



DOC21/73876-7

Dr Mandana Mazaheri
Principal Planning Officer
Department of Planning, Industry and Environment
Via: Major Project Portal

4 March 2021

Dear Dr Mazaheri

EPA Advice on McPhillamys Gold Project (SSD-9505)

Thank you for the request for advice from Public Authority Consultation (PAE-14069459), requesting the review by the NSW Environment Protection Authority (EPA) of the additional information provided by Regis Resources Limited for the McPhillamys Gold Project (SSD-9505).

The EPA has reviewed the following document:

- *McPhillamys Gold Project Response to government agency advice on Amendment Report and Submissions Report – EMM – November 2020*

The EPA has reviewed this document and notes that it has addressed the issues raised in the EPA's second submission on this project (letter dated 16 October 2020 – Reference DOC20/741867-14).

Based on the information provided, the proposal, if approved, will require an environment protection licence under sections 43, 47 and 48 of the *Protection of the Environment Operations Act 1997* (POEO Act) for scheduled development work (s.47 POEO Act) and 'Mining for minerals', 'Mineral processing' and 'Crushing, grinding or separating activities' under clauses 29, 27 and 16, respectively, of Schedule 1 of the POEO Act.

The EPA has made a number of recommended conditions should the project be approved. These recommendations are listed under Attachment 1.

If you have any questions about this request, please contact Mr Andrew Helms at the EPA's Central West (Bathurst) Office on (02) 6333 3805 or via email at epa.southopsregional@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'K Willows', is positioned above the printed name of the signatory.

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ATTACHMENT 1 Recommended conditions of Project Approval

General

1. Construction working hours on the pipeline development shall be limited to standard construction working hours which are:
 - Monday to Friday 7am to 6pm
 - Saturday 8am to 1pm
 - No work Sunday and Public Holidays.
2. No more than 8.5 million tonnes per annum (tpa) of material can be extracted and processed at the site.
3. The proponent must install and operate a meteorological weather station at an appropriate location within the premises that is capable of measuring the following monitoring parameters and meeting the corresponding requirements.

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Air temperature at 2 metres	degrees Celsius	Continuous	1 hour	AM-4
Air temperature at 10 metres	degrees Celsius	Continuous	1 hour	AM-4
Wind direction at 10 metres	Degrees	Continuous	15 minute	AM-2 & AM-4
Wind speed at 10 metres	m/s (metres per second)	Continuous	15 minute	AM-2 & AM-4
Sigma theta	Degrees	Continuous	15 minute	AM-2 & AM-4
Rainfall	mm	Continuous	15 minute	AM-4
Relative humidity	%	Continuous	1 hour	AM-4

Note 1 – The weather monitoring instrumentation installed and operated at the site must be have a stall speed or lower limit of measure for measuring wind speed less than 0.2 m/s.

4. The meteorological weather station must be maintained to be capable of continuously monitoring the parameters specified in (the table above).
5. The proponent must maintain and calibrate the meteorological monitoring station in accordance with the reference test methods and manufacturer's specifications. Records of the calibration and maintenance must be made available to DPIE/EPA upon request.
6. The proponent must develop and implement a quality assurance/quality control procedure for the data collected from the meteorological monitoring station. Outcomes from the procedure must be made available to DPIE/EPA upon request.
7. Blasting activities at the premises must only be undertaken between 8 am – 4 pm.
8. The proponent must notify DPIE and the EPA upon the commencement of construction works at the premises such that the initial 6 month construction window is triggered.
9. All aboveground storage facilities containing flammable and combustible liquids must be banded in accordance with Australian Standard AS 1940-2004.

All toxic chemicals must be handled and stored in accordance with the requirements of AS/NZS 4452-1997.

10. All trucks and mobile plant operating within the premises must be fitted (where there is a requirement for such an alarm to be fitted under Work Health and Safety legislation) with broad-spectrum reversing alarms.

The reversing alarms will be set to emit multiple frequencies attenuated above 4000Hz with a sound power level not exceeding 107dB on large machinery and 97dB on smaller vehicles and equipment. The sound power levels of the reversing alarms will be audited annually, or in accordance with the noise management plan, and immediately replaced or remediated where noise exceeds design specification.

11. Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

12. All plant and equipment installed at the premises or used in connection with the licensed activity:

- a) must be maintained in a proper and efficient condition; and
- b) must be operated in a proper and efficient manner.

Air

1. The proponent must develop and implement an Air Quality Management Plan (AQMP) prior to the commencement of project operations. As a minimum, the air quality management plan must include the following parts:
 - i. *Proactive and reactive mitigation strategies of all significant, and potentially significant emissions sources including the implementation of those mitigation measures contained in the Statement of Commitments (Appendix C to the Amended EIS¹);*
 - ii. *Key performance indicator(s)*
 - iii. *Monitoring method(s), including but not limited to:*
 - a. *the proposed installation, ongoing operation and maintenance of a suitable number of real-time PM₁₀ monitoring sites;*
 - b. *the installation, ongoing operation and maintenance of a meteorological weather station;*
 - iv. *Establish a trigger response/reactive management protocol to be used in combination with the PM₁₀ monitoring sites and the meteorological weather station;*
 - v. *Location, frequency and duration of monitoring;*
 - vi. *Record keeping;*
 - vii. *Response mechanisms and contingency measures,*
 - viii. *System and performance review for continuous improvement*
 - ix. *Compliance reporting.*
2. Prior to the commencement of activities, the proponent must prepare a Blast Management Plan that, as a minimum, includes appropriate blast management practices and the analysis of representative meteorological data to identify sub-optimal dispersion conditions during which blasting should not be undertaken.

¹ McPhillamys Gold Project Amended Report, prepared by EMM Consulting Pty Ltd., September 2020

3. All operations and activities occurring at the premises must be carried out in a manner that prevents and minimises the emission of air pollutants from the premises.
4. The premises must be maintained in a manner that prevents and minimises the emission of air pollutants from the premises.

Noise:

Construction:

1. The proponent must apply all reasonable and feasible noise mitigation measures in accordance with the *Interim Construction Noise Guideline* (DECC, 2009).
2. The following activities may be carried out outside the recommended construction hours:
 - a) construction that causes $L_{Aeq(15minute)}$ noise levels that are:
 - i. no more than 5dB above Rating Background Level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009); and
 - ii. no more than the Noise Management Levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses; and
 - b) construction that causes L_{AFmax} noise levels no more than 52 dB(A) during the night period; or
 - c) for the delivery of materials required by the police or other authorities for safety reasons; or
 - d) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.

Operation:

1. The proponent must develop a blast and vibration management plan prior to any blasting being undertaken on site to demonstrate the protocol to comply with conditions set in L7. As a minimum, the plan must include details about:
 - i. *Compliance standards;*
 - ii. *Measures to ensure compliance with licence limits;*
 - iii. *Remedial and reporting action plan;*
 - iv. *Monitoring methods and program;*
 - v. *Notification of procedures for neighbours prior to detonation of each blast;*
2. The EPA recommends that standard ground vibration and air overpressure limit and monitoring conditions be incorporated into any conditions of project approval with respect to all blasting undertaken at the premises.
3. Noise generated at the premises must not exceed the noise limits at the times and locations in the table below. The locations referred to in the table below are indicated by Table 7 and Figure 4 of the Amended Noise and Vibration Impact Assessment, McPhillamys Gold Project Mine Development, Blayney NSW, dated 25 August 2020, Muller Acoustic Consulting Pty Ltd, reference: MAC170434RP2V2

Location	Noise Limits in dB(A)			
	Day	Evening	Night	Night
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{AFmax}
R28a	41	38	38	52
R30	41	38	37	52
R31, R32	41	37	36	52
R16, R25, R28, R29, R33	41	37	37	52
R15, R17	41	37	35	52
R24	40	37	37	52
R19, R21, R23	40	36	36	52
All other residential receivers	40	35	35	52

4. Noise generated at the premises must not exceed the noise limits in recommended condition 3 above except for the following construction activities during the first six months of mine development:

- Construction of the temporary site access via Dungeon Road;
- Initial construction of the permanent site access from the Mid-Western Highway;
- Clearing and grubbing of the open cut mine area and ROM pad;
- Construction of the WMFs at the southern end of the Mine Development Project Area (WMF4, WMF5 and WMF6); and
- Initial construction of the pit amenity bund.

These construction activities are to occur only during standard construction hours, as defined in the *Interim Construction Noise Guideline*.

All reasonable and feasible mitigation is to be implemented to seek to achieve the noise management levels as defined in the *Interim Construction Noise Guideline*.

5. The following activities may be carried out outside the recommended construction hours:
- a) construction that causes L_{Aeq}(15minute) noise levels that are:
 - i. no more than 5dB above Rating Background Level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009); and
 - ii. no more than the Noise Management Levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses; and
 - b) construction that causes L_{AFmax} noise levels no more than 52 dB(A) during the night period; or
 - c) for the delivery of materials required by the police or other authorities for safety reasons; or
 - d) where it is required in an emergency to avoid the loss of lives, property and/or to prevent environmental harm.
6. For the purposes of the recommended operational noise condition 3 above:
- a) Day means the period from 7am to 6pm Monday to Saturday and the period from 8am to 6pm Sunday and public holidays.
 - b) Evening means the period from 6pm to 10pm.
 - c) Night means the period from 10pm to 7am Monday to Saturday and the period from 10pm to 8am Sunday and public holidays.
7. Meteorological conditions:
- a) The noise limits set out in recommended condition 3 above apply under the following meteorological conditions:

Assessment Period	Meteorological Conditions
Day	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level
Evening	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level
Night	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level

b) For those meteorological conditions not referred to in recommended condition 7 a) above, the noise limits that apply are the noise limits in condition 3 plus 5 dB.

8. For the purposes of recommended condition 7 above:

- a) The meteorological conditions are to be determined from meteorological data obtained from the meteorological weather station identified under condition 3 (General) above.
- b) Stability category shall be determined using the following method from Fact Sheet D of the *Noise Policy for Industry* (NSW EPA, 2017):
 - i. Use of sigma-theta data (section D1.4).

9. To assess compliance with the noise limits:

- a) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{AFmax} noise limits in recommended conditions 3 and 7 above, the noise measurement equipment must be located:
 - (i) approximately on the property boundary, where any residence is situated 30 metres or less from the property boundary closest to premises; or where applicable,
 - (ii) in an area within 30 metres of a residence façade, but not closer than 3 metres where any residence on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable,
 - (iii) in an area within 50 metres of the boundary of a National Park or Nature Reserve,
 - (iv) at any other location identified in condition 3.
- b) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{AFmax} noise limits in recommended conditions 3 and 7 above, the noise measurement equipment must be located:
 - (i) at the reasonably most affected point at a location where there is no residence at the location; or,
 - (ii) at the reasonably most affected point within an area at a location prescribed by condition 9 a) above.

10. A non-compliance of conditions 3 and 7 above will still occur where noise generated from the premises is measured in excess of the noise limit at a point other than the reasonably most affected point at the locations referred to in condition 9 a) or 9 b) above.

NOTE to recommended conditions 9 and 10: The reasonably most affected point is a point at a location or within an area at a location experiencing or expected to experience the highest sound pressure level from the premises.

- 11. For the purpose of determining the noise generated from the premises, the modifying factor corrections in Table C1 in Fact Sheet C of the *Noise Policy for Industry* (NSW EPA, 2017) may be applied, if appropriate, to the noise measurements by the noise monitoring equipment.
- 12. Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.

Requirement to monitor for noise

13. Attended noise monitoring must be undertaken in accordance with recommended condition 9 above and must:
 - a) occur quarterly in a reporting period;
 - b) occur during each day, evening and night period as defined in the *Noise Policy for Industry* for a minimum of:
 - 1.5 hours during the day;
 - 30 minutes during the evening; and
 - 1 hour during the night.
 - c) occur for three consecutive operating days; and
 - d) occur at a time when the mine is operating in a manner representative of typical activities.

Reporting conditions

14. A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the quarterly monitoring. The assessment must be prepared by a competent person and include:
 - a) an assessment of compliance with noise limits presented in recommended conditions 3 and 7 above; and
 - b) an outline of any management actions taken within the monitoring period to address any exceedences of the limits contained in recommended conditions 3 and 7 above.

Water:

Construction:

1. The proponent must design, construct and manage all erosion and sediment controls consistent with the practices and principles of *Managing Urban Stormwater, Soils and Construction Vol. 1* (Landcom, 2004) and *Vol. 2E Mines and Quarries* (DECC, 2008).

Operation:

The EPA notes that the premises will be operated as a 'nil discharge' site and therefore does not recommend any surface water monitoring or discharge quality limit conditions.

The proponent will need to ensure that any surface water discharges from the premises, including any captured clean water that is piped around operational areas of site, comply with s.120 of the POEO Act (prohibition of pollution of waters).

Groundwater:

1. The proponent must prepare an updated Water Management Plan and Groundwater Monitoring and Management Program and provide these reports to the EPA for review prior to the commencement of construction activities and operation of the project. The updated plans must include as a minimum:
 - i. Trigger Action Response Plans;
 - ii. Mitigation Measures Plans;
 - iii. Ongoing updates to baseline monitoring data;
 - iv. Details of constructed seepage monitoring bores proposed around the TSF;
 - v. Monitoring frequency of the seepage monitoring bores; and
 - vi. The proposed suite of water quality analytes that are to be monitored for at these bores.