



Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L9136/2018/1
Licence Holder	Norwest Sand & Gravel Pty Ltd
ACN	090 664 378
File Number	DER2018/000852-1
Premises	<p>The Farm</p> <p>Sturt Pea Road</p> <p>WICKHAM WA 6720</p> <p>Legal description –</p> <p>Lot 178 on Deposited Plan 186560</p> <p>As defined by the Premises maps attached to the Revised Licence</p>
Date of Report	21 February 2025
Decision	Revised licence granted

Grace Heydon
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L9136/2018/1 (L9136) is held by Norwest Sand & Gravel Pty Ltd (Licence Holder) for the Farm (the Premises), located at Lot 178 Sturt Pea Road Wickham WA, 6720.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9136 has been granted.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 26 September 2024, the Licence Holder submitted an application to the department to amend Licence L9136 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Increase in Production and Design Capacity (P&DC) for Category 12 and 13 from 20,000 to 50,000 tonnes per annual period for crushing and screening of Inert Waste Type 1 building materials - concrete.

This amendment is limited only to changes to Category 12 and 13 activities from the Existing Licence. No changes to the aspects of the existing Licence relating to Category 62 have been requested by the Licence Holder.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design capacity	Proposed design capacity	Description of proposed amendment
12	20,000 tonnes per annual period	50,000 tonnes per annual period	Increase from 20,000 to 50,000 tonnes per annual period
13	20,000 tonnes per annual period	50,000 tonnes per annual period	
62	20,000 tonnes per annual period	20,000 tonnes per annual period	No change

2.3 Nosie Assessment and Report

Existing Licence conditions 23 to 26 required the submission of a Nosie Assessment (NA) and Report to the department. The NA required the Licence Holder to investigate the nature and extent of noise emissions from the Premises and conduct an assessment in accordance with

the methodology required in the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations), to ensure compliance of the noise emissions from the primary activities against the relevant assigned levels specified in the Noise Regulations. The Report was also to be submitted to the department CEO within 30 days of the commencement date of the licence, being 11 July 2020.

The department requested a copy of the NA as a part of this amendment application, so that compliance with the Noise Regulations could be assessed, noting that an increase in crushing and screening operations will increase potential noise emissions arising from the premises. The Licence Holder advised the department that there was no NA undertaking in accordance with Existing Licence conditions.

The department requested the Licence Holder undertake the required NA in a letter dated 10 October 2024 with submission by 5 November 2024 allowing a request for an extension. The Licence Holder submitted a NA on 30 October 2024.

The departments Noise Branch (NB) assessed the NA and provided a response on 11 November 2024 advising that the NA was insufficient and required further information be provided to substantiate outcomes. DWER then requested an updated NA from the Licence Holder in a letter dated 13 November 2024.

The Licence Holder submitted a revised NA on 29 January 2025. The departments NB subsequently assessed the revised NA and provided a response on 10 February 2025.

The late submission of the NA constitutes a technical non-compliance with conditions of the Existing Licence, which will be followed up by the departments Assurance (Compliance) Branch independent to this amendment application assessment.

2.3.1 Technical advice

Technical advice has been sought from internal experts within the departments NB to assist with the assessment of the suitability of noise emissions from the Premises. This advice is summarised as follows:

- Acoustic Consultants (AC) attended site 27-28 November 2024 and also carried out unattended noise monitoring extending to 4 December 2024. The attended measurements were taken at selected points around the crusher and screener (locations A - F), at three locations along Sturt Pea Rd (locations P1 – P3) as well as at three identified receiving locations (locations R1 – R3).
- The unattended noise logging site (7 Spencer St) - is located further away than that of R2 - has data portrayed. It is not identified why this location was selected, possibly due to property access. It is unclear what the purpose of the data from the unattended noise monitoring is. Aside from presenting data, there is no discussion in the report to describe what information can be obtained from it, which in turn may assist in explaining why the ambient levels (i.e. when the crusher is not operating) is elevated and therefore have more informed insight into the local noise environment. Additionally, it is not known if the measurement data from this location was used to calibrate the noise model – which may assist with its accuracy.
- Table 7 of the AC report articulates the modelled levels under various conditions and at various locations. The table indicates that exceedances are expected at 111 & 112 Point Samson-Roebourne Road and R2 by 5dB and 1dB respectively. There are two notes following Table 7 that seek to explain these exceedances and suggest the modelled results are likely over-predicting for these two sites. The NB is not supportive of an approach of relying on assumptions to counter datasets that indicates non-compliance.
- Given the suite of measurements which were obtained, along with the associated weather conditions at the time, there exists an opportunity to use this measurement data

to calibrate the noise model and thereby increase its reliability and the accuracy of the predicted outcomes.

- Further to the predicted levels in Table 7, the report states “updated noise contours have been generated to match the above scenarios”, however it is not described what the noise contour maps have been updated with – be it the levels contained within Table 7, or utilising the assumptions in the following notes.

NB provided the following conclusion based on their assessment of the revised NA:

- AC have undertaken noise modelling which indicates non-compliance at two locations; however, it also states that owing to measurement data received - the noise modelling may be over-estimated and consequently non-compliance is not expected. A better understanding of the modelled results and the consequential impacts could be achieved if the measured data were used to calibrate the noise model and increase its reliability. A calibrated noise model would provide greater confidence in its predicted outcomes.
- Notwithstanding this, the nearest sensitive land use (i.e. residential receiver) is located approximately 1,400m from the location of the crusher plant. It is noted that EPA Guidance No. 3 - Separation Distances between Industrial and Sensitive Land Uses speaks of a buffer distance of 1,000 to crushing operations. Given the buffer distance to the nearest residential receivers, the risk of non-compliance can be considered low, especially as the crushing operations are limited to 0700 – 1900 Monday to Saturday (excluding public holidays).
- The AC report identifies the appropriate location of the crusher is as per the location identified in Figure 4 in order to maximise the buffer distance to noise receivers. It would be appropriate to identify this location in the license conditions.
- The existing license condition of restricting operational hours to 0700 – 1900 Monday to Saturday (excluding public holidays) seems appropriate in this case.

Key finding: Noting the above advice, the Delegated Officer considers that there is a need to add an additional licence condition to the licence identifying the location of the crusher at the Premises to avoid noise emissions impacting receptors. An additional Map will be provided in Schedule 1 of the Licence.

The Licence Holder has not requested any amendment to existing Licence condition 3 which outlines operational hours for the crusher and screen machinery. The Delegated Officer considers this condition sufficient based on NB advice.

2.4 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made as summarised in Table 2.

Table 2: Licences consolidated in this amendment

Instrument	Issued	Summary of approval
L9136/2018/1	11/06/2020	Licence granted
L9136/2018/1	DRAFT	Increase Category 12 and 13 P&DC from 20,000 to 50,000 tonnes per annual period.

The obligations of the Licence Holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence; and
- revised licence condition's numbers, and removed redundant Condition 1 Table 2 Authorised Emissions table and realigned condition numbers for numerical consistency.

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 3 below. Table 3 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 3: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Crushing and Screening of material, vehicle movements, lift-off from stockpiles and/or stored product, earthworks etc.	Air/windborne pathway	<ul style="list-style-type: none"> • Water cart and water cannon to be used on site to minimise dust from stockpiles and vehicle movements. • Inbuilt sprinklers installed on screening equipment to minimise dust. • Delay screening during unfavourable weather conditions.
Noise	Crushing and screening of material and vehicle movements	Air/windborne pathway	<ul style="list-style-type: none"> • All onsite machinery fitted with muffler. • Crusher/screener only to be operated between "day-time" hours (6am to 4pm), daily. • Noise Assessment / Report.
Asbestos Fibres	Building waste - Concrete waste material for Crushing and Screening and	Air/windborne pathway	Non-acceptance of building and demolition waste containing asbestos or ACM.

