

Recommended Conditions of Consent - EPA Comments



Notice No. - 1600632

DEPARTMENT OF PLANNING INDUSTRY AND ENVIRONMENT
ABN 20 770 707 468
4 PARRAMATTA SQUARE, 12 DARCY STREET
PARRAMATTA NSW 2150

Attention: Melissa Anderson

Notice Number 1600632
File Number EF13/3063
Date 22-Sep-2020

EPA Response - SSD Modification - Roberts Road Quarry - DA267/11/99 Mod 4

I refer to the application by Hodgson Quarries and Plant Pty Ltd to modify development consent DA267-11-99 and the accompanying additional information provided to the Environment Protection Authority (EPA) on 25 March 2020, 25 May 2020 and 11 September 2020. The EPA has reviewed the additional information provided relating to Air.

Hodgson Quarries and Plant Pty Ltd (the proponent) operates the Roberts Road Quarry located on the corner of Roberts Road at Maroota NSW (the premises). The proponent is seeking to modify the development consent (DA 267-11-99) for the premises to allow for importation of Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM) for backfilling the extraction area to construct a free-draining final landform, and to undertake processing and blending.

The modification of consent is sought to:

- import Virgin Excavated Natural Material (VENM) and Excavated Natural Material (ENM), to backfill the extraction area and create a final landform. Up to 320,000 tonnes per annum of VENM/ENM is proposed to be imported;
- On-site processing of selected, high sand content VENM and ENM for sale or blending with sand produced from the in-situ resources;
- Increase in the number of traffic movements permitted each day from 100 to 140. Up to 40 additional truck movements per day are associated with the proposed importation of VENM and ENM;
- An extension of the approved quarry life from 31 May 2025 to 31 May 2030;
- Removal of a condition limiting the area of exposed and active quarry extents to allow for backfill and rehabilitation of the completed sections of the Quarry with VENM and ENM.

The EPA has issued Environment Protection Licence No 6535 (EPL) under the *Protection of the Environment Operations Act 1997* (Act) to HB Maroota Pty Ltd in respect of the site located at Cnr Roberts and Old Northern Roads, Maroota, NSW 2756, Lot 1 DP 228308, Lot 2 DP 228308 and Lot 2 DP 312327 (premises). The EPL permits the following scheduled activities:

- extractive activities (up to 500,000T tpa)
- crushing, grinding, or separating activities (each permitted up to 500,000T tpa)

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If the proposed increase in the amount of VENM and ENM is approved the EPL will require variation under s.58 of the Act to update the limits of the ancillary activity 'Receipt and processing of VENM and ENM' under EPL condition L2.1. This will limit the amount of VENM and ENM received, as approved by any conditions of consent. The applicant will need to apply separately to the EPA to vary the licence.

The licensee will also be required to comply with the conditions of *The excavated natural material order 2014* and *The excavated natural material exemption 2014* (made under Clause 93 of the *Protection of the Environment Operations (Waste) Regulation 2019*).

Please note that, in accordance with EPA's documents *The excavated natural material order 2014* (ENM Order) and *The excavated natural material exemption 2014* (ENM Exemption), ENM cannot be processed or blended with other material, it can only to be imported for the purposes of application to land as engineering fill or for use in earthworks.

The EPA has reviewed the additional information provided and is of the view that if the current activity is modified, EPL No. 6535 should be varied to effectively regulate the modified activity. The applicant will need to apply separately to the EPA to vary this licence. The EPL variation will also include changes to conditions, where relevant, around Air, Water and Noise.

Background

On 3 February 2020 the EPA provided a response (DOC20/6390) which identified issues with:

- the Air Quality Impact Assessment (AQIA), a revised AQIA to address the issues identified was requested,
- the Noise Impact Assessment (NIA), a revised NIA in line with the Noise Policy for Industry (NPfI) was requested,
- potential water pollution risks - a water impact assessment was requested with requirements provided along with recommended conditions to address the residual water pollution risks.

