

CONSTRUCTION NOISE AND VIBRATION MANAGEMENT PLAN

**50 Cowan Drive
Cottage Point**

06/12/19

1.0 NOISE AND VIBRATION MANAGEMENT

This section describes the measures that will be employed by the Proponent to minimise noise emissions and vibration generated as a result of earthmoving activities.

2.0 NOISE MANAGEMENT

Noise management will comply with Guide to Noise Control on Construction, Maintenance and Demolition Sites (AS 2436-1981), Noise Management in the Construction Industry: A Practical Approach (Worksafe) and DEP (1997) Environmental Protection (Noise) Regulations.

This includes:

- Adhering to the hours of normal operation, with work conducted in accordance with the DA conditions of consent, namely Point 15.
- All plant equipment and vehicles being fitted with appropriate noise suppression equipment to reduce noise levels as far as is practicable.
- The Remediation Contractor will need to demonstrate and have procedures in place to ensure that all equipment is operating in good condition.
- A list of all proposed machinery is to be provided with the expected noise levels at the operator position and an estimate provided as to the noise hazard (85 dB(A)).
- All site workers to be trained in noise reduction (such as proper use of machinery and the use of hearing protection) and informed of locations requiring the use of such equipment.
- All outside workers must wear appropriate hearing protection if in close proximity to machinery for extended periods. Workers exposed to elevated noise levels above occupational limits to have hearing tests.
- Warning signs should be set up in active work areas, prohibiting entry to persons without hearing protection.

- Advisory notices will be placed in the local newspaper advising of the pending remediation at least two weeks before scheduled commencement of ground disturbing activity.
- Prior warnings are to be provided to potentially effected premises where noise levels are expected to be in excess of the nominated levels in AS/NZS2107:2000 including how long the activity is expected to last.
- A point of contact (name and phone number) will be provided for handling enquiries and complaints regarding the remediation. This information will be provided in the advice notice.
- All non-conformances and noise related complaints will be reported to the Superintendent and will be documented in an up to date logbook.
- Following complaints the source of any excessive noise will be identified and work practices modified or re-scheduled to reduce or eliminate the risk of future events.

3.0 VIBRATION MANAGEMENT

Vibration is not expected to be an off-site issue due to the distances involved. Nevertheless in order to avoid damage to nearby structures, the proponent will comply with Australian Standard AS 2670.2 – Evaluation of Human Exposure to Whole Body Vibration (1990).

The following procedures will be undertaken:

- remedial works to ensure no damage has occurred.
- Adhering to the hours of normal operation, with work conducted as per the DA conditions of consent.
- Prior warnings are to be provided to potentially effected premises where vibration levels are expected to be in excess of the nominated levels in Annexes of AS2670.2-1990 including how long the activity is expected to last.

- An point of contact (name and phone number) will be provided for handling enquiries and complaints regarding the remediation. This information will be provided in the advice notice.
- All non-conformances and vibration related complaints will immediately be reported to the Superintendent and will be documented in an up to date logbook; and
- If vibration complaints are received, the following control measures may need to be implemented.
- Use smaller machinery.
- Minimise the use of vibration in compaction equipment; and
- Use static rolling where possible.

4.0 NOISE MONITORING

Noise levels will be monitored from time to time to ensure that noise generated as a result of remediation activities does not disturb local residents and that occupational health and safety guidelines are complied with.

Monitoring will be in the form of regular checks by the Environmental Supervisor and in response to any complaints. Where the Environmental Supervisor believes that regulations are being exceeded or in response to valid complaints, independent noise monitoring will be undertaken. This would be performed inside the premises of the afflicted property.

Occupational noise monitoring is to be performed on at least one day of activity to demonstrate compliance to the relevant standard at the operator position and in the noise hazard area. Acceptable noise levels will be in accordance with the DEP (1997) Noise Regulations and Worksafe WA.

Monitoring is to be undertaken by an experienced noise monitoring professional.

The results of any noise monitoring are to be provided to the relevant party or person in a timely manner.

5.0 VIBRATION MONITORING

Monitoring is not expected to be required. Where the Superintendent believes or upon complaint that structural damage is occurring, independent vibration monitoring will be undertaken.

To avoid damage to structures, the Civil Contractors Federation/Environmental Protection Authority (2001) suggest the following vibration limits should apply

- 2mm/second for very old structures;
- 4mm/second for old/sound structures; and
- up to 10mm/second for strong, modern structures.

The results of any vibration monitoring are to be provided to the relevant party or person in a timely manner.



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