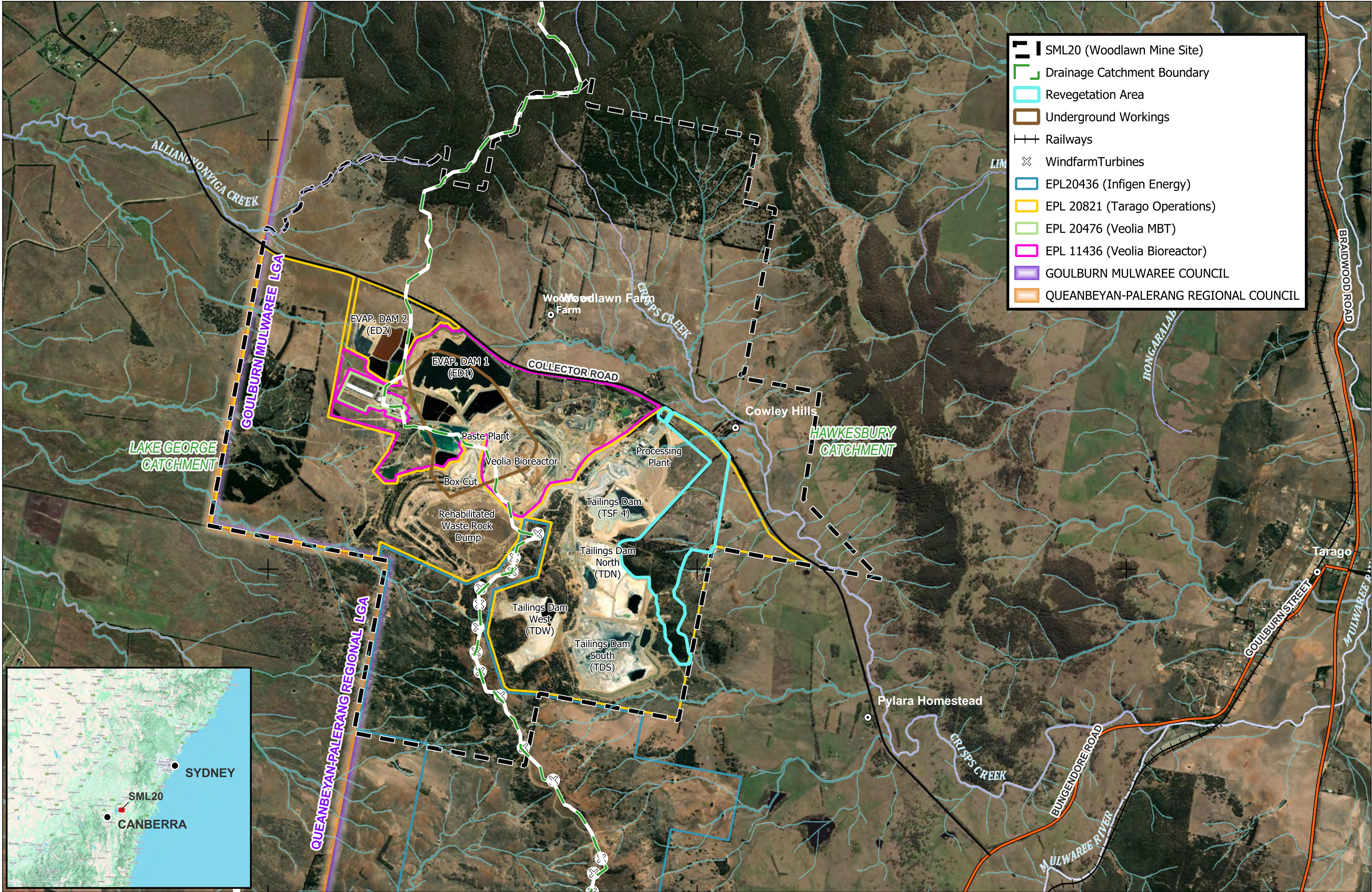
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-  SML20 (Woodlawn Mine Site)
-  Drainage Catchment Boundary
-  Revegetation Area
-  Underground Workings
-  Railways
-  Windfarm Turbines
-  EPL20436 (Infigen Energy)
-  EPL 20821 (Tarago Operations)
-  EPL 20476 (Veolia MBT)
-  EPL 11436 (Veolia Bioreactor)
-  GOULBURN MULWAREE COUNCIL
-  QUEANBEYAN-PALERANG REGIONAL COUNCIL



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**DEVELOP**

WOODLAWN ZINC COPPER PROJECT

Site Plan

Scale: 1:32,000 MGA94 (Zone 55)  
 VTX-JOB-0473-MAP-02  
 Date: 2025-6-26 Rev: 02 @A3 Author: C Hobbs Requested By: K Crook