On 15 April 2020 the EPA provided a response (DOC20/249727-8) following a review of the additional information provided, which resulted in additional information being requested:

- *Air* - Revised AQIA, issues identified with the air quality impact assessment have been adequately addressed the referenced site-specific monitoring data for annual average PM2.5 is significantly above the annual average impact assessment criteria of 8 ug/m3. The EPA recommended that, prior to project determination, the proponent investigate the source of the elevated annual average PM2.5 impacts from current operations, and if required, propose mitigation and rectification measures to reduce these impacts. The EPA will consider requiring these measures to be implemented via a pollution reduction program or special condition on the licence. In Umwelt's response dated 20 May 2020, it was advised that "the requirement for a Pollution Reduction Program is not warranted".

- *Noise* - March 2020 Response to Submissions (RtS) did not address the EPA's concerns. The EPA also noted that the EPL was not updated following approval of MOD 3, therefore different metrics were used to assess noise-related monitoring limits (L10 vs. Leq). The EPA requested that the NIA be revised in line with the NPfI, as requested in previous letters to Umwelt on 24 April 2020 and DPIE on 3 February 2020.

- *Water* - The RtS clarified that no discharges are expected to occur during operational quarrying, however the RtS indicated that discharges may be required during construction of final landform. No further assessment is required at this stage given that no licensed discharge point is currently proposed. A recommended condition of approval was provided. In Umwelt's response dated 20 May 2020, it was advised that "the Applicant does not object to this condition".

On 30 April 2020 a teleconference between representatives from the EPA and Umwelt was held. During the teleconference the EPA discussed the issues raised, relating to Noise, in their response to DPIE (letter dated 15 April 2020) to assist Umwelt to understand the issues and request for an updated NIA in line with the NPfI.

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On 24 June 2020 the EPA provided the recommended licence conditions - Noise, refer to the EPA's response Notice Number 1596266 (Attachment A). The EPA also requested a further teleconference to discuss resolution of the remaining outstanding issues relating to Air as follows:

- the EPA was unable to reconcile the predicted cumulative ground level concentrations of PM_{2.5} (annual average) on the basis that PM_{2.5} monitoring data collected at the premises was utilised to characterise predicted impacts from the proposal, and there were questions regarding the quality of the referenced PM_{2.5} monitoring data.

On 15 July 2020 a teleconference between representatives from the EPA and Umwelt was held. During the teleconference the EPA discussed the issues relating to Air, in their response to DPIE (letter dated 24 June 2020) to assist Umwelt in understanding the issues and resolution of issues. The EPA met with the proponent to discuss the issue. The EPA advised that the residual issue could be resolved through a further review of the site specific PM_{2.5} monitoring data (specifically on the quality of the data collected) and a commitment to implement reactive management strategies to manage particulate matter emissions at the premises.

Recommendation

The EPA provides the following in response to the additional information provided on 11 September 2020.

The additional analysis of site specific PM_{2.5} monitoring data indicates issues with the quality of the monitoring data which are likely causing an overestimation of cumulative PM_{2.5} impacts presented in the AQIA

The AQIA adopted an annual average PM_{2.5} background of 13 ug/m³, which is significantly greater than the EPA's impact assessment criteria and likely to be an unrealistic characterisation of the existing environment. As such, the EPA recommends additional analysis to investigate the integrity of the monitoring data used in the assessment.

The additional analysis provided compares PM₁₀ to PM_{2.5} ratios from on site monitoring data, with ratios derived from other monitoring stations, and literature values for activities that could be considered similar in nature to the activities undertaken at the premises. Whilst the analysis does not completely resolve issues around the quality of PM_{2.5} monitoring at the premises, it does provide sufficient information to give a good indication that there are accuracy issues with onsite PM_{2.5} monitoring data, likely resulting in unrealistically elevated concentration being reported.

Incremental impact PM_{2.5} from the proposal is predicted to be low

The air quality impact assessment predicts a 0.2 ug/m³ change in annual average PM_{2.5} concentration compared with current operations. This represents 2.5 % of the applicable cumulative assessment criteria. As such there is unlikely to be an appreciable change in observed annual average PM_{2.5} concentrations as a result of the proposal.

