

CLIENT: GOVERNMENT OF REPUBLIC OF KIRIBATI

PROJECT: KIRIBATI ROAD REHABILITATION
PROJECT

LOCATION: TARAWA, KIRIBATI

PROJECT NO.: 2536

Environmental Protection Instruction

NOISE & VIBRATION MANAGEMENT PLAN

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Revision History

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1.0 INTRODUCTION

Considering the low traffic volume and current demographic rate, noise is not considered a major concern in the area. Machineries, vehicles and construction sites where noise and vibration may affect susceptible receptors are highly considered. McConnell Dowell will be responsible for ensuring that noise and vibration does not affect the adjacent communities. While it is unlikely that noise and vibration will be an issue due to the large distances between the activities and the communities McConnell Dowell will confine all work to daylight hours (06:30hrs-18:00hrs) Nighttime operations not envisaged at this time

This Noise and Vibration Management Plan is prepared to satisfy the requirements of the Government of Republic of Kiribati during the implementation of contract conditions for Kiribati Road Rehabilitation Project. As stated, Part A Sub-clause 4.18 Condition under Protection of Environment, McConnell Dowell shall comply with all applicable national, local and environmental laws and regulations:

- Establish an operational system for managing environmental impacts;
- Carry out all of the monitoring and mitigation measures set forth in the Initial Environmental Impact Assessment and Environmental Management Plan;

McConnell Dowell shall submit monthly reports summarizing results to “the Engineer”.

2.0 OBJECTIVES

- To limit the level of noise generated by the construction of the works so that it does not cause an environmental nuisance to nearby residents and the general public.
- The limit of level of vibration generated by the construction of the works so that it does not cause an environmental nuisance to site workers and adjoining property owners.

3.0 TARGETS

Performance Criteria	Target	Measurement
Noise emission	Zero complaints Minimise unacceptable disturbance to residents in the vicinity.	Complaints received
Vibration emission	Zero complaints No structural effect on adjoining or nearby buildings or structures caused by site works or laden trucks on public roads.	Complaints received
Compliance with consent conditions	100%	No infringements or abatement notices

4.0 DEFINITIONS

Nuisance – signifies that the "right of quiet enjoyment" is being disrupted to such a degree that a tort is being committed.

Noise control equipment – any device used to prevent or limit the emission of noise; any device used for indicating or recording the emission of noise

Offensive noise – noise made in or outside public premises, or outside private premises that, by reason of its level, nature, character or quality, or the time at which it is made is like to be harmful or to interfere unreasonably with the peace, comfort or convenience of any person (Environment Act 1999)

5.0 RESPONSIBILITIES

The Site Engineer and/or Supervisor are responsible for the continual monitoring of noise levels and vibration indicators on the site.

6.0 LEGISLATIVE INFORMATION/REFERENCES

6.1 ENVIRONMENT ACT 1999 – PART 4: CONTROL OF POLLUTION

6.1.1 Causing pollution and noxious discharges

No person shall emit or cause to be emitted from any premises noise which unreasonably interferes with the health, welfare, convenience, comfort or amenity of any person.

6.1.2 Occupier of premises to take certain measures

The occupier of any premises shall:

- comply with any prescribed standard for the emission of noise from such premises;
- take all reasonable and practicable measures to prevent or minimise the emission of noise from such premises.

6.1.3 Occupiers of prescribed premises to obtain a license

Subject to the provisions of this Act, no person who occupies prescribed premises shall:

- cause or increase, or permit to be caused or increased, the emission of noise from the prescribed premises; or
- alter or permit to be altered the nature of the noise emitted from the prescribed premises, unless in accordance with any conditions of the license.

Any occupier of prescribed premises who contravenes the provisions commits an offence against this Act.

6.1.4 Application for license

An application for a license to emit noise from prescribed premises shall be made to the Secretary in the prescribed form and:

- be accompanied by the prescribed fee; and
- include any information, plans, specifications and other document and information as the Secretary acting in accordance with the advice of the Cabinet may require.

7.0 CONTROL METHODS

McConnell Dowell shall take all reasonable steps to protect the environment (both on and off the site) and to limit damage and nuisance to people and property resulting from noise and other results of operations.

Noise mainly affects urban areas, villages, hospitals, schools, etc. along the roads. To control noise during construction, the suggested measures are:

- Use modern and well-maintained equipment (with mufflers where appropriate)
- Carry out noise construction activities during normal working hours.
- Advise schools, hospitals, churches, etc. when there will be unusual or unavoidable noise.

7.1 NOISE CONTROL

- Working hours to be in accordance with contractual and legislative limitations
- All plant and equipment to be regularly serviced in accordance with manufacturers' specification.
- Where possible plant and equipment to be selected with lowest noise rating or to have silencing and noise suppression equipment fitted.
- Generators and other fixed machines to be situated to minimise noise disturbance to local residents and the general public.
- Trucks and plant to follow approved, designated transport routes.
- Noisy equipment to be removed from site.
- Trucks to be loaded within legal limits for travel on public roads.

7.2 VIBRATION CONTROL

- Review the contract and/or construction activities to determine the need for vibration monitoring and dilapidation surveys of adjoining properties.
- As necessary implement vibration monitoring and dilapidation surveys of buildings, roads, footpaths.
- Plan transportation routes in consultation with the Superintendent.
- Ensure trucks remain on designated routes.

8.0 MONITORING

- Observation of noise levels from equipment, vehicles and operation during working hours.
- Vibration monitoring as required.
- Observation of vibration levels during construction works. Observation of trucks.

9.0 EMERGENCY RESPONSE

In the event of an emergency:

- Cease noisy work and consider alternative methods.
- Repair or service noisy equipment.
- Advise the Superintendent.

- Cease work causing vibration and consider alternative methods in consultation with the Superintendent.

10.0 RECORDS

In the event of a complaint record the following:

- Use standard complaint record form
- The date, time, source and reason for the complaint or the observation.
- Details of any sources of noise.
- The date and time of any corrective action.
- The date, time, source and reason for the complaint.
- Details of any observed building damage.
- Details of vibration.
- Latest vibration monitoring levels.
- The date and time of any corrective action.