

# OPERATIONAL NOISE MANAGEMENT PLAN – ADDENDUM

Moorebank Intermodal Precinct – Precinct West South

23 OCTOBER 2024



# Moorebank Intermodal Precinct – Precinct West South

EPBC 2011/6086 Approval, SSD 5066 Development Consent, SSD 7709 Development Consent and Complying Development Consent 230736/01

Operational Noise Management Plan – Addendum

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### Revisions

Revision	Date	Description	Prepared by	Approved by
01	19/06/2024	Draft for client review		
02	23/10/2024	Final for issue		



# DECLARATIONS OF ACCURACY

LOGOS MLP Development Management PTY LTD (as joint approval holder)

In making this declaration, I am aware that section 491 of the *Environment Protection and Biodiversity Conservation Act* 1999 (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the *Environment Protection and Biodiversity Conservation Regulations* 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed	
Full name	
Organisation	LOGOS MLP Development Management Pty Ltd (ACN: 649 469 778)
Date	2 December 2024



#### Qube Re Services (No. 2) (as joint approval holder)

In making this declaration, I am aware that section 491 of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) makes it an offence in certain circumstances to knowingly provide false or misleading information or documents to specified persons who are known to be performing a duty or carrying out a function under the EPBC Act or the Environment Protection and Biodiversity Conservation Regulations 2000 (Cth). The offence is punishable on conviction by imprisonment or a fine, or both. I am authorised to bind the approval holder to this declaration and that I have no knowledge of that authorisation being revoked at the time of making this declaration.

Signed	
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Organisation	Qube Re Services (No. 2) Pty Limited (ACN: 605 751 782)
Date	26/11/24



# ACRONYMS AND DEFINITIONS

Acronym/Term	Meaning
Addendum	Operational Noise Management Plan – Addendum
CDC	Complying Development Consent
СоА	Conditions of Approval as detailed in the EPBC Act Approval EPBC 2011/6086
CoC	Conditions of Consent as detailed in the EP&A Act Development Consent SSD 5066
DCCEEW	Department of Climate Change, Energy, Environment and Water
The Development	The five warehouses and associated landscaping and infrastructure on the MPW South site.
EIS	Environmental Impact Statement
Environmental Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance. Environmental incidents include pollution incidents and environmental emergencies. Environmental incidents may arise from natural (e.g. storm, wind or bushfire) or human factors.
EP&A Act	Environmental Planning and Assessment Act 1979
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
ESR	ESR Australia & New Zealand
Material harm	Harm that involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)
MIP	Moorebank Intermodal Precinct
MPE	Moorebank Precinct East
MPW	Moorebank Precinct West
Non-compliance	An occurrence, set of circumstances, or development that results in a non- compliance or is non-compliant with Development Consent SSD 7709 and SSD 10431 Conditions of Consent or EPBC Act Approval (EPBC 2011/6086) Conditions of Approval but is not an incident.
NPfl	NSW EPA Noise Policy for Industry, 2017
NVIA	Moorebank Precinct West Noise and Vibration Impact Assessment – MPW South (Renzo Tonin & Associates, November 2023)
OEMP	Operational Environmental Management Plan
ONMP	Operational Noise Management Plan
RBL	Rating background (noise) level
REMM	Revised Environmental Management Measures. These are the management and mitigation measures presented in the MPW Concept Plan Supplementary RtS (August 2017).
SSD	State significant development

#### Moorebank Intermodal Precinct

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# **1 INTRODUCTION**

#### **1.1 Development Ownership**

In 2022, LOGOS joined the ESR group of companies and since August 2024, the LOGOS and ESR operations have been integrated to now operate under the name ESR Australia & NZ (ESR). The applicant/ approval holder entity remains unchanged at this stage until further notice and references to LOGOS and LOGOS authored documents and/or plans may continue and remains relevant where LOGOS and ESR are used interchangeably.

#### **1.2 Moorebank Intermodal Precinct Overview**

The Moorebank Intermodal Precinct (MIP), operated by ESR (formerly LOGOS), is an integral component of the freight, ports and transport strategies of both the Commonwealth and NSW governments and is located approximately 27km south-west of the Sydney Central Business District and 26km west of Port Botany within the Liverpool Local Government Area.

The MIP aims to streamline the freight logistics supply chain from port to store, deliver savings to businesses and consumers, and help service the rapidly growing demand for imported goods in south-west Sydney. On completion, MIP will move 1.55 million shipping containers annually by rail instead of road. It will also feature Australia's largest purpose-built warehouse and distribution precinct serviced by the latest automated technology which will see driverless shuttle carriers collect and transport containers around the precinct to be processed, unpacked and stored on site prior to distribution.

The MIP is divided into the Moorebank Precinct West (MPW) and Moorebank Precinct East (MPE) developments.

MPW Stage 2 is located to the north of MPW South (the Development) and includes operation of a multi-purpose Intermodal (freight) Terminal facility, rail link connection, warehousing and a freight village. The MPW Stage 2 Operational Environmental Management Plan (OEMP) and sub-plans were approved by:

- the Commonwealth Department of Climate Change, Energy, Environment and Water (DCCEEW) in accordance with Condition of Approval (CoA) 4 of the EPBC 2011/6086 Approval
- the NSW Department of Planning, Industry and Environment (DPIE) in accordance with Condition of Consent (CoC) C7 of the MPW Stage 2 (SSD 7709) Development Consent.

Operations on MPW Stage 2 commenced after these plans were approved.

#### 1.3 Addendum Purpose

This Operational Noise Management Plan (ONMP) – Addendum (this Addendum) has been prepared to apply environmental management measures, where relevant, consistently for the operation of the Development and meet the relevant conditions of the applicable development approvals and consents. This Addendum is an addendum to the MPW Stage 2 ONMP and forms a sub-plan to the MPW South Operational Environmental Management Plan (OEMP) – Addendum that has been prepared for the operation of the Development.



This Addendum addresses:

- the relevant conditions of the EPBC 2011/6086 Approval issued under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- the relevant conditions of the MPW Concept and Stage 1 (State Significant Development (SSD) 5066) Development Consent
- the relevant conditions of the MPW Stage 2 (SSD 7709) Development Consent
- the relevant conditions of the Complying Development Consent (CDC) 230736/01 issued under the *State Environmental Planning Policy (Transport and Infrastructure)* 2021 (TISEPP).

This Addendum has been prepared for submission to DCCEEW under CoA 21 of the EPBC 2011/6086 Approval.

This Addendum aims to demonstrate how noise impacts will be managed during the operation of the Development. It provides methods to monitor, measure, reduce and mitigate impacts on sensitive receivers by ESR and the warehouse tenants during the operation of the Development, including all Development personnel

This Addendum was developed in reference to the following documents:

- Moorebank Intermodal Terminal Project Environmental Impact Statement (Parsons Brinkerhoff, October 2014), Chapter 12 Noise and Vibration
- Moorebank Intermodal Terminal Response to Submissions Report (Parsons Brinkerhoff, May 2015), Volume 4 Appendix F Noise and Vibration Assessment
- Moorebank Intermodal Terminal Supplementary Response to Submissions Report (Parsons Brinkerhoff, August 2015), Chapter 4 Response to government agencies submissions, Chapter 5 Response to community submissions and Chapter 7 Revised environmental management measures
- Exempt and Complying Development Assessment Warehouse S1, S2, S3, S5 and S6 – Moorebank Logistics Park – West Precinct South (Aspect Environmental, December 2023), including Appendix E – Moorebank Precinct West Noise and Vibration Impact Assessment – MPW South (Renzo Tonin & Associates, November 2023) (NVIA)
- MPW Stage 2 Operational Environmental Management Plan (OEMP)
- MPW Stage 2 Operational Noise Management Plan (ONMP)
- MPW South OEMP Addendum.

#### **1.4 Objectives and Targets**

The objectives and targets for this Addendum are the same as those detailed in Table 1-1 of the MPW Stage 2 ONMP

#### **1.5 Consultation**

No stakeholder consultation was required for the preparation of this Addendum.



#### **1.6 Progressive Implementation of this Addendum**

This Addendum is applicable to the operation of the Development. Operation of the Development will not commence until this Addendum has been submitted to the Minister responsible for the EPBC Act (or delegate) under CoA 21 of the EPBC 2011/6086 Approval. The most recent version of this Addendum will be implemented to manage the potential impacts of the Development on sensitive receivers during operation.

Operational areas will come online progressively as warehouses are constructed, commissioned, and tenanted. As areas become operational, any adjacent construction areas will continue to be managed in accordance with the relevant approved Construction Environmental Management Plan and sub-plans, while operational areas will be managed in accordance with the MPW South OEMP – Addendum and sub-plan addenda.

Until the entire Development is operational, all construction areas will be appropriately identified and demarcated to enable effective management of the interface between any construction areas and operations.

#### 1.6.1 Distribution and Availability

A copy of the approved MPW South OEMP – Addendum and sub-plan addenda will be kept at the Development Office and will be made available to relevant regulatory officers, the Certifying Authority and operational staff upon request.

In accordance with CoA 27 of the EPBC 2011/6086 Approval, each management plan will be published on the website of the person taking the action within one month of being approved or being submitted under CoA 21. This Addendum will be published on the Development's website (https://moorebankintermodalprecinct.com.au/).

#### 1.6.2 Submission, Review and Update

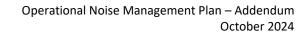
This Addendum will be submitted to DCCEEW as required by CoA 21 of the EPBC 2011/6086 Approval prior to the commencement of operation of the Development.

This Addendum will be reviewed annually, as a minimum (until all areas are operational), which may lead to revision of the document.

Under CoA 21 of the EPBC 2011/6086 Approval, the revised document can be submitted to DCCEEW for information if implementing the plan would not be likely to have a new or increased impact, and approval of the plan under Section 143A of the EPBC Act is not required. CoA 21 to 25 of the EPBC 2011/6086 Approval detail the process for review and implementation of the revised documents following submission to DCCEEW. In the event that ESR or DCCEEW considers that the implementation of the revised document would be likely to have a new or increased impact, approval of the revised documents under Section 143A of the EPBC Act will be required prior to implementation.

In addition to the triggers above, this Addendum may be revised more regularly as a result of:

- Inspection outcomes (either by internal or external parties)
- Changes to the precinct-wide environmental management requirements (see Section 4.1)
- Changes to procedures and/or scope of works after an incident or potential incident





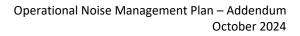
- Proactive identification of noise reduction opportunities during changes or refinements of site noise generating activities (i.e. change of tenant)
- Design or operational changes
- Following noise monitoring that identifies ongoing criteria exceedance
- Opportunities for improvement identified as part of an investigation or noncompliance report
- Internal or external environmental audits
- Material noise complaints that require a review of procedures, operations or mitigation/management measures.

#### **1.7 Document Structure**

The structure of this Addendum is:

- Section 1 provides a brief overview of the MIP and the purpose, objectives and targets, and application of this Addendum. It also describes requirements for consultation (if any).
- Section 2 provides a summary of the activities being undertaken during operation of the Development.
- Section 3 outlines the statutory requirements and obligations which need to be fulfilled during operation of the Development in relation to the management of noise.
- Section 4 describes the environmental management requirements for the Development, relevant to noise.
- Section 5 describes the nearby noise sensitive receivers, identifies the aspect, impacts and risks for noise and details the management measures that will be implemented to manage these risks.
- Section 6 provides details for monitoring and review of the implementation of this Addendum, and how environmental non-compliance and non-conformance will be managed during operations.

This addendum has been structured to be consistent with the other MPW South sub-plan addenda, as appropriate.





# **2 DEVELOPMENT DESCRIPTION**

The Development comprises Warehouses S1, S2, S3, S5 and S6, located within the southern portion of the MPW footprint. The operation of the Development also includes ancillary infrastructure, namely car parking, landscaping, signage and lighting. Bushmaster Avenue provides truck and car access to the Development site.

The warehouses have been approved to operate 24 hours per day, 365 days per year. Heavy and light vehicles would access the warehouses via the main site access off Moorebank Avenue and Bushmaster Avenue, light vehicles would park in the allocated parking area adjacent to each warehouse and heavy vehicles would progress to the truck loading/unloading areas alongside each warehouse. Containers would be transferred directly to the warehouses from the rail terminals located to the east of the Development site.

The future tenant(s) for the warehouses are currently unknown, and so further details on future warehouse operations, for example chemical, fuels and/or dangerous goods handling and storage, are currently not available.

The Development site is shown in Figure 2-1. Figure 2-2 shows an aerial view of the MPW South warehouses.



#### Figure 2-1 MPW South Development site (MP01-23103-P7, Watson Young, September 2023)

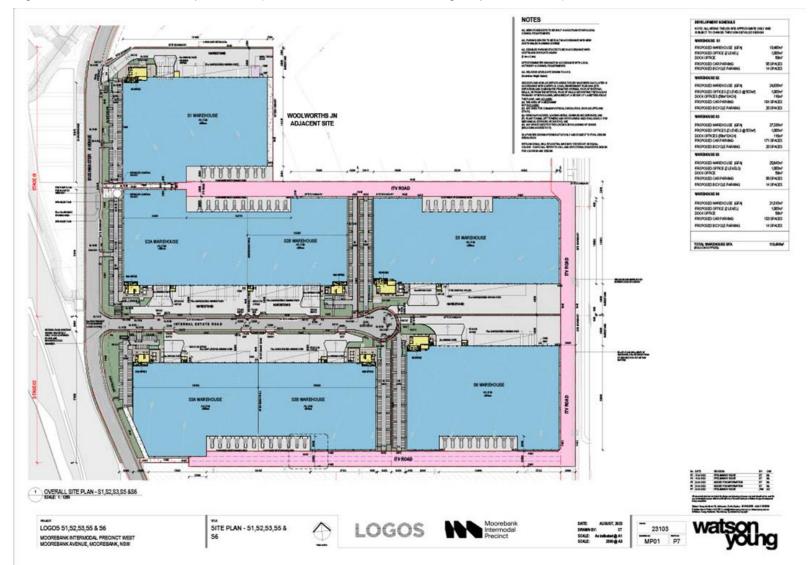




Figure 2-2 Aerial view of Warehouses S1, S2, S3, S5 and S6 (LOGOS 2023)





# **3 STATUTORY REQUIREMENTS**

The operation of the Development is required to comply with all relevant development approvals and consents legislation, permits, and licences applicable to the Development site.

#### **3.1 Development Approvals**

The Development was approved under both the EPBC Act and Environment Planning and Assessment Act 1979 (EP&A Act). The approval, consent and certificate granted under these acts include conditions relevant to operations and potential noise impacts as detailed below. Where updated or revised versions of guidelines, protocols, standards or policies, or a replacement of these are available, the most recent versions would be reviewed and their applicability to the Addendum determined.

The EPBC 2011/6086 Approval for the MPW Concept was granted by DotEE (now DCCEEW) in September 2016 and varied on 17 September 2019 and 22 April 2022. The operation of the Development will be consistent with the EPBC 2011/6086 Approval conditions. The EPBC 2011/6086 Approval refers to the Revised Environmental Management Measures (REMM) of the "finalised EIS" (i.e. the Moorebank Intermodal Terminal Plan Supplementary Response to Submissions (RtS), Parsons Brinckerhoff, August 2017).

The MPW Concept and Stage 1 (SSD 5066) Development Consent was granted on 3 June 2016. The CoC under Schedule 2 (Terms of Approval) are potentially relevant to the operations of the Development, although CoC under Schedule 3 (Stage 1 Early Works) and Schedule 4 (Future Development Applications) are not.

The MPW Stage 2 (SSD 7709) Consolidated Consent was approved on 11 November 2019 by the NSW Independent Planning Commission (IPC) and is predominately applicable to operations within the northern portion of the MPW Stage 2 Site. However, the SSD 7709 Consolidated Consent defines the MPW Stage 2 Site as including the area of the Development (Appendix 1 Figure 1 of SSD 7709). Therefore, SSD 7709 CoC that refer to the "site" may apply to operation of the Development.

CDC 230736/01 was issued for the Development under the TISEPP on 27 February 2024. The CDC included conditions relevant to the operation of the Development but not specifically related to noise management and this Addendum.

The compliance of this Addendum with the relevant conditions of the approval and consents is detailed in Appendix A.

#### 3.2 Legislation

The regulatory framework relevant to the operation of the Development is documented in Appendix F of the MPW Stage 2 OEMP. This framework identifies relevant legislative instruments, their key objectives and their application to the Development.

This register will be revised and updated in conjunction with the management review outlined in Section 6 of the MPW South OEMP – Addendum or when there has been a change to relevant legislation.



#### 3.3 Permits and Licences

Permits and licences relevant to operations are detailed in Appendix B of the MPW Stage 2 OEMP. This register is revised and updated in conjunction with the management review outlined in Section 6 of the MPW South OEMP – Addendum, or when there has been a change to relevant legislation.

Compliance conditions relating to items listed on this register are incorporated into the MPW South OEMP – Addendum and the sub-plan addenda, where relevant.

A summary of the key permits and licences applicable to operations of the Development is provided in Section 3.3 of the MPW South OEMP – Addendum.

#### 3.4 Guidelines

This Addendum has been prepared in accordance with a list of guidelines and codes of practice as detailed in Appendix C of the MPW Stage 2 OEMP, including the *Environmental Management Plan Guidelines (Commonwealth of Australia, 2014) and the Environmental Management Plan Guideline – Guideline for Infrastructure Projects* (DPE, 2020).

Additional standards and guidelines relating to the management of noise and vibration include:

- NSW EPA Noise Policy for Industry, 2017 (NPfl)
- Approved methods for the measurement and analysis of environmental noise in NSW (EPA, 2022).



# 4 ENVIRONMENTAL MANAGEMENT

#### 4.1 Precinct-wide Environmental Management

Section 4 of the MPW South OEMP – Addendum describes ESR's precinct-wide environmental management requirements as summarised in Table 4-1. This Addendum will be implemented in a manner that is consistent with these requirements.

Table 4-1 Precinct-wide environmental management requirements

Environmental Management Requirements	Section of MPW South OEMP – Addendum	
LOGOS' Environmental Management System	Section 4.1	
MIP Sustainability Policy and Sustainability Framework	Section 4.2	
LOGOS' Workplace Health and Safety Management System	Section 4.3	
MPW Stage 3 Precinct OEMP	Section 4.4	
Operational environmental and sustainability objectives and targets	Section 4.5	
Roles and environmental responsibilities	Section 4.6	
Training and competence	Section 4.7	
Community consultation and complaints management	Section 4.8	
Incident management and emergency response	Section 4.9	
Document control and records	Section 4.10	

#### 4.2 Roles and Environmental Responsibilities

Key roles and responsibilities associated with the implementation of this Addendum are detailed in Table 2-1 of the MPW Stage 2 ONMP.

#### 4.3 Training and Competence

Appropriate training and inductions for operations personnel will be undertaken in accordance with Section 4.7 of the MPW South OEMP – Addendum. The following noise management specific information will be included within the induction:

- The location of potentially sensitive receivers
- Main sources and nature of noise
- Relevant noise mitigation and management measures, and how they are to be feasibly and reasonably implemented, including operation or site specific requirements (eg. warehouse operations specific requirements)
- A summary of relevant licence and approval conditions
- Designated loading/unloading areas and related noise management procedures, especially during the critical night period



- Details of the noise complaints and vibration handling procedure
- Details of the noise incident procedures
- Limiting the clustering of noisy plant/processes
- Non-conformance, preventative and corrective action procedures
- An outline of the consequences of not complying with these measures
- Obligations and requirements for plant and equipment (ie. plant and equipment is to be well maintained and not making excessive noise)
- Operation of vehicles to minimise noise impacts, i.e. use of designated routes, use of non-tonal reversing beepers, turning off plant, equipment and vehicles when not in use.

Training, inductions and/or toolbox talks will also be undertaken on noise management.

Training on the noise management requirements and measures will be completed by the Facilities Manager (or nominated delegate).

Records of all training and inductions are to be filed in accordance with the document control system outlined in the MPW South OEMP – Addendum.



# **5 IMPLEMENTATION**

#### 5.1 Nearby Noise Sensitive Receivers

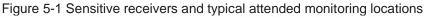
Section 3.1 of the MPW Stage 2 ONMP describes the existing environment in terms of residential and non-residential sensitive receivers and the existing noise environment.

In terms of sensitive receivers, Table 5-1 identifies the sensitive receivers and their approximate distance from the Development. Figure 5-1 identifies these sensitive receivers and monitoring locations (Section 4.1.2 of the MPW Stage 2 ONMP identifies the typical locations for attended monitoring).

Table 5-1 Summary of sensitive receivers and approximate distance

Receiver/Suburb	Category	Distance (m) from the Development
Wattle Grove		1100
Wattle Grove North	Residential	1700
Casula		530
Glenfield		1300
All Saints Senior College (S1)	Educational	630
Casula Powerhouse (S2)	Educational	620
DJLU	Industrial	1050
ABB	muusmai	1400







#### 5.2 Noise Management Criteria

Section 3.2 of the MPW Stage 2 ONMP describes noise limits in terms of operational LAeq 15-minute noise limits and maximum noise level (LAmax) sleep disturbance trigger levels.

In terms of operational noise limits, Table 5-2 summarises the operational noise limits as prescribed in SSD 7709 CoC B131. These noise limits are applicable for all operational noise emissions from the Precinct (MPW and MPE) (excluding rail operations on the rail link), and so are applicable to the noise emissions generated by the Development cumulatively for all other operations.



Table 5-2 Operational	noise l	limits	dB(A)
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Location (Residential Receivers)	Daytime <sup>4</sup> L <sub>Aeq, 15minute</sub>	Evening <sup>4</sup> L <sub>Aeq, 15minute</sub>	Night-time <sup>4</sup> L <sub>Aeq, 15minute</sub>	Night⁴ Sleep Arousal Screening Level L <sub>AFmax</sub>
Casula	46	44	39	52
Glenfield	49	46	42	52
Wattle Grove	44	42	42	52
Wattle Grove North	41	41	41	52

Notes:

- 1. Noise limits outlined in Table 3-3 apply under the following meteorological conditions:
  - wind speeds up to 3m/s at 10 meters above ground level; or
    - atmospheric stability category F (with no wind).
- 2. To determine compliance with the LAeq, 15-minute noise limits, noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30m of a dwelling where the dwelling is more than 30m from the boundary. Where it can be demonstrated that direct measurement of noise from the project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 7 of the NPfI). The modification factors in Fact Sheet C of NPfI must also be applied to the measured noise levels where applicable.
- 3. To determine compliance with the Night LAFmax Sleep Arousal Screening Level in Table 5 2 above, noise from the project is to be measured at 1m from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 7 of the NPfI).
- 4. The time periods are defined as 7:00am to 6:00pm Monday to Saturday, and 8:00am to 6:00pm on Sundays and Public Holidays; Evening 6.00 pm to 10.00 pm; Night-time 10:00pm to 7:00am Monday to Saturday, and 10:00pm to 8:00am on Sundays and Public Holidays.
- 5. As per CoC B131, the noise limits apply for noise arising from use of the approved Precinct (MPW and MPE) (excluding rail operations on the rail link).

#### 5.3 Aspects, Impacts and Risks

Section 2 of this Addendum describes the Development, including operational activities, hours of operation and ancillary operational activities. Section 5.1 and Appendix D of the MPW South OEMP – Addendum, details the aspects, impacts and risks associated with the operation of the Development.

The location and specification of in-principle noise mitigation measures, including the requirement for future mitigation as part of the staged operation in the NVIA, are to be further investigated as per the NVIA, as detailed in Section 5.4.

#### **5.4 Management Measures**

Management actions prescribed by this Addendum aim to avoid and minimise impacts on nearby sensitive receivers. Management measures to be implemented pre-operations and during operations are detailed in Table 5-3. These measures have been sourced from the



MPW Stage 2 ONMP and subsequently amended to be relevant for the operation of the Development and include relevant recommendations and outcomes of the NVIA.



Table 5-3 Management Measures

ID	Management Measure	Timing	Responsibility	Reference			
Pre-O	Pre-Operations Management Actions						
	Undertake an assessment to model and assess the proposed tenant operations, with consideration of the final constructed warehouse and precinct design, to achieve any individual allocations provided by ESR, so that the Development will cumulatively be consistent with the outcomes of the NVIA.						
	The assessment should consider the items identified in NVIA Section 4.3.1 and 4.3.4.						
N1	Where the tenant operational noise emissions are predicted to result in higher noise levels than expected in the NVIA based upon individual noise allocations and requirements provided by ESR, different noise mitigation and management controls may be required to be implemented into the tenant operational noise mitigation or management plans.	Pre-Operations of individual warehouses prior to occupation (new tenant or change of	HSE Manager Warehouse Tenants	NVIA Sections 4.3.1 and 4.3.4			
	This assessment must be approved by ESR prior to occupation.	tenant)					
	Where physical mitigation measures are required, they should be installed prior to operation, or where this is not feasible and reasonable, they are to be installed as soon as practicable after operation, in consultation with ESR.						
	The required mitigation and management measures based upon the outcomes from the assessment will be incorporated into the relevant Warehouse operational procedural documents.						
	Tenant demand for container operations (or other equipment) to the warehouse container area of each warehouse is to be reviewed when tenant operations are known, and the number/frequency of movements and plant/equipment noise levels	Pre-Operations of	HSE Manager	NVIA Sections 4.3.2			
N2	confirmed against the assumptions in NVIA Table 4-6, Section 4.3.2.	Warehouse Tenant and Ongoing	Warehouse	(Table 4-6), 4.5.1 and 4.5.4			
	Further assessment should be undertaken where typical operations differ (e.g. noise level) or are greater (e.g. frequency) than the NVIA assumptions.		Tenants	anu 4.5.4			



ID	Management Measure	Timing	Responsibility	Reference
N3	Tenant truck movements, in the data format (i.e. reasonable worst case 15-minute period truck and light vehicle movements) presented in NVIA Table 4-2, are to be confirmed by the tenant and provided to ESR, prior to the commencement of a tenant's operations. This information should be provided to ESR for use in a cumulative noise assessment, as part of a whole of MIP assessment for shared internal roads (i.e. Bushmaster Avenue).	Pre-Operations of individual warehouses prior to occupation (new tenant or change of tenant)	HSE Manager Warehouse Tenants	NVIA Sections 4.2.2.1, 4.3.3, 4.5.1 and 4.5.4
N4	<ul> <li>A task specific induction and relevant training will be provided to all staff, contractors, and drivers with an emphasis on understanding and managing noise impacts from their activities.</li> <li>This will include the location of noise sensitive receptors, tenant or warehouse specific management measures for the relevant site activity, any relevant operation/activity specific mitigation or management measures, noise management practices, noise complaints procedure and the consequences of not complying with these mitigation measures.</li> <li>Also include behavioral practices that reduce noise emissions. This may include:</li> <li>Avoiding generating high instantaneous noise events, especially during the critical night period (e.g. from dropping of materials from height, slamming/sudden drops of forklifts, goods, containers, etc. onto trucks).</li> </ul>	Pre-Operations and Ongoing	HSE Manager Facilities Manager Site personnel	REMM 5AG NVIA Table 3-6 and Section 4.5.2
	<ul> <li>No excessive revving of plant and vehicle engines.</li> </ul>			

• Minimisation of truck air brake releases.



ID	Management Measure	Timing	Responsibility	Reference			
Opera	Operations Management Actions						
N5	Reducing peak 15-minute heavy vehicles movements across the site by staggering delivery / arrival / departure times during sensitive time periods (i.e. night).	Operations	Warehouse Tenants	REMM 5AG NVIA Section 4.5.2			
N6	Unnecessary idling for vehicles will be avoided with engines turned off during periods of inactivity. Avoid unnecessary revving of plant and vehicle engines.	Operations	Site personnel	REMM 5AG NVIA Section 4.5.2			
N7	Minimising concurrent use of mobile plant on hardstands and/or limiting their use to the less sensitive daytime and evening periods.	Operations	Warehouse Tenants	REMM 5AG NVIA Section 4.5.2			
N8	Minimising use of reversing alarms by providing forward manoeuvring where practicable.	Operations	Site personnel	REMMs 5U and 5AH NVIA Section 4.5.2			
N9	Broadband reversing alarms "quackers" shall be adopted across the warehouse tenant truck fleet that operates through warehouse facility. This should be adopted for all permanent and tenant owned/controlled vehicles where feasible and reasonable. Where tenants do not have control over vehicles that operate through the facility, management of potential impacts should be reviewed further as part of the tenant operational management plan, with particular consideration as to whether these trucks with tonal reverse alarms would operate during the night period.	Operations	Warehouse Tenants	NVIA Section 4.3.4			
N10	Any public announcement (PA) systems that are used as part of normal operations would be restricted to within the enclosed areas of the facility during the night period.	Operations	Warehouse Tenants	NVIA Section 4.3.4			
N11	Alternate methods and practices to the use of horns as a safety warning for onsite moving forklifts should be reviewed and incorporated into site operations and safety	Operations	Warehouse Tenants	NVIA Section 4.3.4			



ID	Management Measure practices, where feasible and reasonable, especially where this equipment is used during the night period and or in outside areas.	Timing	Responsibility	Reference
N12	Signage will be installed across the Precinct to remind drivers of the anti-idling policy and their obligations.	Operations	Asset Manager	REMM 5AG
N13	All vehicles and equipment will be well maintained in accordance with the manufacturer's specifications.	Operations	HSE Manager	REMMs 5AG NVIA Section 4.5.2
N14	Where feasible and reasonable, utilise quieter mobile plant, such as electric forklifts instead of gas-powered forklifts.	Operations	HSE Manager	REMMs 5V and 5Y NVIA Section 4.5.2
N15	Where feasible and reasonable, noise reduction packages would be fitted and maintained on plant and equipment. Equipment would be selected and procured with an efficient muffler design.	Operations	HSE Manager	REMM 5W NVIA Section 4.5.2
Monit	oring			
N16	The ambient noise monitoring surveys undertaken within Casula, Wattle Grove and Glenfield would be continued throughout the operation of the Precinct (with annual reporting of noise results).	Operations (up to two years following commencement of full operations) (Completed under MPW Stage 2 ONMP requirements)	Asset Manager	REMM 5AJ
N17	A noise survey (both attended and unattended) will be carried out under B140A at R1 No. 9 Casula Road, Casula (or an equivalent location if access is denied). If the survey identifies an exceedance arising from use of the Precinct of the $L_{Aeq,15minute}$ and the $L_{AFmax}$ noise limits specified in Section 5.2, prepare a Preliminary Residual Noise	Operations (Completed under MPW Stage 2 ONMP	Asset Manager	SSD 7709



ID	Management Measure	Timing	Responsibility	Reference
	Impact Report (PRNIR). Where required by the PRNIR, prepare a Residual Noise Impact Mitigation Plan and detail a Proposal for a Property Noise Mitigation Plan for each property (B140A(g)).	requirements)		
N18	For all properties identified in the Residual Noise Impact Mitigation Plan as requiring feasible and reasonable receiver based treatments, liaise with identified owners of properties and provide the owners with a copy of the Proposal for At Property Noise Mitigation Plan. Within 3 months of the Proposal for At Property Noise Mitigation Plan being completed, make an offer to the respective owners to affect the receiver based treatments specified in the Proposal for At Property Noise Mitigation Plan within an agreed time line.	Operations (Completed under MPW Stage 2 ONMP requirements)	Asset Manager	SSD 7709
	If an agreement is reached with the property owner, execute the recommended mitigation treatment at no cost to the property owner, within an agreed time.			
N19	Where ongoing noise surveys determine there has been a substantial change in the MIP noise levels as part of the analysis for B140A (f), update the Residual Noise Impact Mitigation Plan and At Property Noise Mitigation Plan (s) and implement the requirements of B140A (h)-(i) in respect of any properties which have not been offered noise mitigation treatment to date or where there is a required change to previously identified treatments.	Operations (Completed under MPW Stage 2 ONMP requirements)	Asset Manager	SSD 7709
N20	Noise compliance measurements for the warehouse base building noise emissions are to be undertaken within 6 months (or as soon after that measurement of valid operations can take place) of the completion of construction, to compare actual noise emission levels against any individual allocations provided by ESR. Further mitigation and management measures should be considered in consultation with ESR, where measured noise levels are above these levels.	Within 6 months of the completion of construction	Asset Manager	NVIA Section 4.5.3
	The monitoring must be carried out by a suitably qualified and experienced person(s) and should be undertaken in accordance with Section 7 ' <i>Monitoring performance</i> ' of the NPfI and consideration of Approved Methods for measurement and Analysis of Environmental Noise in NSW (EPA 2022).			



ID	Management Measure	Timing	Responsibility	Reference
N21	Noise compliance measurements for the tenant operations of each warehouse operation are to be undertaken within 12 months (or as soon after that measurement of valid operations can take place) of the commencement of operations, to compare actual noise emission levels against any individual allocations provided by ESR. Further mitigation and management measures should be considered in consultation with ESR, where measured noise levels are above these levels. The monitoring must be carried out by a suitably qualified and experienced person(s) and should be undertaken in accordance with Section 7 ' <i>Monitoring performance</i> ' of the NPfl and consideration of Approved Methods for measurement and Analysis of Environmental Noise in NSW (EPA 2022).	Within 12 months of the commencement of operations (or as soon after that measurement of valid operations can take place)	Warehouse Tenants	NVIA Section 4.5.3
N22	Review of noise reduction opportunities during changes or refinements of site noise generating activities (i.e. new tenant/change of tenant)	Operations	HSE Manager	REMMs 5AG and 5AH NVIA Section 4.5.5
N23	Reviewing noise levels of plant, equipment and activities, during both ongoing compliance checks and in response to complaints.	Operations	HSE Manager	REMMs 5AG and 5AH NVIA Section 4.5.5



# **6 MONITORING AND REVIEW**

#### 6.1 Environmental Monitoring

Noise monitoring will be undertaken in accordance with the monitoring that is detailed in Section 4.1 of the MPW Stage 2 ONMP, where relevant, and as detailed in the NVIA. Monitoring required to determine the effectiveness of management measures required by this Addendum is outlined in Table *6-1*.

Table 6-1 Monitoring activities

Monitoring Activity	Frequency	Responsibility
Operational Noise Monitoring	<ul> <li>Noise monitoring to compare actual noise performance of the MIP Precinct against the operational noise limits will be undertaken as follows:</li> <li>Performance monitoring, within 12 months following occupation of the entire site.</li> </ul>	Asset Manager
Operational Noise Monitoring	Attended noise monitoring will be undertaken to determine compliance against the operational noise limits upon receipt of a noise complaint.	Asset Manager
Warehouse Operational Noise Monitoring (Base building)	Noise compliance measurements for the warehouse base building noise emissions are to be undertaken within 6 months of the completion of construction, to compare actual noise emission levels against any individual allocations provided by ESR.	Asset Manager
Warehouse Operational Noise Monitoring (Tenant operations)	Noise compliance measurements for the tenant operations of each warehouse operation are to be undertaken within 12 months of the commencement of operations (or as soon after that measurement of valid operations can take place), to compare actual noise emission levels against any individual allocations provided by ESR.	Asset Manager
	Not < 3months not > 6months from commencement of operation. Then at 12-month intervals and 12 months after full site operations.	
Noise Impact Monitoring - No. 9 Casula Road, Casula (or an equivalent location if access is denied)	Attended noise monitoring, for 4 contiguous hours in a single day, evening and night period conducted on days when the Precinct is likely to be operating at maximum capacity.	Asset Manager
	Unattended noise monitoring, for a period of 7 contiguous days not adversely affected by weather and must include the days of the attended surveys.	



Monitoring Activity	Frequency	Responsibility
Ambient Noise Monitoring	Operations (up to two years following commencement of full operations).	Asset Manager

#### 6.2 Attended Monitoring and Methodology

Attended noise monitoring will be undertaken in accordance with the monitoring where relevant as detailed in Sections 4.1.2 and 4.1.2.1 of the MPW Stage 2 ONMP.

#### 6.3 Environmental Reporting

Section 6.2 of the MPW South OEMP – Addendum details the environmental reporting required during the operation of the Development.

The reporting requirements that are applicable to this ONMP are summarised in Table 6-2.

Table 6-2 Environmental Reporting Requirements

Condition or Reference	Reporting requirements	Frequency
CoA 6c) REMMs 5AG and 5AJ	Reporting results of ambient noise monitoring undertaken for MPW, including MPW South	Annually for up to two years after the completion of all warehouse construction

#### 6.4 Exceedances of Noise Management Levels

Noise monitoring data will be analysed to determine if the operational noise levels exceed the applicable noise limits, consistent with the NPfl and Section 7 '*Monitoring performance*' of that document. In the event of an exceedance of the noise limits is identified, the actions to be undertaken are listed in Section 4.3 of the MPW Stage 2 ONMP.

If these actions are not sufficient to resolve the monitored sustained exceedance of the relevant noise limits, contingency measures identified in Section 4.3.3 of MPW Stage 2 ONMP will be implemented.

#### 6.5 Environmental Auditing and Inspections

Auditing and inspections will be undertaken in accordance with Sections 6.3 of the MPW South OEMP – Addendum.

#### 6.6 Incidents

All noise incidents are to be reported and managed in accordance with the Logos Incident Reporting and Management Procedure (SHEMS-QM-13-PR-0126). Incidents are classified



based on the incident's severity as shown in Section 4.9 of the MPW South  $\mathsf{OEMP}-\mathsf{Addendum}.$ 

All incidents will be managed and reported according to Section 4.9 of the MPW South OEMP – Addendum.

#### 6.7 Complaints

All noise complaints will be handled in accordance with Section 4.8 of the MPW South OEMP – Addendum.

As outlined in Table 6-1, in the event of a confirmed noise complaint, noise monitoring may be carried out as part of an investigation to determine whether noise levels are achieving the requirements of the Development.

#### 6.8 Non-compliance, Non-conformance and Corrective Actions

It is the responsibility of all personnel to report non-conformances to ESR. The HSE Manager and/or Asset Manager will investigate non-conformances, log corrective and/or preventative actions, and delegate responsibility for corrective and/or preventative actions within assigned timeframes.

Non-compliances and non-conformances will be managed in accordance with Section 6.4 of the MPW South OEMP – Addendum.



## **7 REFERENCES**

Aspect Environmental (2023), Exempt and Complying Development Assessment – Warehouse S1, S2, S3, S5 and S6 – Moorebank Logistics Park – West Precinct South, December 2023)

NSW Environment Protection Authority (2017), Noise Policy for Industry (NPfl)

NSW Environment Protection Authority (2022), Approved methods for measurement and analysis of environmental noise in NSW

Parsons Brinkerhoff (2014), Moorebank Intermodal Terminal Project Environmental Impact Statement, Chapter 12 – Noise and Vibration, October 2014

Parsons Brinkerhoff (2015), Moorebank Intermodal Terminal Response to Submissions Report, Volume 4 Appendix F Noise and Vibration Assessment, May 2015

Parsons Brinkerhoff (2015), Moorebank Intermodal Terminal Supplementary Response to Submissions Report, Chapter 4 Response to government agencies submissions, Chapter 5 Response to community submissions and Chapter 7 Revised environmental management measures (REMM), August 2015

Renzo Tonin & Associates (2023), Moorebank Precinct West - Noise and vibration impact assessment - MPW South (S1/S2/S3/S5/S6), Report: TM306-18F04 MPW S1 S2 S5 (S3 S6) CDC NVIA (r3), Revision 3, dated 14/11/2023.

Wilkinson Murray (2016), MPW Stage 2 Best Practices Review: Noise, Report No. 15324, Version B, September 2016.





CoA/CoC	Requirement	Section	How Addressed					
EPBC 2011/	EPBC 2011/6086 Approval							
6	Sections of the CEMP and OEMP relating to noise and vibration must be prepared by a suitably qualified expert and must:	This Addendum	This Addendum was prepared by suitably qualified experts from Aspect Environmental and Renzo Tonin & Associates.					
	<ul> <li>a) be consistent with the Noise and Vibration Provisional Environmental Management Framework (2 July 2014), provided at Appendix O to the finalised EIS</li> </ul>	Sections 4 and 5	This Addendum is consistent with Section 6.3 of the Noise and Vibration Provisional Environmental Management Framework which details management controls to be implemented during the operation phase.					
	<ul> <li>b) incorporate all measures 5A to 5T (CEMP only) and 5U to 5AJ (OEMP only) from Table 7.1 of the finalised EIS that are described as 'mandatory'</li> </ul>	NA	REMM 5AI does not apply to operations.					
	c) explain how all measures 5A to 5T (CEMP only) and 5U to 5AJ (OEMP only) from Table 7.1 of the finalised EIS that are described as	Section 5.4	The following REMM applicable to operations have been addressed, 5U- 5W, 5Y, 5AF-5AH and 5AJ apply to operations.					
	'subject to review' have been addressed be approved by the Minister or a relevant New South Wales regulator	Section 5.4	REMM 5X, 5Z, 5AA, 5AB and 5AD do not apply to the operation of the Development and REMM 5AC and 5AE do not apply to operations.					
	d) be approved by the Minster or a relevant New South Wales regulator.	NA	This ONMP – Addendum will be submitted to DCCEEW under CoA 21.					



CoA/CoC	Requirement	Section	How Addressed
REMM			
5U	<ul> <li>To achieve the noise reductions outlined in Table 7.30 of the Response to Submissions report and the Revised Project Noise and Vibration Impact Assessment report in Appendix F, mitigation treatments may be required to reduce noise from all dominant noise sources. The Project would implement reasonable and feasible noise mitigation to control potential noise levels. In the event that the Project does not meet the assessment criteria at receptors, if the Project has reduced noise levels to be as low as practicable, the NSW Industrial Noise Policy (INP) (EPA 2000b) notes that:</li> <li>achievable noise limits can be negotiated with regulators and the community; and</li> <li>the Project specific noise mitigation measures and noise levels outlined in Table 7.30 of this report and in the Noise and Vibration Assessment (Appendix F) should not automatically be interpreted as conditions for approval without consideration of other factors (environmental, social and economic) consistent with the objectives of the EP&amp;A Act. In this regard, where appropriate, the INP notes that noise limits can be set above the Project specific noise levels.</li> </ul>	Section 5.2 (Table <i>5-2</i> ) Section 5.4 (Table <i>5-3</i> )	These sections include further assessment and monitoring to capture actual noise performance.
5V	Where practical operational plant and equipment would be selected to reduce noise emissions.	Section 5.4 (Table <i>5</i> - <i>3</i> N14 and N15)	Using quieter plant, fitting and maintaining noise reduction packages on plant and equipment where feasible and reasonable.
5W	Mechanical components on fixed and mobile equipment, such as motors, gearboxes and exhausts, would include enclosures and acoustic insulation (lagging) (as necessary) to limit noise emissions.	Section 5.4 (Table <i>5-3</i> N15)	Fitting and maintaining noise reduction packages on plant and equipment where feasible and reasonable.



CoA/CoC	Requirement	Section	How Addressed
5Y	Where reasonable and feasible, and where it would produce a lower noise emission, electric motors would be operated instead of diesel powered equipment	Section 5.4 (Table <i>5-3</i> N14)	Where feasible and reasonable, use quieter mobile plant, such as electric forklifts instead of gas-powered forklifts.
5AF	Before the start of each phase of operations, an operational noise and vibration management plan (ONVMP) (or equivalent) would be developed and implemented. The ONVMPs would detail the operation of the relevant Project phase, the potential offsite operational noise levels as determined during the detailed design process, and all measures to manage and mitigate operational noise and vibration.	Section 5.4 (Table <i>5-3</i> )	This section includes further assessment and monitoring to capture actual noise performance.
5AG	<ul> <li>As a minimum, the ONVMP (or equivalent) would include:</li> <li>The operational noise criteria/limits as defined by the relevant Project approvals and Environmental Protection Licence;</li> <li>identification of all surrounding receptors and land use that would be potentially sensitive to noise and vibration;</li> <li>identification of all noise and vibration generating operations and the timing of these operations;</li> <li>the location and specification of any onsite and offsite noise mitigation, including the requirement for future mitigation as part of the staged operation;</li> <li>detailed measures for managing operational noise, including checklist and auditing procedures to ensure measures are implemented before the start of noise generating activity;</li> <li>procedures for the monitoring and reporting of operational noise and vibration;</li> </ul>	Section 5.2 (Table <i>5-2</i> ) Section 5.1 (Table <i>5-1</i> and Figure <i>5-1</i> ) Section 5.3 (OEMP Appendix D) Section 5.3 (OEMP Appendix D) Section 5.4 (Table <i>5-3</i> ) and Section 6.7 Sections 6.1, 6.2 and 6.3	This Addendum addresses the specific requirements of this REMM.
	<ul> <li>procedures for consultation with the community regarding operational noise and vibration; and</li> </ul>	MPW South OEMP – Addendum Section 5.8	



CoA/CoC	Requirement	Section	How Addressed
	complaint handling procedures.	Section 6.6	
5AH	<ul> <li>During detailed design, where practical and feasible to do so, consideration would be given to:</li> <li>undertaking locomotive maintenance during the daytime and evening period between 7.00 am and 10.00 pm;</li> <li>operating heavy vehicles to limit the requirement for reversing and audible reversing alarms; and</li> <li>appropriate management measure – either contractual or operational – that rail operators accessing the site would be required to undertake regular maintenance of all trains to address wheel flat spots and locomotive exhausts.</li> </ul>	Section 5.4 (Table <i>5-3</i> N8 and N9)	Minimising use of reversing alarms by providing forward maneuvering where practicable. The implementation of broadband reversing alarms for permanent and tenant owned/controlled vehicles, where feasible and reasonable. Rail related items not applicable to the Development.
5AJ	The ambient noise monitoring surveys within Casula, Wattle Grove and Glenfield would be continued throughout the construction and operation of the Project (with annual reporting of noise results up to two years beyond the completion of Full Build). The noise surveys would quantify any potential noise from the Project and identify any trends/changes in the ambient noise environment during the progressive development. The measured noise levels and contribution from the operation of the Project would be continually applied to the detailed design of the Project to ensure it includes appropriate mitigation measures to reduce and control noise during construction and operation. The monitoring data would also include any changes to the ambient noise environment from new or changed developments in the area. In the event of any noise or vibration related complaint or adverse comment from the community, noise and ground vibration levels would be measured at the potentially affected premises, where reasonable and feasible. In accordance with procedures in the CNVMP and ONVMP, the measured noise and/or vibration levels would then be assessed to	Section 5.4 (Table <i>5-3</i> N16) Section 6.4 (Exceedances) Section 6.7 (Complaints) Section 6.8 (Non- compliance)	The ambient noise monitoring surveys undertaken within Casula, Wattle Grove and Glenfield would be continued throughout the operation of the Precinct (with annual reporting of noise results). For confirmed noise complaints, noise monitoring may be carried out to investigate operational noise levels, to determine if noise levels are achieving the requirements of the Development.



CoA/CoC	Requirement	Section	How Addressed
_	ascertain if remedial action is required		
SSD 5066	Development Consent		
	The SSD 5066 Development Consent did not include conditions relating to noise and vibration during the operation of the Development.		
SSD 7709	Development Consent		
B131	The SSD 7709 Development Consent did not include conditions relating to noise and vibration for the 'Site', except for the cumulative noise limits detailed in CoC B131 which are applicable for all operational noise emissions from use of the approved Precinct (MPW and MPE).	Section 5.2 (Table <i>5-2</i> ) Section 5.4 (Table <i>5-3</i> )	The NVIA considered the CoC B131 cumulative noise requirements, and allocated noise quotas to the Development, for management of noise emissions from the Development. These are considered in the management measures in Section 5.4 (Table <i>5-3</i> ).
B188	<ul> <li>All plant and equipment used on site, or to monitor the performance of the development must be:</li> <li>(a) maintained in a proper and efficient condition; and</li> <li>(b) operated in a proper and efficient manner.</li> </ul>	Section 5.4 (Table <i>5-3</i> N13)	Equipment used on site will be maintained in accordance with the manufacturer's specifications.
CDC 23073	36/01 and TISEPP Chapter 6		
	The CDC did not include conditions relevant to noise and vibration during		

the operation of the Development.