Emission	Sources	Potential pathways	Proposed controls
	associated Stockpiles		
Contaminated Stormwater	Crushing and Screening and Stockpiles	Overland runoff into surface and coastal flats environment	Earthen bunding on site directing water to north-west corner via natural gradient to two basins for evaporation. Sediments will be contained in this sump.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 4 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guideline: Environmental siting* (DWER 2020)).

Table 4: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Wickham Townsite	950 m southwest of Premises boundary
Environmental receptors	Distance from prescribed activity
Saline coastal flats	The nearly level tract of land between mean high water and the line of the highest astronomical tide. Immediately adjacent north of the Premises boundary.
Minor non-perennial watercourse	Whilst the mapped location of the watercourse runs along the south-eastern corner of the Premises boundary, on ground the watercourse does not have an established path through or near the Premises. Being non-perennial, the watercourse has no flow during the dry seasons.
Threatened and Priority Fauna	Recorded at 670 m east of the Premises boundary, at the Wastewater Treatment Plant: <ul style="list-style-type: none"> • <i>Calidris ferruginea</i> (curlew sandpiper) critically endangered and protected under an International Agreement. • <i>Arenaria interpres</i> (ruddy turnstone) protected under an International Agreement • <i>Tringa stagnatilis</i> (marsh sandpiper, little greenshank) protected under an International Agreement.

	<ul style="list-style-type: none"> • <i>Actitis hypoleucos</i> (Common Sandpiper) protected under an International Agreement. • <i>Hydroprogne caspia</i> (Caspian Tern) protected under an International Agreement.
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3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 5.

The Revised Licence L9136 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 5. Risk assessment of potential emissions and discharges from the Premises operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source / Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Screening, crushing, unloading, loading and storage of material Vehicle movements	Dust	Air/windborne pathway causing impacts to health and amenity	Residences 950m southwest	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 5 and 6	N/A
	Noise			Refer to Section 3.1	C = Moderate L = Possible Medium Risk	N	Condition 3 <u>Condition 1 Table 1</u> Condition 23-26 on the existing licence have been deleted as the NA has been completed.	Noise verification monitoring has now been undertaken and reviewed by the departments NB – refer to section 2.3 of the Amendment Report. An additional condition will be added to the Licence as advised by NB.
	Asbestos fibres			Refer to Section 3.1	C = Severe L = Rare High Risk	Y	Condition 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 and 20	N/A
	Sediment laden stormwater	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Saline coastal flats immediately north of the Premises Seasonal minor creek on southeast boundary of Premises Threatened fauna 670m east	Refer to Section 3.1	C = Moderate L = Possible Medium Risk	Y	Condition 1	N/A

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

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4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 6: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal 10/10/2024.	<p>The City of Karratha provided initial comment on 24/10/2024.</p> <p>The City of Karratha provided revised commentary on 28/10/2024 after a further clarification request from DWER on 25/10/2024 advising:</p> <p><i>Documentation relating to the Scheme Amendment as a result of the 2018 Licence application has been reviewed. The intent of including Category 70 in lieu of Category 12 in the City of Karratha's Local Planning Scheme No. 8 was to restrict the operations to up to 50 000 tonnes per annum. Should the applicant exceed 50 000 tonnes per annum, then a Scheme Amendment will be required to be submitted to the City for consideration.</i></p> <p><i>I can confirm that the City has not issued development approval for the operations on-site, as there was inadequate information provided as part of the application to undertake an assessment. As such, an application for development approval is still required to be submitted to the City. The City can consider a development application should the operations only reach the 50 000 tonnes per annum as applied for in the amended Licence application.</i></p>	<p>The Delegated Officer notes that Development Approval has not been issued to the Licence Holder by the City of Karratha.</p> <p>It is the responsibility of the Licence Holder to ensure that all relevant regulatory approvals are in place prior to commencing activities authorised through the granting of this licence amendment.</p>
Licence Holder was provided with draft amendment on 17 February 2025	<p>The Licence Holder responded on 19 February 2025:</p> <p>Thank you for your recent information on the amendment application.</p> <p>I wish to confirm the requested increase of volumes, of material being crushed and screened, will not impact the quantity of material being stored at the premises under Category 62.</p>	Noted