## Appendix 2 Consultation Log – NMP

Date	Form/Agency	Comments and Outcomes	Response/how addressed
23/08/2025	EPA	Query sent to EPA requesting feedback on the AQMP and NMP before the review period for this closes on the 9th September. Same email correspondence followed up on 4th September	Response received 04/09/2025 via email, comments considered in subsequent updates. Reference to the INP updated throughout.
17/12/2024	Iberdrola	Briefing the Iberdrola representative for the Capital Renewable Energy Precinct	Copy of presentation sent. No comments requiring action.
17/12/2024	Veolia	Briefing Woodlawn Veolia environment manager on project re-start and updates being proposed for management plans.	Copy of presentation sent. Draft plans which require consultation under the approval (blast and water) to be sent once drafted.
9/12/2024	Online meeting with EPA Queanbeyan	Briefing with EPA to outline updates being proposed for management plans. Included: air quality, water, noise, waste rock and rehabilitation.	No comments / noted. Recommendation to re-engage with EPA if technical input or advice is required for any of the plans at any point.
15/11/2024	DPHI	Briefing DPHI on complex site historical context and re-start timeline with high level discussion on timing and process of management plan submission and approval.	Agreed with approach to re-draft and re-submit management plans.
30/03/2017	Email from EPA with final EPL 20821	Final EPL issued to Heron Resources	Noted
15/03/2017	Email from EPA re EPL	Updated Woodlawn Mine EPL for comment	Various emails and calls to finalise EPL and attachments
13/01/2017	Meeting with EPA Queanbeyan	Meeting with EPA to discuss licence finalisation and amendments to license	No specific comments received in relation to noise, blasting or dust management. The inclusion of the 4 dust deposition gauge was added to the licence
20/10/2016	Letter from EPA re draft EPL	Provision of second draft EPL 20821 for the Heron operation	Noted
12/10/2016	Letter to DPE re additional Experts	Letter from Heron Resources requesting approval of additional experts engaged in management plan preparation	Noted and approved by DPE
12/10/2016	Email from EPA re licence application	First draft EPL provided for comment with request for additional plans	6 emails to and from EPA and various phone calls in relation to comments on draft EPL

<b>Date</b>	<b>Form/Agency</b>	<b>Comments and Outcomes</b>	<b>Response/how addressed</b>
10/08/2016	EPL Application to EPA	Application for new EPL covering Woodlawn Mine construction and operation	Noted
27/05/2016	email to Julian Thompson EPA	Copy of Noise and Blast Management Plan provided to EPA for comment	Noted
9/03/2016	Meeting with Community Consultation Committee	Presentation to Woodlawn Community Consultation Committee which included overview of project, monitoring program, construction program, workforce numbers, exploration and environmental management plan preparation and content.	Draft EMPs provided on web page for download by committee members
13/10/2014	Meeting with EPA and OEH Queanbeyan Office	General project briefing, need for EPL separation with Veolia EPL, monitoring conditions, lack of archaeology sites and impact, need to define vegetation offset area and outcomes	Ongoing negotiation with EPA in relation to licensing requirements
9/10/2014	Email to Sandie Jones OEH	Copy of Planning Approval and plans of development area	Noted
18/09/2014	Site meeting with DRE	General briefing and site inspection, outline of Management Plans, finalised scope of MOP, Need for rehabilitation trials, standard environmental management provisions, control of acid generation	Noted
11/09/2014	Letter to DPE (Department of Planning and Environment)	Seeking approval of Experts engaged in relevant management Plan	Approval provided
23/07/2014	Meeting with Goulburn City Council	General Management and Planning Manager, general briefing no specific feedback	Noted
7/07/2014	Letter from Trade and Investment	Requested meeting and briefing on site and staged approach to preparation and approval of management plans	On site meeting held
3/07/2014	Initial consultation letter to: <ul style="list-style-type: none"> <li>• NSW Trade and Investment</li> <li>• Environment Protection Authority</li> <li>• NSW Office of Water</li> <li>• Sydney Catchment Authority</li> <li>• Office of Environment and Heritage</li> </ul>	These letters were the initial consultation and sought specific advice from each agency according to the respective relevant management plan.	None required

Date	Form/Agency	Comments and Outcomes	Response/how addressed
	<ul style="list-style-type: none"> <li>• Department of Planning and Environment (DPE)</li> </ul>		
19/01/2014	Email to Fran Kelly and James Caddey SCA	Copy of Woodlawn EMS provided, Project Approval, and Construction Environmental Management Plan (EMP)	None required

# Appendix 3 Plan Approval



Mr Andrew Lawry  
Chief Operating Officer  
Heron Resources Limited  
WOODLAWN MINE PROJECT

By email to: [ALawry@HeronResources.com.au](mailto:ALawry@HeronResources.com.au)

Dear Mr Lawry

**Woodlawn Mine Project (07\_0143)  
Approval of Environmental Management Plans**

I refer to your letter dated 30 March 2017 seeking the Secretary's review and approval of the:

- Vegetation and Rehabilitation Management Plan (incorporating the Tailings Management Strategy, Vegetation Management Plan and Rehabilitation Management Plan);
- Noise and Blast Management Plan;
- Water Management Plan;
- Heritage Management Plan; and
- Air Quality Management Plan.

The Department has reviewed the revised versions of these documents, dated May 2017 and is satisfied that they address the requirements of Condition 2 in Schedule 3 and Conditions 4, 7, 12, 17, 20, 22, and 27 in Schedule 4 of project approval 07\_0143. Accordingly, the Secretary approves the revised management plans.

Please ensure that a copy of the approved plans is placed on your website as soon as possible.

If you require further information, please contact Stephen Shoosmith on 9274 6164 or by email to [stephen.shoosmith@planning.nsw.gov.au](mailto:stephen.shoosmith@planning.nsw.gov.au).

Yours sincerely

Clay Preshaw  
**A/Director**  
**Resource Assessments**  
As nominee of the Secretary