The EPA has not completed a detailed review of the Air Quality Management Plan- insufficient detail provided

The proponent has provided an *Air Quality Management Plan prepared for Hodgson Quarries & Plant Pty Ltd Roberts Road Quarry, Maroota NSW 2756*, prepared by Benbow Environmental dated 10 September 2020 (the Air Quality Management Plan). The EPA has not conducted a detailed review of the Air Quality Management Plan, however, a screening level review indicates that the plan is not sufficiently detailed to assure management measures will be effectively and rigorously implemented in an auditable manner.

The EPA recommends the management plan be revised and has included a recommended condition of approval in this regard.

The residual issue can be resolved through conditions of approval

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Factoring in the additional analysis provided, the incremental predictions in annual average PM_{2.5}, and a commitment to implement proactive and reactive management strategies, the EPA considers that the residual issue can be resolved through conditions of approval.

The EPA recommends conditions of approval as **Attachment A**, including a condition requiring that the Air Quality Management Plan for the premises be explicit on triggers for implementing reactive management, and those triggers be auditable and reviewed on an ongoing basis for continual improvement purposes.

Further, the EPA recommends that the licensee commission an expert review and audit of current and past air quality monitoring and conduct a campaign of PM_{2.5} monitoring (in accordance with relevant Australian Standards) to accurately confirm ambient PM_{2.5} concentrations.

The EPA also requests that if the modification is approved, that a condition of consent be included requiring HB Maroota Pty Ltd ensure that it holds an EPL that is appropriate for the scheduled activities being undertaken under the *Protection of the Environment Operations Act 1997*.

In the event that the proposal is further modified by the applicant prior to the granting of consent or by DPIE as a result of the conditions proposed to be attached to the consent, the EPA requests that DPIE consult with the EPA about the changes before modifying the consent. This will enable EPA to determine whether the proposed licence conditions need to be modified in light of the changes.

If you have any questions, or wish to discuss this matter further please contact Lisa Crambrook on (02) 8837 6079 or email lisa.crambrook@epa.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to be 'Lara Barrington', written over a dotted line.

Lara Barrington

Unit Head - Regulatory Operations Metropolitan West

(by Delegation)

Attachment A - Recommended licence conditions - Air

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Attachment A - Recommended licence conditions - Air

Consent Conditions

1. The premises must be maintained in a condition which minimises or prevents the emission of air pollution (including dust) from the premises
2. All operations and activities undertaken at the premises must be conducted in a manner which minimises or prevents the emission of air pollution (including dust) from the premises
3. The proponent must implement methods for application of wet suppression to the source feed material for screening activities. The wet suppression must be implemented to prevent or minimise visible dust emissions occurring from screening activities.
4. The proponent must prepare and implement an Air Quality Management Plan (the AQMP) that includes both proactive and reactive management strategies. The AQMP must include, but is not limited to
 - a. Key performance indicators
 - b. Continuous PM₁₀ monitoring
 - c. Monitoring methods, including location frequency and duration of monitoring
 - d. Triggers for the implementation of reactive management strategies. Triggers must be clearly articulated, and auditable.
 - e. Methods for ongoing review of the AQMP (including the reactive triggers) for informing continual improvement
 - f. Complaint handling procedures
 - g. Methods for documenting the implementation of both proactive and reactive mitigation measures.
 - h. Methods for compliance reporting

EPL conditions

1. The licensee must engage a suitably qualified independent expert, with experience in ambient air quality monitoring of particulate matter, to conduct an independent audit of the current and past air quality monitoring undertaken at the premises. The audit must consider, but is not limited to the following:
 - The methods for collection and analysis;
 - Quality assurance and quality control practices; and
 - Method accuracies

Within <X> months, the licensee must submit a report to the EPA that details the audit undertaken, the findings of the audit, and any recommendations made by the person(s) undertaking the audit.

2. The licensee must undertake a monitoring campaign of PM_{2.5}. The campaign must include monitoring of PM_{2.5} continuously for a minimum of a 12 month period using a method consistent with an Australian Standard. Within 3

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months of completion of the 12 month monitoring period, the licensee must submit a report to the EPA. The report must include, but is not limited to:

- A description of the monitoring undertaken, including the method(s) implemented, and conformance to the Australian Standard referenced for undertaking the monitoring;
- A summary of the data obtained during the monitoring period; and
- Analysis and interpretation of the data obtained during the monitoring period.