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined

controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 7 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 7: Summary of licence amendments

Condition no.	Proposed amendments
Prescribed premises category table	Amend Assessed production / design capacity from 20,000 to 50,000 tonnes per annual period for Category 12 and 13.
Condition 1 Table 1	Addition of Figure 2 Crusher Location Map to ensure this is the only location the crusher can operate from noting NB advice.
Condition 2 Table 2	Amend Quantity Limit from 20,000 to 50,000 tonnes per annual period
Schedule 1 Map	New Map for the location of the crusher.

Table 8 provides a summary of the conversion of the Existing Licence that has been reformatted into the current Licence template.

Table 1: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
N/A	Prescribed Premises Category table	N/A	Revised to current licensing format.
1	Emissions	Condition 1 and Table 2	Redundant condition. Deleted from Licence
2 Table 3	Premises Operation	Condition 2 Table 2	Revised to current licensing format.
3	Premises operation times	Condition 3	Revised to current licensing format.
4	Vehicle speed limits signage	Condition 4	Revised to current licensing format.
5	Sprinklers	Condition 5	Revised to current licensing format.
6	Ineffective Sprinkler management	Condition 6	Revised to current licensing format.

Existing condition	Condition summary	Revised licence condition	Conversion notes
7	No asbestos signage	Condition 7	Revised to current licensing format.
8	Sprinklers for each Inert Waste Type 1 load	Condition 8	Revised to current licensing format.
9	Separation into three stockpiles	Condition 9	Revised to current licensing format.
10	Separation into three stockpiles management	Condition 10	Revised to current licensing format.
11	Visually inspect all loads when accepted	Condition 11	Revised to current licensing format.
12	Reject ACM material	Condition 12	Revised to current licensing format.
13	Accurate records of rejected waste	Condition 13	Revised to current licensing format.
14	Management of high-risk waste	Condition 14	Revised to current licensing format.
15	Maintain accurate records	Condition 15	Revised to current licensing format.
16	Visually inspect material	Condition 16	Revised to current licensing format.
17	Sample and Testing of finished product	Condition 17	Revised to current licensing format.
18	Suspected ACM kept damp	Condition 18	Revised to current licensing format.
19	Disposal by licensed waste transporter	Condition 19	Revised to current licensing format.
20	Retain asbestos testing records	Condition 20	Revised to current licensing format.
21 Table 4	Maintenance of Infrastructure and Equipment	Condition 1 Table 1	Revised to current licensing format.
22 Table 5	Monitoring of waste	Condition 21	Revised to current licensing format.

Existing condition	Condition summary	Revised licence condition	Conversion notes
23	Investigate noise emissions	N/A	Deleted from Licence as the Assessment and Report has been completed.
24	Noise Assessment Report	N/A	
25	Submission of noise assessment Report	N/A	
26	Non-compliant Noise Assessment	N/A	
27	Maintain accurate and auditable books	Condition 23 and 24	Revised to current licensing format.
28	Complaints	Condition 22	Revised to current licensing format.
29	Annual Audit Compliance Report	Condition 25	Revised to current licensing format.
30	Comply with Department Request	Condition 24	Revised to current licensing format.
Schedule 1: Maps	Premises map	Schedule 1: Maps	New naming convention, no change to map
Schedule 2	Primary Activities	N/A	Redundant attachment. Deleted from Licence
Attachment 1 and 2	Asbestos Guidelines	Attachment 1 and 2	No changes.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.