Checklist – CAC070M  
Noise and Vibration Management Plan Implementation (MRTS51)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Contractor |  | Date |  | Review No. |  |
| Contract No. |  | Project No. |  | Project Name |  |

This project has been assessed as having a Choose an item. of Choose an item. impacts.

|  |  |
| --- | --- |
| Review Decision | |
|  | The Contractor has undertaken reasonable and practicable management measures in accordance with their NVMP to mitigate risks of environmental harm. |
|  | The audit found that the Contractor has generally undertaken reasonable and practicable management measures to mitigate environmental harm occurring on Site. However, the audit has found minor non‑compliance with the requirements of MRTS51 and/or the Contractor’s NVMP that are required to be addressed promptly. The Contractor should address the minor non‑conformances and advise the Administrator within 10 business days. |
|  | The audit has found that the Contractor is not operating in compliance with either the NVMP or the requirements of MRTS51. The audit found evidence of potential or actual environmental harm and nuisance on Site and believes that an Environmental Incident and Contractual non‑conformance report is warranted to report, rectify and prevent re‑occurrence. Report in accordance with Procedure for Environmental Incidents. |

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| --- | --- | --- | --- | --- | --- | --- |
| Reviewed by: |  | |  | |  | |
| Name |  | Signature |  | Date |  |

# Definitions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Conformance (C) | | Fulfilment of a requirement, either contractual or legislative. | | |
| Non‑conformance (NC) | | A failure to comply with a requirement of Contract. | | |
| Not Fully Verifiable (NFV) | | There was insufficient evidence to determine conformance or non‑conformance. | | |
| Observation (O) | | A positive or negative comment of the auditor based on evidence and/or an observation made during the audit. Observations may or may not suggest corrective actions. | | |
| Reference | Requirements for a Noise and Vibration Management Plan | | Addressed | Comments |
| Clause 7.1 | The Contractor has reviewed the NVMP and, where required, implemented additional measures when either:  directed by the department, or  in response to a justifiable complaint or in the event of structural / building damage caused by the project’s activities, or  when changes in the equipment / work method, intensity, location, duration, or timing of impacts that are expected to increase noise and vibration impacts, are foreseen. | |  |  |
| Clause 7.1 | **Works under the Contract**  The Works under the Contract (construction activities) undertaken on Site are as stipulated in the NVMP. | |  |  |
| Clause 7.1 | Timing of Activities  The time periods of construction activities are as per the NVMP. | |  |  |
| Clause 7.2 | Locations  The location of the noise and vibration‑generating activities, construction traffic routes and facilities are as per the NVMP. | |  |  |
| Clause 7.1 & 7.2 | **Management Measures**  Reasonable and practicable mitigation and management measures have been undertaken in accordance with the NVMP to minimise disruption, due to noise and vibration from construction activities. | |  | Refer to Appendix 1 for further information and guidance on suitable management measures. |
| Clause 7.1 | Condition Survey  Where works have been completed near sensitive receivers of vibration, post works condition surveys have been completed. | |  |  |
| Clause 7.1 | Monitoring Procedures  The Contractor has undertaken monitoring of noise and vibration in accordance with the Monitoring procedure specified in the NVMP. | |  |  |
| Clause 7.1 | Community Liaison  Community liaison has been undertaken in accordance with the procedure outlined in the NVMP. | |  |  |
| Clause 7.1 | **Reporting Procedures**  The Contractor has completed reporting in accordance with the reporting procedures outlined in the NVMP. | |  |  |

Appendix 1: NVMP Mitigation and Management Measures utilised by Contractor

NOTE: These are example lists of administrative and operational measures that may be employed by a Contractor to mitigate and manage noise and vibration impacts from Construction activities. The Contractor does not have to employ all of these measures, however they should utilise a suite of measures commensurate with the risk of impact from construction noise and vibration.

| Potential Management Measures | NVMP | Comments |
| --- | --- | --- |
| Administrative | | |
| Induction delivered to Site personnel (including subcontractors) addressing the requirements of the NVMP and their responsibilities with regard to noise and vibration management ensuring:   * work occurs within approved hours, and * appropriate mitigation and management measures are being utilised. |  |  |
| Ongoing education of supervisors, operators and subcontractors on the need to minimise noise and vibration through toolbox meetings and on‑site training. |  |  |
| Subcontractor agreements include clauses that require minimisation of noise and vibration. |  |  |
| Implemented protocol for handling noise and vibration complaints that includes recording, reporting and acting on complaints. |  |  |
| Work undertaken during the standard hours where reasonable and practical and safe to do so. |  |  |
| Implemented outside standard hours works procedure to minimise the impact of any significant noise and vibration works outside standard hours. |  |  |
| Use of radios or stereos outdoors where neighbours may be affected is avoided. |  |  |
| The overuse of external public address systems or link these systems to the telephone system where neighbours may be affected is avoided. |  |  |
| Shouting and minimise talking loudly and slamming vehicle doors is avoided. |  |  |
| The use of horns within the construction area is avoided, except in the case of emergency or a requirement for safety. |  |  |
| Minimise mobile equipment reversing / movement or use alternative beepers, such as ‘broadband noise beepers’ or warning systems. |  |  |
| Construction traffic and deliveries | | |
| The Site entry and egress points are as far from sensitive and critical receptors as practical and traffic loads shared across entry points. |  |  |
| Parking for staff and on‑site truck waiting areas provided on Site and away from residences and other sensitive land uses. |  |  |
| Equipment switched off when not required. |  |  |
| Loading and unloading points positioned away from sensitive and critical receptors. |  |  |
| Traffic movement is kept to a minimum and night‑time construction traffic is redirected away from sensitive and critical receptors where possible. |  |  |
| Regular grading of unsealed areas or fill potholes in sealed access roads and hardstand areas. |  |  |
| Aggregate bins are refilled prior to the bins being completely empty. |  |  |
| Plant and Equipment | | |
| Selected plant and equipment have low noise and vibration emission levels. |  |  |
| Equipment is appropriately sized for the task. |  |  |
| Use of plant and equipment simultaneously adjacent to sensitive receptors is avoided where possible. |  |  |
| Alternative construction methods utilised to minimise noise and vibration levels. |  |  |
| Mufflers and engine covers / screens utilised where appropriate. |  |  |
| Equipment is operated in the correct manner and correctly maintained including replacement of engine covers, repair of defective silencing equipment, tightening of rattling components, repair of leakages in compressed air lines and shutting down of equipment not in use. |  |  |
| Where possible the night‑time use of equipment which generates impulsive noise is avoided. |  |  |
| Aggregate bins and chutes are lined with a rubber material, to dampen the vibration of the structure. |  |  |
| Drop height of materials when transferring (loading / unloading) is minimised. |  |  |
| Damped tips on rock‑breakers utilised where appropriate. |  |  |
| Dust extraction fan exhausts are silenced and oriented away from sensitive receptors. |  |  |
| Standby generators are turned off when not required or fitted with an effective muffler. |  |  |
| Stationary plant near sensitive receptors is isolated with resilient mounts. |  |  |
| Piling and compaction | | |
| Impact pile driving is avoided where possible near noise and vibration sensitive receptors. |  |  |
| Dynamic compaction using large tamping weights is avoided near sensitive and critical receptors. |  |  |
| Acoustic screens are provided around hammer head and top of pile. |  |  |
| Acoustic damping installed to sheet steel piles to reduce vibration and resonance. |  |  |
| Resilient pad utilised between pile and hammerhead. |  |  |
| Mufflers and engine covers / screens provided where appropriate. |  |  |
| Obstructions which may exacerbate vibration transmission are provided (for example, old foundations) where appropriate, prior to piling operations. |  |  |
| Cut‑off trenches are provided to interrupt the direct transmission path of vibrations between source and receptors where reasonable and safe to do so. |  |  |
| Reduced energy per blow when piling. |  |  |
| Blasting | | |
| The maximum instantaneous charge (MIC) is reduced by use of delays, reduced hole diameter and/or deck loading. |  |  |
| Adequate stemming is provided and eliminating exposed detonating cord. |  |  |
| Secondary blasting is avoided where possible. |  |  |
| Toe shots are avoided where appropriate. |  |  |
| Blasting during heavy cloud cover or temperature inversions avoided where possible. |  |  |
| Blasting avoided during strong winds blowing towards sensitive receptors. |  |  |
| A blasting timetable is established through community consultation. |  |  |
| Transmission Path | | |
| Construction equipment is located in a position that provides the most acoustic shielding from buildings and topography. |  |  |
| Construction of permanent acoustic barriers is scheduled as early as possible. |  |  |
| Temporary noise barriers are located between the construction Site and sensitive receptors. |  |  |
| Temporary enclosures / screens are constructed around especially noisy activities, or clusters of noisy equipment. |  |  |
| Facility layout | | |
| Acoustic shielding from existing topography and buildings and from structures and buildings associated with the facility is maximised. |  |  |
| Where at all practicable, intake and exhaust vents from fans, blowers and other items of powered mechanical plant are orientated away from noise‑sensitive sites. |  |  |
| On‑site fabrication work is avoided where possible. |  |  |
| Respite  Where all reasonable and practicable measures are implemented and noise and vibration impacts are unavoidable and significant, respite measures may be used. | | |
| Work scheduled when premises are not in operation. |  |  |
| The number of nights per week that the works are undertaken near residences is restricted. |  |  |
| Alternative mitigation and management  Where noise and vibration impacts are unavoidable and significant after all reasonable and practicable measures and respite periods are implemented, alternative mitigation measures may be used. | | |
| Affected occupants have been relocated for short periods of time where all reasonable and practicable measures and respite periods are implemented and further mitigation is impractical. |  |  |
| Alternative ventilation has been provided where the windows are to remain closed. |  |  |
| Community consultation | | |
| Information has been disseminated regarding the project schedule and potential impacts to the surrounding sensitive locations. |  |  |
| Complaints have been responded to in accordance with the Contractor’s complaints procedure. |  |  |
| Notification | | |
| Notification regarding specific construction activities has been provided to adjacent residents and property owners likely to be affected by noise and vibration from the activity types of equipment required. |  |  |