



Your reference: DA 165-7-2005 MOD 1  
Our reference: DOC17/354271-05

The Planning Officer  
NSW Department of Planning and Environment

Attention: Laura Evans

Dear Laura

### **Haerses Road Sand Quarry - DA 165-7-2005 MOD 1 – Applicant's Response to Submissions**

I refer to the Department of Planning and Environment's notification on 3 July 2017 of a Response to Submissions (RTS) submitted by Dixon Sand (Penrith) Pty Ltd in relation to the above development consent modification application.

The application was previously on public exhibition until 10 November 2016 and the Environment Protection Authority (EPA) provided a response on 16 November 2016 in which more information about air quality and noise impacts was sought. The premises to which the application applies is regulated under environment protection licence 12513.

The EPA has reviewed the RTS and provides the following comments.

#### **Air Quality Impact Assessment**

The EPA considers that the RTS addressed most of the issues identified in its November 2016 review of the applicant's environmental assessment (EA). However one aspect requires resolution: the predicted additional exceedance of 24 hour PM10 at receptor R6. In accordance with Section 5.1.3 of the Approved Methods, the proponent must ensure that no additional exceedances will occur as a result of the proposed activity.

**Attachment A** includes a recommendation to address this issue.

#### **Noise Impact Assessment**

The EPA previously provided recommended noise conditions and limits in response to a review of the applicant's environmental assessment (EA) in November 2016. The advice was that in view of the low risk nature of the project with respect to noise, and the minor 1-2 dB increase in noise levels at some receivers only during the early extractive activities associated with the Modification (when noise sources are at their most exposed locations), the existing licence noise limits in Environment Protection Licence 12513 should be retained for the Modification.

The EPA understands that DPE's preference is to amend the existing noise limits to reflect the noise predictions in the EA (except for bund construction).

The EPA therefore has provided revised noise conditions and limits in **Attachment A** which align with the EA for three additional receivers. The existing noise conditions and limits have been retained for other receivers which aligns with current EPL limits to account for noise emissions from potential extractive activities occurring in the remaining cells of the premises. This is considered to be a clearer approach than setting varying conditions depending on which cell(s) extractive activities are occurring in at any given time.

The EPA considers that the applicant's RTS has otherwise adequately addressed the EPA's comments.

Yours sincerely



28 July 2017

**DAVID GATHERCOLE**  
Unit Head Sydney Industry  
**ENVIRONMENT PROTECTION AUTHORITY**

## ATTACHMENT A

### Air Quality Impact Assessment

The EPA has reviewed the AQIA, Dixon Sand Haerses Road Quarry Modification – Haerses Road, Maroota, New South Wales (PEL 2016) and the Response to Submissions (RTS) Report (Umwelt, June 2017). The RTS Report indicates that the proposed extension will cause one additional exceedance of the PM10 24 hour average criterion.

PEL notes that a number of management controls are proposed that were not accounted for in the modelling. PEL further notes that when the predicted concentration due to activities at the site exceeds 8 µg/m<sup>3</sup>, the background concentration is below 16 µg/m<sup>3</sup>, and therefore the dust prevention controls specified in Condition M2.4 of the EPL are adequate.

However, dispersion modelling in the AQIA predicts a 24 hour average PM10 concentration of approximately 58 µg/m<sup>3</sup> at R6 in October 2015. This exceeds the EPA's impact assessment criterion of 50 µg/m<sup>3</sup>. Figure 13 of the RTS Report indicates that project related activities contributed approximately 26.5 µg/m<sup>3</sup>, with background concentration contributing approximately 31 µg/m<sup>3</sup>. In this circumstance, Condition M2.4 would not have been implemented, and hence would not have prevented the exceedance. Further, R6 is located north-west of the site, and therefore a wind direction of approximately 120°-140° would be required to cause impacts at R6. Since Condition M2.4 applies to winds with direction between 180° and 240°, it would not have been effective in preventing exceedances, regardless of background concentration.

