

Central Sydney Industrial Estate (excluding Lot 6) | SSD 10459 CONSTRUCTION NOISE MANAGEMENT PLAN

Prepared for VE Property Pty Ltd | 24 March 2021







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Date	24 March 2021	24 March 2021	24 March 2021

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1 INTRODUCTION

1.1 Overview

VE Property Pty Ltd (VE Property), will develop the Central Sydney Industrial Estate (CSIE) on land formerly known as the 'Western Area' of the former Shell Oil Refinery at Clyde. Stage 1 (Lot 6 of the subdivision) will be developed as the Downer Sustainable Road Resource Centre, the construction of which is addressed in a separate construction environmental management plan (CEMP) and noise management plan.

Environmental impacts of the CSIE were assessed in Element (2020) *Central Sydney Industrial Estate incorporating the Sustainable Road Resource Centre – State significant development – environmental impact statement* (the EIS), which was submitted with an application for State significant development (SSD) to the Department of Planning, Industry and Environment (DPIE) on 18 September 2020.

The SSD application was determined and conditions of consent (CoC) provided by DPIE on 31 January 2021. CoC B14 requires VE Property to prepare a construction noise management plan (CNMP or 'the plan') which must be approved by DPIE prior to the start of construction of the CSIE. This CNMP has been prepared by Element Environment Pty Ltd to satisfy this condition.

1.2 Scope

This plan has been prepared as required by the CoCs summarised in Table 1.1, including sections of the plan where they are addressed.

CoC	Description	Plan section
B12	The Applicant must comply with the hours detailed in Table 1. Earthworks and construction: Monday – Friday: 7 am to 6 pm Saturday: 8 am to 1 pm	2.4
B13	Earthworks and construction works outside of the hours identified in condition B12 may be undertaken in the following circumstances: (a) works do not exceed the noise limits detailed in Table 8 of the Noise and Vibration Impact Assessment, prepared by Muller Acoustic Consulting, dated 17 September 2020; or (b) works agreed to in writing by the Planning Secretary; or (c) for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or (d) where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.	2.4 Table 3.3 Table 5.1
B14	The Applicant must prepare a Construction Noise Management Plan (CNMP) for the development to the satisfaction of the Planning Secretary. The Plan must form part of a CEMP in accordance with condition C2 and must:	This plan
B14(a)	be prepared by a suitably qualified and experienced acoustic expert;	1.2.1
B14(b)	describe procedures for achieving the noise management levels in EPA's Interim Construction Noise Guideline (DECC, 2009) (as may be updated or replaced from time to time);	5; 6
B14(c)	describe the measures to be implemented to manage high noise generating works such as piling;	Table 5.1
B14(d)	include a complaints management system that would be implemented for the duration of the development.	6.5; 10.4 of CEMP

Table 1.1 Noise CoCs

CoC	Description	Plan section
B15	The Applicant must: (a) not commence construction of any relevant stage until the CNMP required by condition B14 is approved by the Planning Secretary; and (b) implement the most recent version of the CNMP approved by the Planning Secretary for the duration of construction.	Noted
B18	The Applicant must prepare a Driver Code of Conduct and induction training for the development to minimise road traffic noise. The Code is to be incorporated into the CEMP required under condition C2 and the OEMP required under condition C5.	Appendix B of Construction Traffic and Pedestrian Management Plan in Annex E of the CEMP

1.2.1 Suitably qualified expert

Condition B14(a) requires this plan "be prepared by a suitably qualified and experienced noise expert". Element Environment requested via email on 18 January 2021 to David Koppers (DPIE) that this plan be prepared by an environmental scientist with significant experience in assessment and management of construction noise and reviewed/signed-off by the director of Muller Acoustic Consulting Pty Ltd (Oliver Muller). David approved this approach.

Oliver is a member of the Australian Acoustical Society (MAAS) and has reviewed this plan and signed on the document control page.



2 PROJECT SUMMARY

2.1 Location

The site address is 9 Devon Street, Rosehill and is part of lot 100 in deposited plan 1168951 and covers 35.068 ha. The project will be on the newly created lots shown on Figure 2.1.

The site is in the Parramatta Local Government Area (LGA) and is zoned IN3 Heavy Industrial under the land use table in Part 2 of the LEP.

The site is accessed from James Ruse Drive via Grand Avenue and Colquhoun Street or Grand Avenue, Durham and Devon streets. The site is accessed from Parramatta Road via Wentworth, Kay and Unwin streets.

2.2 Receivers

Potential noise impacts on the sensitive receivers on Figure 2.1 during construction were assessed. The receivers are categorised as:

- 'R' private residential.
- 'FR' future residential.
- 'In' industrial.
- 'C' commercial.
- 'Wor' place of worship.
- 'Sch' school.
- 'AR' active recreation.

2.3 Project summary

The project involves the staged subdivision of the Central Sydney Industrial Estate on lands known as the Western Area of the former Shell Oil Refinery at Clyde. Stage 1 (being Lot 6 of the subdivision) will then be developed as the Downer Sustainable Road Resource Centre described in a separate CEMP.

VE Property proposes the following:

- Staged subdivision of the site into fourteen lots that will form the Estate.
- Earthworks/filling to bench the lots to form a flat pad in the northern half of the site then gradually grading down towards the Duck River in the southern half of the site.
- Construction of a new public access road running south from an intersection with Devon Street, providing access to those lots that do not front Devon Street, in accordance with council specifications.
- Installation of an inter-allotment stormwater drainage system to provide a single stormwater connection point to each lot of the proposed subdivision. Temporary erosion and sediment controls will also be installed to manage water quantity and quality over the lots until they are sold and developed, when permanent stormwater management infrastructure will be installed within each lot.
- A 40 m average riparian corridor along Duck River.
- Landscaping/planting:
 - Along both sides and around the cul-de-sac of the proposed access road.
 - Within the previously disturbed part of the proposed riparian corridor along Duck River in accordance with a landscape management plan and vegetation management plan.

Provision has been made for a 5 m easement for services along the northern site boundary adjacent Devon Street. The extension of the following key municipal services will likely be required to suit the needs of each of the lots:

- Potable water potentially construction of a ring main linking the main under Colquhoun Street to the main under Durham Street (subject to separate approval by Sydney Water).
- Wastewater (sewer) extension of the rising main along Devon Street and minor sideline extension of the gravity sewer along Colquhoun Street (subject to separate approval by Sydney Water).
- Electricity supply may be required to each lot from the high voltage line along Devon Street (subject to separate approval by Endeavour Energy).

Development of the Estate for new industrial uses (in accordance with current zoning), other than Lot 6, will then be subject to future applications.

2.3.1 Lot preparation

Condition B47 of SSD 9032 requires the rehabilitation of the Western Area to achieve the final landform shown in Appendix 4 of the consent. This application does not seek to modify the approved final landform, but rather, it seeks approval for the development of further earthworks to re-contour the land on the lots.

The lots other than Lot 64 will be benched in two stages (no works are proposed on Lot 64, which will be maintained as is).

Bulk earthworks on the other lots will comprise the construction of a flat pad at reduced level (RL) 4.8 m Australian height datum (AHD) in the northern half. The proposed earthworks will then gradually grade down towards Duck River in the southern half of the site to RL 4.4 m and 4.3 m AHD at the southern ends of lots 63 and 64 respectively.

Cut and fill is likely to be balanced with approximately 33,000 m³ cut and 33,000 m³ fill.

There will be an allowance for the importation of up to 30,000 m³ of virgin excavated natural material (VENM) and/or excavated natural material (ENM) for site presentation.

All lots will be hydroseeded or spread with tackifier after earthworks to prevent wind erosion.

2.3.2 Access

Lots 51-56 will be accessed via new private entry driveways subject to a future development application after the lots are sold. Lots 55 and 56 will have the option of access either off Devon Street or the new public road. Lots 58-64 will be accessed from Devon Street via a new public road with driveways to the new road subject to future development applications after the lots are sold.

The new access road will be connected to Devon Street and will be an industrial road with asphalt surface and kerb and guttering to council standards. It is proposed as a public road.

The road reserve of the proposed road will be 21 m wide with a 12 m wide carriageway, 3.65 m wide western verge, and a 5.35 m wide eastern verge including a 3 m wide shared cycle/pedestrian path.

A road easement will be provided from the road to Duck River to allow for the potential road extension and bridge.

2.3.3 Stormwater management

Construction erosion and sediment controls

An erosion and sediment control plan has been included in Annex H of the CEMP.

Initially, a 'Type D' sediment basin will be installed on the southern site boundary, which will catch and treat the five day 85th percentile volume during construction. Water will be diverted to the basin via temporary diversion drains inside the site boundary, along the proposed road and the boundaries of some lots.

Type D basins are generally pumped out following rain when suspended solid concentrations of less than 50 mg/L are achieved from flocculation treatments.

Sediment fences will be installed along the site boundary to prevent sediment, not captured in the sediment basin, from migrating offsite.

Post construction pre-operation erosion and sediment controls

Once the lots are prepared, additional temporary Type D sediment basins will be installed in a corner of each lot to treat sediment laden runoff until the lots are developed by eventual owners. Additional temporary diversion drains will be provided to divert water from the lots to the basins. The basins will discharge to pits associated with the permanent drainage network described below.

Other management measures will be:

- Minimising the extent of disturbed areas across the site at any one time.
- Progressive stabilisation of disturbed areas or previously completed earthworks.
- Regular monitoring and implementation of remedial works to maintain the efficiency of all controls.

2.3.4 Landscaping

Areas of the site will be landscaped as described below (also refer to Annex F of the CEMP).

Riparian corridor

There will be an average 40 m wide riparian corridor along the Duck River at the southern site boundary.

Access road reserve

The verges to the proposed road will be planted in accordance with council requirements.

Northern boundary

A 5 m easement along the sites northern and north-western boundaries will be provided for services along Devon and Colquhoun streets.

The existing turf and trees along the Devon and Colquhoun street frontages will be retained, where possible, except at the proposed site access road. Provision has also been made for a 5 m landscape setback along the Devon and Colquhoun streets frontage with landscape works/planting subject to future development applications.

2.3.5 Services

The site is serviced with key municipal services as part of its previous use as Clyde Refinery and Terminal. However, the site will require service extensions to the proposed lots.

The following existing services are shown on Drawing C013919.01-DA15 (refer to Appendix 1 of Annex A of the CEMP):

- Potable (drinking) water.
- Recycled Water.
- Wastewater (sewer).
- Electricity.
- Communications.
- Gas.

2.4 Hours of construction, employment, plant and equipment

Preparation of the lots will commence after conclusion of the works associated with WARP. Civil works will commence in the second half of 2021 and will take approximately nine months. Installation of services will occur prior to this, likely in the first half of 2021.

Construction will typically occur between 7am-6pm Monday-Friday and 8am-1pm Saturday. Construction will also take place at night-time and on Sundays in the following circumstances:

- works do not exceed the noise limits detailed in Table 3.3; or
- works agreed to in writing by the Planning Secretary; or
- for the delivery of materials required outside these hours by the NSW Police Force or other authorities for safety reasons; or
- where it is required in an emergency to avoid the loss of lives, property or to prevent environmental harm.

Construction on public holidays will be avoided.

There will be up to 35 construction employees on site at any time.

There will be up to 10 items of plant and equipment on site at any time comprising water cart, dump trucks, excavators, front end loaders, compactors, concrete truck, bulldozer, grader, backhoes, small and medium cranes, concrete pump, kerb and guttering machine, piling rig and concrete crusher.

Figure 2.1 Sensitive noise receivers

Central Sydney Industrial Estate incorporating the Sustainable Road Resource Centre Construction noise management plan







3 CONSTRUCTION NOISE CRITERIA

3.1 Noise monitoring

Noise around the site was monitored in 2017 for a previous project, with results used to characterise existing ambient noise at the site. The monitoring was used to determine the rating background level (RBL) (the noise level exceeded for 90% of the measurement time) and the ambient noise level (the all-encompassing noise in the environment).

The noise was monitored at the following locations:

- Rydalmere Location M1: 530 John Street, Rydalmere to establish the ambient noise at residential receivers in Rydalmere to the north of the site.
- Silverwater Location M2: 101 Asquith Street, Silverwater to establish ambient noise at residential receivers in Silverwater to the south of the site.
- Rosehill Location M3: 1-9 Eleanor Street, Rosehill to establish the ambient noise at residential receivers in Rosehill to the west of the site.

The resulting RBLs and ambient noise levels are summarised in Table 3.1.

Location	RBL (dB _{LA90(period)})))	Ambient level (dB _{LAeq(period)})		
	Day	Evening	Night	Day	Evening	Night
M1	44	41	37	52	51	44
M2	42	41	38	55	51	48
M3	51	51	40	58	58	52

Table 3.1 RBLs and ambient noise levels

Day: 7am-6pm Mon-Sat and 8am-6pm Sun and public holidays; Evening: 6pm-10pm; night: remaining periods.

3.2 Interim construction noise guidelines

Noise impacts on sensitive receivers are assessed and managed in accordance with DECC (2009) *Interim construction noise guideline* (ICNG).

The ICNG contains procedures for determining project specific noise management levels (NMLs) for sensitive receivers based on the existing background noise in the area. The 'worst-case' noise levels from construction of a project are predicted and then compared to the NMLs in a 15-minute assessment period to determine the likely impact.

The NMLs are not mandatory limits. However, where construction noise levels are predicted or measured to be above the NMLs, feasible and reasonable work practices to minimise noise emissions are to be investigated.

The ICNG approach for determining NMLs at residential receivers is shown in Table 3.2.

Time	NML (LA _{eq(15 min)})	How to apply
Standard construction hours Monday to Friday 7:00 am to 6:00 pm	RBL* + 10 dB	 The noise affected level represents the point above which there may be some community reaction to noise Where the predicted or measured LAeq(15minute) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practises to meet the noise affected level

Table 3.2 ICNG NMLs for residential receivers

Time	NML (LA _{eq(15 min)})	How to apply
Saturday 8:00 am to 1:00 pm No work on		 The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.
Sundays or public holidays	Highly noise affected 75 dBA	 The Highly Noise Affected (HNA) level represents the point above which there may be strong community reaction to noise Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restructuring the hours that the very noisy activities can occur, taking into account: Times identified by the community when they are less sensitive to noise (such as before and after school for works near schools or mid-morning or mid-afternoon for works near residences If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside standard construction hours	RBL + 5 dB	 A strong justification would typically be required for works outside the recommended standard hours. The proponent should apply all feasible and reasonable work practices to meet the noise affected level. Where all feasible and reasonable practises have been applied and noise is more than 5 dB above the noise affected level, the proponent should negotiate with the community.

* The RBL is the rating background level and the ICNG refers to the calculation procedures in the *NSW Industrial Noise Policy* (INP). The INP has been superseded by the *NSW Noise Policy for Industry* (NPfI).

The NMLs apply to the receivers during construction of both the subdivision and Stage 1. The modelling incorporated all construction activities and demonstrated they can occur simultaneously without exceeding noise criteria at sensitive receivers, as discussed in Chapter 4.

The ICNG NMLs for residential receivers are shown in Table 3.3.

Table 3.3 NMLs – residential receivers (LA_{eq, 15min} – dB(A))

Receiver	Standard hours NML	Out of h	ours NML
	Day	Period 1	Period 2
R1	54	46	42
R2	52	46	43
R3	61	56	45

Note: period 1 = 6-10pm Monday-Friday, 1-6pm Saturday, 8am-6pm Sunday; period 2 = 10pm-7am Monday-Friday, 6pm-7am Saturday/Sunday (8am Sunday).

For NMLs applicable to non-residential receivers refer to Chapter 4.1.2 and 4.1.3 of the ICNG.



4 CONSTRUCTION NOISE IMPACTS

4.1 Construction noise activities

The iNoise three-dimensional model was used to predict construction noise from the project and the Central Sydney Industrial Estate subdivision at the receivers. Modelling was based on the sound power level for the plant and equipment listed in Table 16 of MAC (2020) *Noise and vibration impact assessment – Central Sydney Industrial Estate* operating simultaneously for 100% of the time during all time periods for the following scenarios:

- 1. Bulk earthworks to bench the site and provide level pads to the whole of the subdivision.
- 2. Construction of a new road from Devon Street.
- 3. Sealing/capping of Lot 6.
- 4. Construction/installation of plant on Lot 6.

A maximum noise level of 117 dBLA_{max} was assumed for impacts such as an excavator dropping rock into a truck at night for the sleep disturbance assessment.

4.2 Predicted construction noise levels

Predicted noise levels for the construction scenarios are in Table 4.1. Construction noise is demonstrated to comply with NMLs during standard construction hours at assessed residential receivers. The cumulative noise levels during the day, evening and night period for all construction activities (Scenario 1 to Scenario 4) will satisfy the noise management levels at all assessed residential receiver locations with the implementation of good noise management practices during the evening and night periods.

Receiver (day, period 1, period 2 NML – LA _{eq,} _{15min} – dB(A))	Predicted noise level (dB LA _{eq(15min)})					
	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Cumulative ¹	
R1A (54, 46, 42)	34	<30	31	34	33	
R1B (54, 46, 42)	35	<30	32	35	34	
R2A (52, 46, 43)	41	33	37	40	40	
R2B (52, 46, 43)	40	31	39	41	40	
R3A (61, 56, 45)	38	31	32	35	36	
R3B (61, 56, 45)	40	33	33	35	37	

Table 4.1 Combined construction noise predictions

Note 1: 10 dB reduction applied for external to internal noise attenuation as per the ICNG, as noise levels at schools and places of worship are assessed internally.

The predicted LA_{max} noise levels at the residential receivers are in Table 4.2. Sleep disturbance by transient events will not exceed the maximum noise trigger level at assessed residential receivers.

Table 4.2 Construction maximum noise levels

Receiver	Predicted noise level and criteria (brackets) dB dB LA _{max}
R1A	32 (52)
R1B	36 (52)
R2A	45 (53)
R2B	45 (53)
R3A	43 (55)
R3B	45 (55)



5 NOISE MANAGEMENT AND VERIFICATION

5.1 Management measures

The management measures in Table 5.1 will be implemented to reduce impacts from noise generated during construction of the project.

Table 5.1 Construction noise management measures

Strategies	Management measures	Timing	Responsibility
Universal work practices	Provide regular training to workers and contractors (such as toolbox talks) to use equipment in ways to minimise noise.	Pre and during construction	Project Manager Site Supervisor
	Avoid shouting and minimise talking loudly and slamming vehicle doors.	During construction	All personnel
	Keep truck drivers informed of designated vehicle routes, parking locations, acceptable delivery hours and other relevant practices.	During construction	Project Manager Site Supervisor
	Avoid the use of equipment which generates impulsive noise and minimise metal to metal contact and dropping materials from height.	During construction	Project Manager Site Supervisor Equipment operators
Consultation and notification	Consider notifying immediate adjoining neighbours of the start, duration and nature of the construction activities.	Pre construction	Project Manager Site Supervisor
	Keep a register for any complaints, including details of the complaint such as date, time, person receiving complaint, complainant's contact details, person referred to, description of the complaint, work area and response.	During construction	Project Manager Site Supervisor
Plant and equipment	Use quieter methods and equipment where feasible and reasonable.	During construction	Equipment operators
	Operate plant in a quiet and efficient manner, minimise idling.	During construction	Equipment operators
	Regularly maintain equipment to ensure that it is in good working order.	During construction	Site Supervisor Equipment operators
	Place as much distance as possible between the equipment and sensitive land uses.	During construction	Equipment operators
	Avoid the use of reverse alarms by designing the site to avoid reversing or install broadband reverse alarms where possible.	Pre construction	Project Manager Site Supervisor
	Where possible, schedule noisy activities to occur during less sensitive periods.	During construction	Site Supervisor Equipment operators
	Avoid undertaking multiple highly noise intensive activities concurrently.	During construction	Site Supervisor
	Ensure truck movements are kept to a minimum i.e. trucks are fully loaded on each trip.	During construction	Site Supervisor Equipment operators

5.2 Validation of noise emissions

Noise levels will be quantified at surrounding residential receivers via validation calculations or modelling and results compared against relevant NMLs. This is to manage noise emission from noisy works (such as piling) that have a greater sound power level or an overall noise level that significantly differs from scenarios originally assessed as part of the *Noise and vibration impact assessment*.

Where the calculated/modelled noise levels exceed relevant NMLs, feasible and reasonable noise measures will be implemented so that compliance with NMLs is achieved prior to these activities. This will be done where relevant during either standard hours or non-standard hours.

VE Property will apply to the Planning Secretary in writing for permission to carry out any out of hours work where reasonable and feasible noise measures or controls cannot achieve relevant NMLs in Table 3.3.



6 COMPLIANCE MANAGEMENT

6.1 Roles and responsibilities

The overall roles and responsibilities for construction personnel are outlined in Annex I of the CEMP. Specific responsibilities for the implementation of mitigation measures specific to noise management are detailed in Chapter 5 of this CNMP.

6.2 Training

All employees, contractors and staff working on site will be inducted and trained in relation to noise management, comprising:

- Requirements of this plan.
- Relevant legislation.
- Approved working hours.
- Location of sensitive receivers.
- Roles and responsibilities for noise management.
- Procedure to follow if out of hour works are required.
- Complaints handling process.
- Disciplinary action around non-compliance with this plan.

Further details regarding staff induction and training are in sections 4.2 and 4.3 of the CEMP.

6.3 Inspections

General requirements and responsibilities in relation to inspections and compliance monitoring are in Chapter 6 of the CEMP. Routine environmental inspections will include determination of compliance with this plan.

6.4 Incident notification and monitoring

Incidents will be notified to DPIE in accordance with Appendix 2 of the development consent and Section 6.3 of the CEMP.

6.5 Management of noise complaints

A procedure for complaints received during construction of the project is in Section 6.4 of the CEMP and comprises:

- 1. Record and acknowledge.
- 2. Assess and prioritise.
- 3. Investigate.
- 4. Action or rectify.
- 5. Respond to complaint.
- 6. Record.
- 7. Preventive action.

Noise specific complaints will be handled in accordance with this complaints handling procedure. The following additional procedures specific to a noise complaint will also be implemented:

1. Record and acknowledge: Ask the complainant to describe as accurately as possible what the noise sounded like, exactly what time they heard that noise, where they heard the noise from

(eg address) and what direction the noise was coming from. This will allow VE Property to confirm that the noise was from their construction site and to identify if there was a particular activity that caused the noise complaint.

- 2. Assess and prioritise: Ask the complainant how the noise they can hear is affecting them (waking them up at night vs irritating daytime noise) to ascertain the seriousness of the complaint and the level of priority it receives.
- 3. Investigate: If it is established that the noise complaint is from construction activities at the site and is causing disturbance to the complainant, then VE Property will conduct attended noise investigations at the address from where the noise was noticed. The attended noise investigations will be undertaken at a time of day and during construction activities that are aligned as closely as possible to when the complainant noticed the noise which caused their complaint.
- 4. Action or rectify: If the attended noise investigations identifies that standard construction hours noise affected construction NMLs have been exceeded, VE Property will investigate whether all management measures in Table 5.1 are being applied, will apply them where feasible where they aren't being applied and will apply additional reasonable and feasible noise management measures to specifically attenuate the noise from the identified construction activity source.

If the attended noise investigations identify that standard construction hours highly noise affected construction NMLs have been exceeded following implementation of the above procedures for addressing exceedances, VE Property will further investigate whether they can implement respite periods by restricting the hours that the very noisy activities can occur.

If the attended noise monitoring identifies that outside of standard construction hours noise affected construction NMLs have been exceeded and the above procedures for addressing exceedances of noise affected construction NMLs have been implemented, VE Property will investigate whether they can rather undertake the activities causing the exceedance, during standard construction hours. If this is not possible then VE Property would investigate implementing respite periods by restricting the hours that the very noisy activities can occur.

VE Property will then conduct follow up attended noise investigations at the address from where the noise complaint originated to establish whether the noise management measures applied have suitably reduced the noise to within the relevant construction NMLs or whether further noise management measures are required.

- 5. Respond to complaint: The complainant will be notified of the results of the initial attended noise investigations, what additional noise management measures have been implemented to address any identified exceedances of relevant construction NMLs and results of follow up attended noise monitoring after the implementation of additional noise management measures.
- 6. Record: All aspects of the noise complaints handling procedure will be recorded including where and when it occurred, results of initial noise monitoring, noise management measures applied, results of follow up noise monitoring and all correspondence with the complainant.
- 7. Preventive action: In planning future phases of work during construction, VE Property will ensure that where the same or similar plant and equipment (or with similar sound power levels or noise characteristics) is to be used, that all noise management measures identified as being necessary during previous noise complaint handling processes, are implemented.

6.6 Monitoring

Noise monitoring may be required in response to a formal complaint to verify that construction noise from the site complies with relevant NMLs.

Should monitoring be required, monitoring will be conducted by a suitably qualified specialist. The location and extent of attended monitoring will be determined taking into account consultation with project staff, consideration of the construction activities taking place and the source of the complaint.

The monitoring will be representative/indicative of any impact across all potentially affected residential receivers.

All items of acoustic instrumentation will be designed to comply with AS *IEC 61672.1-2019 Electroacoustics – Sound level meters –* Specifications and carry current NATA or manufacturers calibration certificates.

6.7 Internal audits

This plan will be internally audited periodically to ensure the development consent conditions and commitments and environmental management controls are properly implemented. Audit reports will be used to determine corrective actions.

6.8 Review and improvement

This plan will be reviewed, and if necessary, updated in the following circumstances:

- Significant changes to the equipment, machinery and plant operated onsite.
- If monitoring identifies the noise performance of the project is not in accordance with this plan.
- At the request of the relevant regulatory authority.

All employees and contractors will be informed of any revisions to this plan during toolbox talks.



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