# Out of hours works protocol

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# **Appendices**

Appendix A: OOHW Works Approval Permit

Appendix B: OOHW Approval Process

#### 1 Introduction

The North Road – Stage 3 North Project (the Project) will require a considerable amount of work outside standard construction hours due to safety, quality and traffic management reasons. These Out of Hours Works (OOHW) have the potential to exceed relevant noise management levels (NMLs) determined in accordance with the approach outlined in the Interim Construction Noise Guidelines (DECC, 2009) (ICNG).

As OOHW have the potential to impact on the amenity of adjacent sensitive receivers, these works require assessment and approval prior to commencement. This protocol defines the process for that assessment, approval and applicable mitigation measures for all OOHW associated with the Project.

All OOHW associated with the Project will be undertaken in accordance with this protocol.

## 2 Approval Requirements

The project has been assessed under Part 5 of the EP&A Act through the development and subsequent determination of a Review of Environmental Factors (*REF: The Northern Road Upgrade between Glenmore Parkway, Glenmore Park and Jamison Road, South Penrith*).

The standard working hours for the project as defined within the REF are:

- Monday to Friday: 7am to 6pm;
- Saturday: 8am to 1pm; and
- Sundays and Public Holidays: no work.

The REF identified a number of activities that would require works outside of standard construction hours to complete the project in a manner that ensures the safety of the community and the work force, reduces the duration of construction Impacts on the surrounding receivers and maintains the operational functionality of the road network in the local area.

Consistent with ICNG the REF identified the following categories of work that may be undertaken outside of the standard construction hours:

- Delivery of oversized plant or structures, where police or other authorities have determined that special transport arrangements are required;
- Emergency work, to avoid the loss of life or damage to property, or to prevent environmental harm;
- Maintenance and repair works, where disruption to essential services and/or safety considerations do not allow work within standard construction hours;
- Public infrastructure works that would shorten the duration of a project and are supported by the Impacted community; and
- Work where a proponent demonstrates and justifies the need to operate outside standard construction hours.

Construction activities that are undertaken outside of standard construction hours will be subject to review and approval as detailed within this Out of Hours Works Protocol, and subject to the conditions of the Environment Protection License issued to the Project.

#### 3 OOHW Justification

OOHW undertaken on public infrastructure projects such as road construction necessary to sustain the operational integrity of roads are considered justified in the ICNG.

Generally, works that are considered justified on the Project are works that are required to:

- Maintain the functional integrity of the M4 Motorway and The Northern Road (including associated side roads) particularly during time of high traffic volumes;
- Maintain the structural integrity of existing and new road infrastructure proposed as part of the Project;
- Promote the safety of road users, construction personnel and the public in general; and
- Minimise potential services/utilities disruptions (e.g. businesses and residential areas).

Justification for any activities proposed as OOHW must be established to the satisfaction of the Environment Manager including the noise assessment as detailed in Section 4 prior to commencement.

#### 4 OOHW Noise Assessment

To manage potential impacts from noise and vibration, an acoustic consultant was engaged by the Project to prepare a Construction Noise and Vibration Impact Statement (CNVIS) and develop tools that allow the prediction of noise impacts resulting from proposed OOH works. These tools enable the assessment of noise impacts on sensitive receivers based on inputs of the location and types of construction machinery operating inside a noise catchment.

Quantitative assessments will be completed for all OOHW and will predict the potential exceedances of the scenario against the relevant noise management levels (NMLs) identified for the potentially affected sensitive receivers. The assessment will be undertaken using the prediction tools developed by the Project's acoustic consultant. The assessment tools will identify the potentially affected sensitive receivers and the impact classification for each of those receivers as outlined in Table 5.1. The prediction tool assessment then identifies the management measures, as described in Table 6.1, to be applied in addition to those within the INCG.

These noise assessments along with the selection of reasonable and feasible management measures both from the ICNG and Table 6.1 will be considered by the Environment Manager when determining the approval for OOH works.

### 4.1 High Noise Impact Equipment Use

Equipment that can generate high noise impacts include jackhammering, rock breaking or hammering, pile driving, concrete cutting, smooth drum vibratory rolling and impact piling occurring on the surface and generating noise with impulsive, intermittent, tonal or low frequency characteristics. Where reasonable and feasible, these pieces of equipment will be used:

- Between 8am-6pm, Monday to Friday;
- Between 8am-1pm Saturdays; and

 In continuance blocks of no more than 3 hours with at least a one hour respite between each block of work generating high noise impact, where the location of the work is likely to impact the same receivers.

Where the use of such equipment is proposed OOH:

- The equipment will be used prior to 10pm where reasonable and feasible;
- Where the above cannot be achieved the equipment will be used prior to midnight where reasonable and feasible; and
- It is not proposed to apply a 3 hour on and a 1 hour off respite approach during OOH
  works in an effort to ensure that the use of such equipment is completed as early in the
  night as possible.

## 5 OOHW Noise Impact Classification

Consistent with other current infrastructure Projects being delivered in the Sydney region eg: WestConnex M4 Widening and North Connex the level of noise impact exceedance above the Noise Management Levels (NML) will be broken into five classifications.

These categories have been derived from management measures described in the ICNG, and the REF.

For all OOHW, potentially affected sensitive receivers predicted to experience noise levels above the relevant NML will be classified as per Table 5-1 based on noise levels determined in the assessment process outlined in Section 4.1 and 4.2.

**Table 5-1 Impact Classification** 

Impact Class	(LAeq 15 min) Exceedance of RBL (dB)	
NML Compliant	A	1- 5
	В	6-10
	C	11-20
	D	21-30
		>30

# 6 OOHW Noise Management and Mitigation Measures

### 6.1 Detailed management measures

After the noise assessment process as described in Section 4, the most appropriate reasonable and feasible management measures are determined in accordance with the ICNG. In addition, specific management measures to be considered for each noise impact classification is shown in Table 6-1 below.

It should be noted that there may be personal circumstances among the sensitive receivers where the below approach to specific additional mitigation measures is not best suited. The

Community and Stakeholder Manager has the authority to amend the below approach taking into account due consideration of the personal circumstances that may apply.

**Table 6-1 Management for OOHW Noise Impact Classification** 

Management Measure			Impact Classification					
	Α	В	С	D	Е			
Programming / schedule of works	✓	✓	✓	✓	<b>✓</b>			
Alternative construction techniques/scheduling	✓	✓	✓	✓	<b>✓</b>			
Alternative plant and equipment	✓	✓	✓	✓	<b>✓</b>			
Community consultation (i.e. letter box drops, etc)		✓	✓	✓	<b>√</b>			
Noise monitoring			✓	✓	<b>√</b>			
Receiver Specific Notifications				✓	<b>√</b>			
Receiver Specific Contact (i.e. Face to Face Consultation)				✓	<b>✓</b>			
Respite Periods				✓	<b>√</b>			
Good will offer				✓	<b>√</b>			
Reasonable temporary relocation offer <sup>1</sup>					<b>√</b>			

Note 1: Temporary relocation to be offered where construction works are planned to extend over more than two consecutive nights at that impact classification

# 7 Approval of OOHW

When it is identified that OOH works are required, the engineer responsible for the works will submit an Internal Out of Hours permit, as shown in Appendix A, justifying the need to carry out the works, to the Environmental Officer. The noise and vibration assessment process as described in Section 4 will be undertaken by the Environmental Officer under the supervision of the Environment Manager where required and forwarded to the Environment Manager and Community and Stakeholder Manager who will review the predicted impacts and management measures to be implemented.

The Environment Manager will approve works in accordance with the requirements of clause L4.8 of EPL#20910.

The Environment Manager has the authority to approve out of hours works following impact assessment described in Section 4 and classification as specified in Table 5-1 in accordance with the following:

- 1. Works assessed to meet noise impact classifications of A and B;
- 2. Works assessed to meet noise impact classifications of C as specified in Table 5-1, the Environment Manager may only approve out of hours works that comply with the following restrictions:
  - a. Three consecutive evenings or nights, in a calendar week;
  - b. Four evenings or nights in a calendar week.
- 3. Works assessed to meet noise impact classifications of D and E as specified in Table 5-1, the Environment Manager may only approve out of hours works that comply with the following restrictions:
  - a. Two consecutive nights, in a calendar week;
  - b. Three nights in a calendar week; and
  - c. Twelve evenings or nights within a period of four consecutive weeks.

Any works proposed on a public holiday must be approved by the EPA.

Following confirmation of compliance with the above criteria and adhering to the process described in Section 4 approval to carry out the works will be provided to construction team by the Environment Manager utilising the Out of Hours Work Approval Permit in Appendix A.

On receipt of the approval for the OOHW, any specific conditions that relate to the OOHW will be:

- Implemented prior to works (such as any additional notification to the community);
- Toolboxed to relevant workforce and site personnel before each shift to introduce/reinforce works restrictions, management measures and expected workforce behaviour; and
- Implemented during works and monitored by the Project environment team.

# 8 OOHW Community Consultation and Communication

A suite of communication tools and activities will be utilised as required to target the relative zone audience based on the nature of works and the potential impacts to provide clear, effective and timely information. The community consultation will be carried out in accordance with the project Community Involvement Plan (CIP).

For OOHW predicted to generate noise at impact classification B and above (Table 5-1), Lendlease will notify potentially affected noise sensitive receivers, Roads and Maritime Services, the Penrith Council, and other affected stakeholders, 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.

#### The notification will:

- by letterbox drop or email; and
- be detailed on the project website.

#### The notification will:

• clearly outline the reason that the work is required to be undertaken outside the hours;

- include a diagram that clearly identifies the location of the proposed works in relation to nearby cross streets and local landmarks;
- include details of relevant time restrictions that apply to the proposed works;
- clearly outline, in plain English, the location, nature, scope and duration of the proposed works;
- detail the expected noise impact of the works on noise sensitive receivers;
- clearly state how complaints may be made and additional information obtained; and
- include the number of the project telephone complaints line, an after-hours contact phone number specific to the works undertaken outside the hours and the project website address.

## 9 Approval Authorities

#### 9.1 EPA

An EPL has been issued for the construction of the Project and the conditions within incorporated as part of the OOH approval. Consistent with the requirements of EPL 20910 the Environment Manger will be responsible for the assessment and approval of OOHW, both in terms of the noise assessment as well as the implementation of reasonable and feasible mitigation measures. OOHW that can be approved by the Environment Manager in accordance with the EPL are detailed within license conditions:

- L4.4;
- L4.6;
- L4.7; and
- L4.10.

EPL variations will be sought through consultation and application to the EPA for works that fall outside the approval process.

#### 9.2 RMS

RMS will be notified of any proposed OOHW in accordance with Section 8 above.

# 10 OOHW Enquiries / Complaints Management

The project team will initiate investigations of noise complaints that are received on the telephone information line (1800 870 665) in line with the EPL conditions (within 2 hours of receiving any such complaint), or in accordance with an agreement negotiated with the complainant.

Each complainant will be advised of the results of the investigation into their complaint and any proposed remedial action.

Complaint records will be kept for at least 4 years following the complaint and will contain:

- a) The date and time of the complaint;
- b) The method by which the complaint was made;
- c) Any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- d) The nature of the complaint;
- e) The action taken by the Project in relation to the complaint, including any follow-up contact with the complainant; and

f) If no action was taken by the Project, the reasons why no action was taken.

The details of any complaints received will be forwarded as a report to the EPA by 2pm each business day. This report will include the complaints received between 12.00pm on that day and 12.00pm on the previous business day.

## 11 OOHW Monitoring

All monitoring will be conducted in accordance with the relevant Australian Standard / guideline in accordance with the EPL.

### 11.1 Noise Monitoring

The following noise monitoring will be undertaken:

- Monitoring will be undertaken periodically to verify the noise model predictions of OOHW in order to ensure effectiveness of management measures;
- Monitoring in response to complaints as determined by the Environment Manager;
- Monthly noise monitoring for OOHW periods at construction compounds in order to ensure effectiveness of controls and verify compliance with NMLs; and
- Ongoing spot checks of high noise impacting plant and equipment will be undertaken throughout construction to ensure compliance with the maximum noise level goals for construction equipment identified within the CNVMP.

### 11.2 Monitoring Records

All monitoring records relating to approved Out of Hours works will be recorded on the monitoring record forms as detailed within the NVMP. In addition to recording the relevant data will include at least:

- a) The date on which the sample was taken;
- b) The time at which the sample was collected;
- c) The point at which the sample was taken; and
- d) The name of the person who collected the sample.

The records will be kept on site at the Project office and will be available for review upon request by an authorized representative of the Environment Protection Authority.

### 12 OOHW Exceedances / Non-Conformances

### 12.1 Management Response

Where monitored noise levels are found to be above predictions the following actions will be undertaken:

- Confirm that monitored levels are not being impacted by other noise sources;
- Implement other feasible and reasonable measures which may include reducing plant size, modify time of works, changing operational settings (such as turning off the vibratory function of the machine), and utilising alternate construction methodology or a combination of these:
- · Review work practices to ensure compliance with the ICNG;
- Confirm if the exceedance is due to an uncharacteristically loud piece of equipment;
- Identify if equipment can be swapped out for another piece of equipment or alternative equipment or plant;
- Confirm that the modelling reflects the actual activity being undertaken; and

• Ensure that learning's from the above are fed back into the noise modelling assessment process.

Previously recorded non-conformances will also be considered prior to the approval of further Out of Hours permits.

# 12.2 Reporting

Noise complaints will be reported as required by the Environment Protection License.

# Appendix A

**OOHW Approval Permit** 

Appendix B

**OOHW Process**