

Our Reference: EF13/3972 SF21/41645 DOC21/962015-26

Contact: Luke Davison
Date: 24 November 2021

James McDonough Team Leader Department of Planning, Industry and Environment GPO Box 39 SYDNEY NSW, 2001

Re: Major Projects – New Request for Advice Hanson Tweed Sand Plant Expansion (SSD-10398) (Tweed Shire)

Dear Mr McDonough

I am writing to you in reply to your 1 November 2021 New Request for Advice, to the Environment Protection Authority (EPA) on the State Significant Development (SSD) application 10398 for the above project. Documentation provided included the:

- Hanson Tweed Sand Plant Expansion (HTSPE) Phase 5 to Phase 11, Submission Report, Zone Planning Group Pty Ltd dated 28 October 2021;
- HTSPE Phase 5 to Phase 11, Submission Response Table;
- Gilbert & Sutherland Response to HTSPE (SSD-10398) Environmental Impact Study submissions dated 8 October 2021; and,
- Twenty attachments including
 - Construction Noise Assessment (CNA by ATP Consulting, ref ATP190611-R-CNA-05, dated October 2021)
 - Operational Noise Impact Assessment (ONIA by ATP Consulting, ref ATP190611-R-NIA-08, dated October 2021)

The EPA requests that this submission be read in conjunction with its letters dated 4 December 2019 and 3 June 2021 in respect of the requirements for the environmental assessment for the project.

The Hanson Tweed Sand Plant (HTSP) has an existing Environment Protection Licence (EPL) No.11453 issued by the EPA. If this proposal proceeds to approval the proponent will be required to apply to the EPA to have the existing licence varied to accommodate the expanded operation.

Waste

HTSP may need to apply for a licence variation to add waste processing (non-thermal treatment) and waste storage to the EPL applied for if the waste proposed to be imported to the premises does not meet current resource recovery order and exemption issued by the EPA.

Noise

The EPA has made specific comments below and provides recommended conditions of approval in Attachment A.

The EPA is satisfied with the response to EPAs comments on the EIS, shown in Table 1.1 of the ONIA. Attached are the EPAs recommended noise limits based on the Project Noise Trigger Levels (PNTLs) that have been derived in the ONIA, or the predicted noise level where there is a minor exceedance of the PNTL. We note that the daytime PNTLs are 1-2 dBA higher than the existing noise limit at all receivers except those closest to the Pacific Motorway (which are 6 dBA higher). The EPA considers this is reasonable, considering the impact that traffic noise will have on the receivers nearest to the Pacific Motorway. 1-2 dBA is a marginal increase in the daytime noise at the remaining receivers and is predicted to be achieved in all scenarios at all relevant receivers. The evening and night time PNTLs are predicted to be achieved in all scenarios and at all receivers except for a minor 1 dBA exceedance at night at 535C Cudgen Road and 543 Cudgen Road in Scenario 2 (Year 4-8).

The proposed construction works are the haulage road, new processing facilities and clearing topsoil for dredging operations. The EPA recommends a condition be included that limits construction works to standard hours of construction only, in accordance with the *Interim Construction Noise Guideline*.

The Proponent should be made aware that any commitments made in the EIS may be formalised as approval conditions and may also be established as formal licence conditions.

If you have any questions, please contact Geff Cramb on 02 6640 2510.

Yours sincerely,

Luke Davison

Unit Head - Regulatory Operations Environment Protection Authority

Attachment A Recommended Conditions of Approval for the HTSP

L3. Waste Limit Conditions

- **L3.1** The licensee must not cause, permit or allow any waste generated outside the premises to be received at the premises for storage, treatment, processing, reprocessing or disposal or any waste generated at the premises to be disposed of at the premises, except as expressly permitted by a licence under the Protection of the Environment Operations Act 1997.
- **L3.2** This condition only applies to the storage, treatment, processing, reprocessing or disposal of waste at the premises if it requires an environment protection licence under the Protection of the Environment Operations Act 1997.

Note: Condition L3 ensures that a premised based activity is not used as a waste facility (unless that scheduled activity is permitted by another condition with relevant development consent).

L3.3 Up to 60,000 tonnes of Virgin Excavated Material (VENM) may be imported onto the premises per reporting period, for the purposes of backfilling, armoring lake edges and rehabilitation works only. The VENM received on the premises must be classified/certified accordingly (including testing requirements). VENM is defined in the Protection of the Environment Operations Act 1997.

L4. Noise Limit Conditions

L4.1 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 Appendix B in Hanson Tweed Sand Plant Expansion Operational Noise Impact Assessment (ATP Consulting Engineers, ref:ATP190611-R-NIA-08, dated October 2021)

	Noise Limits in dB(A)			
Location	Day	Evening	Night	Night
	L _{Aeq(15 minute)}	L _{Aeq(15 minute)}	L _{Aeq(15 minute)}	L_{AFmax}
353 Cudgen Road, Cudgen (Lot 3, DP 616805)	41	41	38	52
535C Cudgen Road, Cudgen (Lot 1, DP 551126)	42	42	39	52
543 Cudgen Road, Cudgen (Lot 1, DP 777905)	42	42	39	52
139 Pacific Motorway, Chinderah (Lot 17, DP 1168455)	46	46	38	54

- **L4.2** For the purposes of condition L4.1:
 - 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.

L4.3 Noise-enhancing meteorological conditions

a) The noise limits set out in condition L4.1 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 3m/s at 10m above ground level.
Evening	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level.
Night	Stability Categories A, B, C and D with wind speeds up to and including 3m/s at 10m above ground level; or Stability category E and F with wind speeds up to and including 2m/s at 10m above ground level.

b) For those meteorological conditions not referred to in condition L4.3(a), the noise limits that apply are the noise limits in condition L4.1 plus 5dB.

L4.4 For the purposes of condition L4.3:

- a) The meteorological conditions are to be determined from meteorological data obtained from the meteorological weather station identified as Bureau of Meteorology AWS at Coolangatta Airport
- 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).

L4.5 To assess compliance:

- a) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{Amax} noise limits in condition L4.1 and L4.3, 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 L4.1
- b) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{Amax} noise limits in condition L4.1 and L4.3, 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 L4.5 (a).
- **L4.6** A non-compliance of conditions L4.1 and L4.3 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 L4.5 (a) or L4.5 (b).

- **NOTE to L4.5 and L4.6:** 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.
- **L4.7** 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.
- **L4.8** Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.

Hours of Construction

L4.9 All construction work at the premises must be conducted between 7am and 6pm Monday to Friday and between 8am and 1pm Saturdays and at no time on Sundays and public holidays, unless inaudible at any residential premises.

Noise Management Plan

- **L4.10** The proponent must prepare and implement a Noise Management Plan that covers all premises based activities and transport operations. The plan must include but need not be limited to:
- a) all measures necessary to satisfy the limits in Table L4.1 at all times,
- b) a system that allows for periodic assessment of Best Management Practice (BMP) and Best Available Technology Economically Achievable (BATEA) that has the potential to minimise noise levels from the facility,
- c) Effective implementation of identified BMP and BATEA measures, where considered feasible and reasonable,
- d) Measures to monitor noise performance and respond to complaints.
- e) Measures for community consultation including site contact details,
- f) Noise monitoring and reporting procedures.
- **L4.11** The proponent must prepare and implement a detailed Construction Noise Management Plan (CNMP), prior to commencement of construction activities, that includes but is not necessarily limited to:
- (a) identification of each work area, site compound and access route (both private and public)
- (b) identification of the specific activities that will be carried out and associated noise sources at the premises and access routes,
- (c) identification of all potentially affected sensitive receivers,
- (d) the construction noise and vibration objectives identified in the Environmental Assessment,
- (e) assessment of potential noise and vibration from the proposed construction methods (including noise from construction traffic) against the objectives identified in the Environmental Assessment,
- (f) where the objectives are predicted to be exceeded an analysis of feasible and reasonable noise mitigation measures that can be implemented to reduce construction noise impacts,
- (g) description of management methods and procedures and specific noise mitigation treatments that will be implemented to control noise and vibration during construction, including the early erection of any operational noise control barriers,
- (h) procedures for notifying residents of construction activities that are likely to affect their noise and vibration amenity,

(i) measures to monitor noise performance and respond to complaints.

M8 Requirement to Monitor Noise

- **M8.1** Attended noise monitoring must be undertaken in accordance with Condition L4.5 and must:
 - a) occur annually 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.

Reporting Conditions

R4 Noise Monitoring Report

A noise compliance assessment report must be submitted to the EPA within 30 days of the completion of the annual monitoring. The assessment must be prepared by a competent person and include:

- a) an assessment of compliance with noise limits presented in Condition L4.1 and L4.3; and
- b) an outline of any management actions taken within the monitoring period to address any exceedences of the limits contained in Condition L4.1 and L4.3.

Additions to Definition of Terms of the licence

- Noise Policy for Industry the document entitled "Noise Policy for Industry" published by the NSW Environment Protection Authority in October 2017.
- Noise 'sound pressure levels' for the purposes of conditions L4.1 to L4.11.
 - L_{Aeq (15 minute)} the value of the A-weighted sound pressure level of a continuous steady sound that, over a 15 minute time interval, has the same mean square sound pressure level as a sound under consideration with a level that varies with time (Australian Standard AS 1055:2018 Acoustics: description and measurement of environmental noise).
 - L_{AFmax} the maximum sound pressure level of an event measured with a sound level meter satisfying Australian Standard AS IEC 61672.1-2013 *Electroacoustics - Sound level meters - Part 1: Specifications* set to 'A' frequency weighting and fast time weighting.

Recommended inclusions in the Planning Approval

That a Traffic Noise Management Strategy (TNMS) be developed by the proponent, prior to commencement of construction and operation activities, to ensure that feasible and reasonable noise management strategies for vehicle movements associated with the facility are identified and applied, that include but are not necessarily limited to the following;

 driver training to ensure that noisy practices such as the use of compression engine brakes are not unnecessarily used near sensitive receivers,

- best noise practice in the selection and maintenance of vehicle fleets,
- movement scheduling where practicable to reduce impacts during sensitive times of the day,
- communication and management strategies for non licensee/proponent owned and operated vehicles to ensure the provision of the TNMS are implemented,
- a system of audited management practices that identifies non conformances, initiates and monitors corrective and preventative action (including disciplinary action for breaches of noise minimisation procedures) and assesses the implementation and improvement of the TNMS,
- specific procedures for drivers to minimise impacts at identified sensitive receivers,
- clauses in conditions of employment, or in contracts, of drivers that require adherence to the noise minimisation procedures and facilitate effective implementation of the disciplinary actions for breaches of the procedures.