

Manage Environmental Noise Issues Procedure

Project Name: WestConnex New M5

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Document Approval

Rev.	Date	Prepared by	Reviewed by	Recommended by	Approved by	Remarks
00	19/04/16	CDS				
01	29/04/16	CDS				
02	26/09/16	CDS				
03	20/10/16	CDS				
04	18/05/16	CDS				
Signature:						

Manage Environmental Noise Issues Procedure



Details of Revision Amendments

Document Control

The Project Director is responsible for ensuring that this Procedure is reviewed and approved. The Support Services Director (SSD) is responsible for updating this procedure to reflect changes to the Project, legal and other requirements, as required.

Amendments

Any revisions or amendments must be approved by the Project Director before being distributed or implemented.

Revision Details

Revision	Details
00	Prepared for internal review
01	OOHW Approval Form updated to include safety management measure and sign-off
02	Updated for EPL and variation for tunnelling
03	Update to Rule 4.2 (10 nights per month of OOH)
04	Addition of Rule 4.3 b) and update to forms and flowchart for EPL Condition L4.3

Manage Environmental Noise Issues Procedure



Contents

This Manage Environmental Noise Issues Procedure has been produced from CPB Management System documents and project specific information documents. Each of these documents are available individually from the Project Management System and Incite. These documents are presented as one procedure here to support the onsite implementation of these procedures and to facilitate the communication of project specific requirements.

This Manage Environmental Noise Issues Procedure includes:

- Manage Environmental Noise Issues (MSID-2-276),
- Out of Hours Approval Flowchart (M5N-ES-FLC-PWD-0006),
- Out of Hours Work Conditions (M5N-ES-LIC-PWD-0001), and
- OOHW Approval Form (M5N-ES-FRM-PWD-0008).

The CPB system uses the term “Environment Representative” when referring to the Environment Manager. Please note that when following this procedure, the definition of Environment Representative as defined within the SSI 6788 is not used, but refers to the CDS-JV Environment & Sustainability Manager within the construction team (CDS-JV).

Manage Environmental Noise Issues

Purpose

This procedure describes how to manage environmental noise issues from construction activities. This refers to any noise produced onsite or in relation activities that can impact on neighbouring areas. Sources include:

- Plant and equipment, including power tools
- Vehicles, including idling engines
- Reversing beepers
- Blasting
- Loud banging of tools or metal on metal
- Loud voices
- Radios.

Procedure

1 Consult with Stakeholders

Accountability: Environment Manager/Representative or Community Representative

- Ensure appropriate consultation has occurred with community stakeholders, in accordance with contractual requirements, on the likely impacts of activities that may cause disruption.

2 Include Controls in Construction Area Plan and Work Pack(s)

Accountability: Senior Project Engineer

- Ensure all noise associated risks are considered as part of the development of Construction Area Plans.
 - Refer to Procedure: Develop Construction Area Plan.
- Ensure Work Packs include relevant environmental control information including a Site Environment Plan where required.
 - Refer to Procedure: Develop Work Pack.

3 Undertake Work

Accountability: Supervisor

- Undertake construction activities within the project's nominated hours of work which must comply with contractual and legislative requirements.

- Ensure approval has been given or seek approval from the Project Manager or Environment Manager/Representative for any works that need to occur outside nominated hours.
- Undertake high noise generating works in accordance with project obligations.
- Ensure all equipment is serviced and maintained according to manufacturer's recommendations, or more frequently if required to minimise noise generated.
- Use the least noise-intrusive reversing alarms for safety requirements if using high frequency noise alarms is not acceptable.

Accountability: Worker

- Notify the Supervisor and/or Environment Manager/Representative of unexpected noise increases immediately.

4 Monitor Noise Levels

Accountability: Environment Representative

- Undertake monitoring to assess compliance in accordance with project requirements.

5 Perform Task Observations

Accountability: Line Manager, SH&E Manager or Subcontractor Supervisor

- Conduct task observations as per Project schedule to ensure ongoing effectiveness of environmental control measures.
 - Refer to Procedure: Conduct Task Observation.



