



JKKP/ DOSH

# GUIDANCE FOR EMPLOYER

## ON THE PREPARATION OF NOISE CONTROL PRACTICABILITY ASSESSMENT REPORT 2023



DEPARTMENT OF OCCUPATIONAL SAFETY AND HEALTH  
2023

A photograph of a large orange industrial robot arm in a factory setting. The robot arm is positioned vertically, with its joints and cables visible. The background shows a complex industrial environment with metal structures and other machinery.

Based on noise risk assessment conducted in workplace, if any of the employees is exposed to noise exceeding noise exposure limit (NEL), employer shall take measures to reduce the noise.

The employer shall make an assessment whether the measure is practicable by way of engineering control or administrative control according to the sequence determined under Regulation 6(4) of OSH (Noise Exposure) Regulations 2019 and prepare a justification report.

The image shows a close-up of an orange industrial robotic arm in a factory environment. The arm is positioned vertically, and its joints and mechanical components are visible. In the background, there are various industrial structures, including metal frames and pipes, under bright overhead lighting. The overall scene is a typical industrial manufacturing setting.

The report should consider the following factors:

- a. the scale of the noise problem and its impact on the business (including workers);
- b. cost and effort required to reduce noise exposure;
- c. effectiveness of planned control measures; and
- d. the number of individuals who would benefit from those control measures.

# Content of The Report

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# Content of The Report

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## 1. Introduction

- a. Particular of the workplace:
  - i. Name
  - ii. Address
  - iii. DOSH registration number
  
- b. Particular of the assessment:
  - i. Name and designation of person conducted the assessment
  - ii. Date of assessment

## 2. Scope of assessment

- a. Particular of Noise Risk Assessment Report
  - i. Name and competency registration no. of noise risk assessor
  - ii. Date of assessment by noise risk assessor
  - iii. Date of report received
  
- b. Similar exposure group (SEG) involved in assessment

# Content of The Report

## 3. Control Options Practicability Assessment

### a) SEG

**Table 1: Information of SEG**

<b>SEG</b>	<b>Noise Source</b>	<b>L<sub>EX,8h</sub> dB(A)</b>	<b>Max Level, dB(A)</b>	<b>Peak Level, dB(C)</b>	<b>Number of workers exposed</b>
<b>SEG 1</b>					
<b>SEG 2</b>					
<b>SEG n</b>					

**Table 2: Assessment of Control Practicability for SEG 1**

Control Hierarchy	Control Option <sup>1</sup>	Details of control specifications	Cost, (RM)	Potential Noise Reduction, dB(A)	Potential Number of workers that will be benefit	Control option will be adapted? (Yes/No)	If Control option cannot be adapted, please justify.	Predicted Noise Exposure level after implementation <sup>2</sup> , dB(A)
<b>Engineering</b>	<b>NRA's Recommendation -1</b>							
	<b>NRA's Recommendation - n<sup>3</sup></b>							
	<b>Other options<sup>4</sup> -1</b>							
	<b>Other options<sup>4</sup>-n<sup>3</sup></b>							

**Predicted noise exposure level after implementation is below NEL?  
Engineering Control solely possible to reduce exposure below NEL?**

**(Yes / No)  
(Yes / No)**

Note:

- *If Yes, stop assessment and implement the selected control options (can be one control option or combination of any control options stated).*
- *If No, proceed with assessment of combination of engineering control and administrative control approach.*

<b>Administrative</b>	<b>NRA's Recommendation - 1</b>							
	<b>NRA's Recommendation - n<sup>3</sup></b>							
	<b>Other options<sup>4</sup> -1</b>							
	<b>Other options<sup>4</sup> - n<sup>3</sup></b>							

**Predicted noise exposure level after implementation is below NEL? (Yes / No)**

**Combination of engineering control and administrative control possible to reduce exposure below NEL? (Yes / No)**

Note:

- If Yes, stop assessment and implement the selected combination of engineering and administrative control options.*
- If No, consider to implement administrative control only (can be one control option or combination of any control options stated).*

**Administrative control solely possible to reduce exposure below NEL? (Yes / No)**

Note:

- If Yes, stop assessment and implement the selected control options (can be one control option or combination of any control options stated).*
- If No, proceed with assessment of personal hearing protection usage.*

<b>PHP</b>	<b>NRA's Recommendation - 1</b>							
	<b>Other options<sup>4</sup> - n<sup>3</sup></b>							

**Predicted Noise exposure level after implementation is below NEL? (Yes / No)**  
**Combination of engineering control, administrative control and PHP possible to reduce exposure below NEL? (Yes / No)**

- Note:
- *If Yes, stop assessment and implement the combination approach.*
  - *If No, consider to implement PHP only.*

**PHP usage solely possible to reduce exposure below NEL? (Yes/ No/Not Applicable)**

- Note:
- *If Yes, stop assessment and implement the usage of PHP.*
  - *If No, reassess with other control options.*

<b>Others</b>	<b>NRA's Recommendation - 1</b>							
	<b>Other options<sup>4</sup> - n<sup>3</sup></b>							

**Note:**

- 1 Attach relevant information gathered such as quotation and brochure from supplier, source of reference etc.*
- 2 Predicted noise exposure level after implementation of all selected control options (based on hierarchy).*
- 3 Add if have more than one control options recommended for this SEG.*
- 4 Based on employer's survey, consultation with acoustic consultant or noise control supplier.*

# Content of The Report

## 3. Control Options Practicability Assessment

### b) SEG 2

*Note:*

*Repeat all steps as stated in Table 2 to assess SEG 2, SEG 3 onwards...*

## 4. Summary of Noise Control Measures to be Implemented

No	SEG	Please Tick (√) measures to be implemented			
		Engineering	Administrative	PHP	Others
1	SEG 1				
2	SEG 2				
n	SEG n				

## 5. Gantt Chart for Action Plan

No	SEG	Control Measures To be Implemented	PIC	Year ____/Month											
				1	2	3	4	5	6	7	8	9	10	11	12
1	SEG 1														
2	SEG 2														
n	SEG n														

# Example of Noise Control Practicability Assessment

## 1. Introduction

XYZ Sdn. Bhd is located at Lot 9, Jalan 9, 99000 Johor. This company manufacture children's bed. DOSH registration number of the factory is JH/09/9999.

The Noise Control Practicability Assessment Report was performed by Mr. Ahmad on 9 September 2023.

The purpose of the report is to carry out practicability assessment of noise reduction measures and prepare the assessment report as required by Regulation 6(3), 6(4) and 6(5) of OSH (Noise Exposure) Regulations 2019.

## 2. Scope of assessment

### Particular of Noise Risk Assessment Report

- Name of noise risk assessor: Mr. Ali (DOSH Reg. No: HQ/19/PEB/00/999)
- Date of assessment by noise risk assessor: 9 July 2023
- Date of report received: 9 August 2023

### Similar exposure group (SEG) involved in assessment

- Lamination operator
- Cutting operator

### 3. Control Options Practicability Assessment

**Table 1: Information of SEG**

SEG	Noise Source	$L_{EX,8h}$ dB(A)	Max Level, dB(A)	Peak Level, dB(C)	Number of workers exposed
Lamination Operator	L1 (front), L2 (Dust Collector), L3 (Manual Flipping Board)	89.9	110.5	130.3	12
Cutting operator	C1, C2, Air Gun	92.0	113.3	135.5	8

**Table 2: Assessment of Control Practicability for Lamination Operator**

Control Hierarchy	Control Option	Details of control specifications	Cost, (RM)	Potential Noise Reduction, dB(A)	Potential Number of workers that will be benefit	Control option will be adapted? (Yes/No)	If Control option cannot be adapted, please justify.	Predicted Noise Exposure level after implementation, dB(A)
<b>Engineering</b>	Preventive maintenance	Continue with regular preventive maintenance.	100	Noise will not increase	12	Yes	Nil	<b>83</b>
	Board flipping machine	To install machines for board flipping process.	40000	20	12	Yes	Nil	
	Partition layer	To install partition layer to segregate the dust collector from the lamination line.	600	15.5	12	Yes	Nil	

**Predicted noise exposure level after implementation is below NEL?**

(Yes)  (No)

**Engineering Control solely possible to reduce exposure below NEL?**

(Yes)  (No)

**Note:**

- *If Yes, stop assessment and implement the selected control options (can be one control option or combination of any control options stated).*
- *If No, proceed with assessment of combination of engineering control and administrative control approach.*

**Table 3: Assessment of Control Practicability for Cutting Operator**

Control Hierarchy	Control Option	Details of control specifications	Cost, (RM)	Potential Noise Reduction, dB(A)	Potential Number of workers that will be benefit	Control option will be adapted? (Yes/No)	If Control option cannot be adapted, please justify.	Predicted Noise Exposure level after implementation, dB(A)
<b>Engineering</b>	Preventive maintenance	Continue with regular preventive maintenance.	100	Noise will not increase	12	Yes	Nil	<b>87</b>
	Silencer	Install silencer on air gun	792	8	12	Yes	Nil	

**Predicted noise exposure level after implementation is below NEL?**

(Yes / **No**)

**Engineering Control solely possible to reduce exposure below NEL?**

(Yes / **No**)

**Note:**

- *If Yes, stop assessment and implement the selected control options (can be one control option or combination of any control options stated).*
- *If No, proceed with assessment of combination of engineering control and administrative control approach.*

Control Hierarchy	Control Option	Details of control specifications	Cost, (RM)	Potential Noise Reduction, dB(A)	Potential Number of workers that will be benefit	Control option will be adapted? (Yes/No)	If Control option cannot be adapted, please justify.	Predicted Noise Exposure level after implementation, dB(A)
Administrative	Job rotation	To limit worker's exposure at less than 1 hours 35 minutes per shift	Nil	Nil	Nil	No	Cannot do job rotation due to work must conduct continuously and limitation of workers (other workers also work at noise risk area).	87

Predicted noise exposure level after implementation is below NEL?  Yes  No

Combination of engineering control and administrative control possible to reduce exposure below NEL?  Yes  No

Note:

- *If Yes, stop assessment and implement the selected combination of engineering and administrative control options.*
- *If No, consider to implement administrative control only (can be one control option or combination of any control options stated).*

Administrative control solely possible to reduce exposure below NEL?  Yes  No

Note:

- *If Yes, stop assessment and implement the selected control options (can be one control option or combination of any control options stated).*
- *If No, proceed with assessment of personal hearing protection usage.*

Control Hierarchy	Control Option	Details of control specifications	Cost, (RM)	Potential Noise Reduction, dB(A)	Potential Number of workers that will be benefit	Control option will be adapted? (Yes/No)	If Control option cannot be adapted, please justify.	Predicted Noise Exposure level after implementation, dB(A)
Personal Hearing Protector (PHP)	Supply ear plug	Continue to supply reusable ear plug, corded with NRR of 25 dB until effective engineering and administrative control implemented.	RM 400/year  (50 pairs/box)	9	8	Yes	Nil	78

Predicted Noise exposure level after implementation is below NEL?  
Combination of engineering control, administrative control and PHP possible to reduce exposure below NEL?

(Yes) /  No)  
 (Yes) /  No)

- Note:
- *If Yes, stop assessment and implement the combination approach.*
  - *If No, consider to implement PHP only.*

PHP usage solely possible to reduce exposure below NEL?

(Yes / No)  (Not Applicable)

- Note:
- *If Yes, stop assessment and implement the usage of PHP.*
  - *If No, reassess with other control options.*

## 4. Summary of Noise Control Measures to be Implemented

No	SEG	Please Tick (√) Measures To Be Implemented			
		Engineering	Administrative	PHP	Others
1	Lamination Operator	√			
2	Cutting Operator	√		√	

## 5. Gantt Chart for Action Plan

No	SEG	Control Measures To be Implemented	PIC	Year 2023/ Month				Year 2023/ Month					
				9	10	11	12	1	2	3	4	5	6
1	Lamination Operator	Preventive maintenance	En. Ali										
		Board flipping machine	Mr. Ang										
		Partition layer	Mr. Ang										
2	Cutting Operator	Preventive maintenance	En. