

2 November 2022

Mr Stephen O'Donoghue
 Director Resource Assessments
 Energy, Resources and Compliance
 Department of Planning and Environment
 Locked Bag 5022
 PARRAMATTA NSW 2124

Attention: Rose-Anne Hawkeswood

Dear Stephen

Re: Bowdens Silver Project (SSD 5765) – Request for Information regarding noise modelling and operating hours

The following provides a response to matters raised in a request for information provided to Bowdens Silver by the Department of Planning and Environment in relation to the Bowdens Silver Project (the Project). The query provided to Bowdens Silver is presented in italics with a response following.

Noting mining is proposed 24 hour a day from year two, please clarify whether waste rock emplacement is proposed during the evening and night and confirm that this has been factored into the noise modelling scenarios.

Table A presents the proposed operating hours included in the Amended Project Description (included as Appendix 1 of the Water Supply Amendment Report).

Table A
Hours of Operation - Amended Project Description

Activity	Days	Hours
Clearing / topsoil and subsoil removal	Monday to Saturday ¹	7:00am to 6:00pm ²
Blasting	Monday to Saturday ¹	10:00am to 4:00pm
Mining	7 days	7:00am to 6:00pm 7:00am to 10:00pm ³ 24hrs ⁴
NAF waste rock transfer to the TSF embankment	Monday to Saturday ¹	7:00am to 6:00pm
Processing	7 days	24hrs
Concentrate Despatch	Monday to Saturday ¹	7:00am to 6:00pm ⁵
Maintenance	7 days	24hrs
Rehabilitation	Monday to Saturday ¹	7:00am to 6:00pm ²
Notes: 1 Public Holidays excluded. 2 Daylight hours only. 3 Commencing from Year 2 and subject to ongoing compliance with noise limits during the evening period. 4 Commencing from Year 3 and subject to ongoing compliance with noise limits during the evening and night-time periods. 5 Excluding 7:30am to 8:30am and 3:30pm to 4:30pm (School bus period) – when Project-related heavy vehicles (other than buses) must not travel on Lue Road.		

Further to this, it is noted that Section 5.2 of the Noise and Vibration Assessment (SLR, 2020) nominates the noise modelling scenarios assessed for the Project as follows.

- Scenario 1 (Year 0): day-time operations involving open cut pit development and construction of processing plant, tailings storage facility (initial embankment) and water supply pipeline.
- Scenario 2 (Year 3): day-time ore processing plus open cut pit operations, southern barrier development (590m AHD), waste rock haulage; and TSF raise (595m AHD). Evening ore processing plus open cut pit operations and waste rock placement. Night-time ore processing plus open cut pit operations and ore stockpiling.
- Scenario 3 (Year 8): day-time ore processing plus open cut pit operations, southern barrier development (615m AHD), waste rock haulage; and TSF raise (604m AHD). Evening ore processing plus open cut pit operations and waste rock placement (650m AHD). Night-time ore processing plus open cut pit operations and ore stockpiling.
- Scenario 4 (Year 10): day-time ore processing plus western side open cut pit operations, southern barrier development (620m AHD) and waste rock placement (650m AHD). Evening ore processing plus western side open cut pit operations and waste rock placement (650m AHD). Night-time ore processing plus open cut pit operations and ore stockpiling.

It is correct that the noise modelling scenarios for night-time operations do not include operations on the waste rock emplacement but refer only to processing and open cut pit operations and ore stockpiling. In reality, the principal activity within the open cut pit during the night-time period will be the management and loading of ore. No waste rock would be loaded or transported from the open cut pit during the night-time period. It is also agreed that the proposed operating hours presented in **Table A** refer to 'mining' and do not delineate between what activities this includes.

The reference to 'mining' for the purpose of setting operating hours was intended to describe all practical mining operations during the designated period. It is not intended to install lighting on the waste rock emplacement at all times. Rather, it would only be installed on those areas of the emplacement that would be operational of an evening, i.e. when evening deliveries of waste rock are planned. Importantly, activities on the waste rock emplacement are also not essential for the mining schedule. It is however imperative that open cut pit operations and ore stockpiling do occur during the night-time period (that is, 24hrs over 7 days a week). The mining schedule (and therefore the predicted life of mine) relies upon continual raw feed of ore material to the ROM Pad for processing. Therefore, waste rock emplacement activities were not modelled to occur during the night-time period.

It is considered appropriate that the operating hours for the Project reflect the intended activities. An example of the operating hours that may be reflected in conditions of consent are provided in **Table B**. You will note that we have also removed the statement in the notes '*subject to ongoing compliance with noise limits during the evening and night-time periods*'. In hindsight, this statement applies without the need for it to be stated. It was included to reflect the commitment to undertake noise compliance monitoring campaigns within one month of the commencement of any change to mining operating hours (indicatively Year 2 - Evening and Year 3 – Evening and Night) but it is not necessary given that compliance with the project noise trigger levels is predicted to be satisfied in all operating periods.

**Table B
Proposed Hours of Operation**

Activity	Days	Hours
Clearing / topsoil and subsoil removal	Monday to Saturday ¹	7:00am to 6:00pm ²
Blasting	Monday to Saturday ¹	10:00am to 4:00pm
Open Cut Pit Operations	7 days	7:00am to 6:00pm 7:00am to 10:00pm ³ 24hrs ⁴
Waste Rock Emplacement Operations	7 days	7:00am to 6:00pm 7:00am to 10:00pm ³
NAF waste rock transfer to the TSF embankment	Monday to Saturday ¹	7:00am to 6:00pm
Processing	7 days	24hrs
Concentrate Despatch	Monday to Saturday ¹	7:00am to 6:00pm ⁵
Maintenance	7 days	24hrs
Rehabilitation	Monday to Saturday ¹	7:00am to 6:00pm ²
Notes: 1 Public Holidays excluded. 2 Daylight hours only. 3 Commencing from Year 2. 4 Commencing from Year 3. 5 Excluding 7:30am to 8:30am and 3:30pm to 4:30pm (School bus period) – when Project-related heavy vehicles (other than buses) must not travel on Lue Road.		

I trust the above satisfies your queries on the noise modelling and how this is reflected in the proposed operating hours. Please contact myself or Anthony McClure with any further queries.

Yours sincerely



Nick Warren
Principal Environmental Consultant