1. Out of Hours Works - Conditions

This Document relates to the Project's Environmental Protection Licences (EPLs 20772 and 4627) issued to CPB Contractors, Dragados and Samsung C&T Joint Venture (CDSJV) by the Environmental Protection Authority (EPA). This document further defines conditions relating to the CPB Manage Environmental Noise Procedure (M5N-ES-PRC-PWD-0043). To execute the OOHW approval process, refer to the:

- Environmental Protection Licences,
- Out of Hours Work Approval Flowchart (M5N-ES-FLC-PWD-0006), and
- Out of Hours Work Approval Form (M5N-ES-FRM-PWD-0008).

2. Out of Hour Work Conditions - EPL

All works must be undertaken in accordance with the Project's Environmental Protection Licences (numbers 20772 and 4627). The licences are available on the EPA's website at: <http://www.epa.nsw.gov.au/prpoeoapp/>

The following conditions are reproduced from the licence for context. The licences should be referred to when planning and conducting out of hours works supersede this document.

Condition L3: Noise limits

L3.1 All works and activities must be undertaken in a manner that will minimise noise and vibration impacts on sensitive receivers.

L3.2 The licensee must ensure that all feasible and reasonable noise and vibration mitigation and management measures are implemented during construction work authorised by this licence, in accordance with the Interim Construction Noise Guideline (DECC, 2009).

Condition L4: Hours of operation

L4.1 Unless permitted by any other condition of this licence, construction work is:

- a) Restricted to between the hours of 7:00 am and 6:00 pm Monday to Friday;
- b) Restricted to between the hours of 8:00 am and 1:00 pm Saturday; and
- c) Not be undertaken on Sundays or Public Holidays.

Condition L4.2: Work generating High Noise Impact

Unless otherwise specified by any other condition of this licence, high noise impact works as defined in condition E1.1 (Special Dictionary) must only be undertaken:

- a) Between the hours of 8:00am to 6:00pm Monday to Friday;
- b) Between the hours of 8:00am to 1:00pm Saturday;
- c) In continuous blocks not exceeding 3 hours, with at least 1 hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers; except as expressly permitted by another condition of this licence.

For the purposes of this condition 'continuous' includes any period during which there is less than a 1 hour respite between ceasing and recommencing any of the work the subject of this condition.

Condition L4.3 High impact noise at sensitive receivers

L4.2 does not apply to high noise impact work as defined in condition E1.1 (Special Dictionary) when it is generating a predicted and validated LAeq(15 minute) noise level below the highly noise affected level at the most noise affected residences or at other sensitive land uses.

Note: A 5 dB(A) penalty should be factored into the predicted noise levels in the qualitative assessment of high impact work, as stated in Section 4.5 of the ICNG.

Condition L4.4: Notification of works approved outside of standard construction hours.

- a) The licensee must notify potentially affected noise sensitive receivers of works approved outside of standard construction hours not less than 5 days and not more than 14 days before those works are to be undertaken.
- b) The notification must be performed in the manner prescribed in the licence.
- c) The notification must contain the information stipulated by the licence.

Note: Notification under this condition does not apply to works undertaken pursuant to condition L4.6 a) or b) or condition L4.10.

Condition L4.5 Agreements

Works may be undertaken outside of standard construction hours if agreement between the licensee and a substantial majority of potentially affected sensitive receivers has been reached

Condition L4.6 Any Agreement(s) between the licensee and potentially affected noise sensitive receivers referred to in condition L4.4 must be recorded in writing and a copy of the agreement(s) kept on the premises by the licensee for the duration of this licence.