According to the RTS Report, other controls will be implemented at the site that have not been modelled. In order to demonstrate that these controls will be effective in preventing exceedances, the AQIA should be revised to incorporate the controls into the modelling.

**Recommendation:** In accordance with Section 11.2.3 of the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales*, since the AQIA predicts additional exceedances in ground level PM10 concentrations, the proponent must revise the AQIA to demonstrate that additional control measures will be effective in preventing exceedances.

### Noise Impact Assessment

The EPA recommends the following noise limit conditions be incorporated into consent conditions, which will also be reflected in the corresponding licence condition in environment protection licence 12513 if the modification application is approved by DPE:

**L6.1** Except for Cell 4 noise mitigation bund construction, noise generated at the premises must not exceed the noise limits specified in the Table below.

Location	NOISE LIMITS dB(A)		
	Day L <sub>Aeq</sub> (15 minute)	Morning Shoulder L <sub>Aeq</sub> (15 minute)	Morning Shoulder L <sub>A1</sub> (1 minute)
Lot 10 DP 835992, Lot 2 DP 230742	37	37	45
Lot 1 DP 230742	38	38	45
Lot 13 DP 38294	37	37	45

<i>Lot 14 DP 38294</i>	36	36	45
<i>Lot 15 DP 38294</i>	36	36	45
<i>Any other residential receiver not subject to a negotiated agreement</i>	35	35	45

Construction of the Cell 4 noise mitigation bund is to occur only during standard construction hours, as defined in the *Interim Construction Noise Guideline*. Construction should be completed as soon as practicable and within six months of construction commencement.

**L6.2** For the purpose of condition L6.1

- Day is defined as the period from 7am to 6pm Monday to Saturday.
- Morning Shoulder is defined as the period 6am to 7am Monday to Saturday.

**L6.3** The noise limits set out in condition L6.1 apply under all meteorological conditions except for the following:

- a) Wind speeds greater than 3 metres/second at 10 metres above ground level.
- b) Stability category F temperature inversion conditions and wind speeds greater than 2 metres/second at 10 metres above ground level; or
- c) Stability category G temperature inversion conditions.

**L6.4** For the purposes of condition L6.3:

- a) Data recorded by a meteorological station located at Maroota Public School must be used to determine meteorological conditions; and
- b) Temperature inversion conditions (stability category) are to be determined by the sigma-theta method referred to in Part E4 of Appendix E to the NSW Industrial Noise Policy.

**L6.5** To determine compliance:

- a) with the  $L_{eq(15\text{ minute})}$  noise limits in condition L6.1, the noise measurement equipment must be located:
  - approximately on the property boundary, where any dwelling is situated 30 metres or less from the property boundary closest to the premises; or
  - within 30 metres of a dwelling façade, but not closer than 3m, where any dwelling on the property is situated more than 30 metres from the property boundary closest to the premises; or, where applicable
  - within approximately 50 metres of the boundary of a National Park or a Nature Reserve.
- b) with the  $L_{A1(1\text{ minute})}$  noise limits in condition L6.1, the noise measurement equipment must be located within 1 metre of a dwelling façade.
- c) with the noise limits in condition L6.1, the noise measurement equipment must be located:

- at the most affected point at a location where there is no dwelling at the location;  
or
- at the most affected point within an area at a location prescribed by conditions L6.5(a) or L6.5(b).

**L6.6** A non-compliance of condition L6.1 will still occur where noise generated from the premises in excess of the appropriate limit is measured:

- at a location other than an area prescribed by conditions L6.5(a) and L6.5(b);  
and/or
- at a point other than the most affected point at a location.

**L6.7** For the purposes of determining the noise generated at the premises the modification factors in Section 4 of the NSW Industrial Noise Policy must be applied, as appropriate, to the noise levels measured by the noise monitoring equipment.

#### **Additions to Definition of Terms of the licence**

- NSW Industrial Noise Policy - the document entitled "New South Wales Industrial Noise Policy published by the Environment Protection Authority in January 2000."
- Noise – 'sound pressure levels' for the purposes of conditions L6.1 to L6.7.