Condition L4.7 Works that do not produce noise impact

The following construction work may be undertaken out of hours if that work does not cause:

- a) L Aeq(15minute) noise levels that are no more than 5 dB above rating background level at any residence in accordance with the Interim Construction Noise Guideline (DECC, 2009); and
- b) L Aeq(15minute) noise levels no more than the noise management levels specified Table 3 of the Interim Construction Noise Guideline (DECC, 2009) at other sensitive land uses; and
- c) continuous or impulsive vibration values, measured at the most affected residence, greater than those for human exposure to vibration, set out for residences in Table 2.2 to the technical guideline 'Environmental Noise Management Assessing Vibration' published by the Department of Environment and Conservation in February 2006, and
- d) intermittent vibration values, measured at the most affected residence, greater than those for human exposure to vibration, set out for residences in Table 2.4 to the technical guideline 'Environmental Noise Management Assessing Vibration' published by the Department of Environment and Conservation in February 2006

Condition L4.8 Works approved outside of Construction Hours

Activities and works may be undertaken outside the hours outlined in Condition L4.1 but only if one or more of the following applies:

- (i) Carrying on those works and activities during the hours specified in Condition L4.1 would cause unacceptable risks to one or more of the following:
 - 1. Construction personnel safety;
 - 2. Road user and public safety;
 - 3. Road network operational performance as may be notified from time to time by the Roads and Maritime Services; and
 - 4. Essential utility services.
- (ii) The Transport for NSW Traffic Management Centre (or other road authority) refuse to issue a road occupancy licence for the works or activities during the hours specified in Condition 2.1.
- (iii) Sydney Trains require a Rail Possession (involving week night and/or weekend rail shutdown) for the works or activities to be performed.

Condition L4.9 Implement ICNG

In undertaking the works or activities under Condition L4.7 the licensee must:

- i. Implement this Manage Environmental Noise Issues procedure and
- ii. Implement the noise and mitigation detailed in the Interim Construction Noise Guidelines (DECC 2009)

Condition L4.10 Website

This Manage Environmental Noise Issues Procedure must be available for public access on the project Website

Condition L4.11 Exemptions

The licensee may undertake works outside of standard construction hours if

- a) the delivery of oversized plant or structures has been determined by the police or other authority to require special arrangements to transport along public roads; or
- b) Emergency work is required to avoid the loss of lives or property, or to prevent environmental harm.



3. Out of Hours Work (Construction Noise and Vibration Impact Statement)

Works may be undertaken outside of standard construction hours if they are in accordance with a Construction Noise and Vibration Impact Statement that has been approved by the EPA. The approved CNVIS must be available for public access on the project website and listed in the CNVIS register held by the EPA.

A CNVIS for tunnelling and a CNVIS for each tunnel support site is envisaged to be submitted to the EPA for approval. The EPA may issue specific conditions for this aspect of work.

4. Out of Hours Work (Noise assessment)

Works conducted outside of standard construction hours, in accordance with EPL condition L4.7 must adhere to the following additional project rules.

Rule 4.1 Out of hours works - weekends:

- a) works may be undertaken (except on public holidays) during the hours of:
 - (i) 1.00 pm and 6.00pm on Saturdays; and
 - (ii) 8.00 am and 6.00 pm on Sundays.
- b) High noise impact works and activities must only be undertaken:
 - (i) In continuous blocks not exceeding 3 hours each with a minimum respite from those activities and works of not less than 1 hour between each block.

For the purposes of this condition 'continuous' includes any period during which there is less than a 1 hour respite between ceasing and recommencing any of the work that is the subject of this Condition.

Rule 4.2 Out of hours works - weeknights

- a) works and activities may be undertaken (except on public holidays) between the hours of:
 - (i) 6:00 pm and 7:00 am the following day on Mondays, Tuesdays, Wednesdays, and Thursdays; and
 - (ii) 6:00 pm and 8:00 am the following day on Fridays.
- b) In undertaking any activities and works, the licensee must:
 - (i) Unless otherwise agreed to by relevant community stakeholders ensure out of hours works and activities are not undertaken that result in noise impacts (noise levels greater than the NML) to the same sensitive receivers on more than:
 - 1. 3 consecutive evenings or nights per week;
 - 2. 4 evenings or nights per week; and
 - 3. 10 evenings or nights per month.

Rule 4.3 Exemptions

- a) Rules 4.1 and 4.2 do not apply to works subject to traffic restrictions on the existing M5 East Motorway (or associated infrastructure) where works have been scheduled to coincide with the regular maintenance shutdown of the M5 East Motorway (generally 4 consecutive nights each month).
- b) Rules 4.1 and 4.2 do not apply to works where a Public Utility Provider will only provide access to their network at a specific time and reasonable attempts have been made by CDS-JV to seek access to their network at times in accordance with:
 - (i) Condition L4.1 of the Environmental Protection Licence, or,
 - (ii) Rule 4.1 and Rule 4.2 of this Procedure.

In undertaking works in relation to Rule 4.3 b), the licensee must, unless otherwise agreed to by relevant community stakeholders, ensure out of hours works and activities are not undertaken that result in noise impacts (noise levels greater than the NML) to the same sensitive receivers on more than:

- 1. 3 consecutive evenings or nights per week;
- 2. 4 evenings or nights per week; and
- 3. 10 evenings or nights per month.

Out of Hours Work Approval Form



SECTION 4: SUPPORTING DETAILS FOR EPL CONDITIONS (FOR CONSTRUCTION ONLY)

Which EPL Condition does the OOHW satisfy? (Please indicate by ticking one of the boxes) (Refer to OOHW Procedure and current EPL)	Works that do not produce noise impact EPL L4.7 <input type="checkbox"/> NB: - Toolbox is required - Notify Community and Environment Teams (as soon as the need for works is known).	Short term OOHW Weeknights or Weekends EPL L4.8 <input type="checkbox"/> NB: - Noise Assessment or CNVIS required (minimum 1 month lead time, 2 months if approval by EPA required) prepared by Environment Team (and Renzo Tonin) Toolbox is required - Notify Community and Environment Teams (as soon as the need for works is known). A min. of 5 business days is required to notify the community of the works. - Environment Team to undertake noise/ vibration monitoring	Longterm works EPA approved CNVIS required – Check EPL <input type="checkbox"/> NB: - CNVIS must be approved by EPA in accordance with EPL - For EPA approval the CNVIS will be prepared by Environment Team (and Renzo Tonin) - Toolbox is required - Notify Community and Environment Teams (as soon as the need for works is known). A min. of 5 business days is required to notify the community of the works. - Environment Team to undertake noise/ vibration monitoring	Exempt works (Emergency or Oversize deliveries) EPL L4.11 <input type="checkbox"/> NB: - Relates to Deliveries requiring special arrangements Document justification - Sign-off by Project Manager required. - Mitigation measures listed in this approval must be implemented	Extended hours high impact noise works EPL L4.3 <input type="checkbox"/> NB: - Relates to high impact noise work <70dB(A) at the nearest residence or sensitive land use. - Modelling and validation monitoring required - Can only be used between 7am-6pm Mon-Fri and 8am-1pm Saturday.
Is a noise assessment or CNVIS required?	Yes (Evidence that noise is <5dba above RBL)	Yes	Yes	No	Yes
Is Community notification required?	No	Yes	Yes	No	No

SECTION 5: NOISE MITIGATION MEASURES

Proposed mitigation measures :	<i>Please detail and include CNVIS reference if applicable</i>
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SECTION 6: TRAFFIC

Will the work require traffic control?	
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SECTION 7: SAFETY

Does the work team comprise a minimum of two persons?	
Who in the work team holds current senior first aid qualifications?	
Where is the first aid kit to be located?	
What means of communications is to be used to	

Out of Hours Work Approval Form



summon assistance in an emergency?	
Who from CDS-JV will be supervising the work? (include contact details)	
SECTION 8: APPROVALS	
ENVIRONMENTAL	Additional Mitigation measures: Name:Signature:..... Date:
SAFETY	Additional Mitigation measures: Name:Signature:..... Date:
COMMUNITY	Additional Consultation requirements: Name:Signature:..... Date:
PROJECT MANAGER	Comments: Name:Signature:..... Date: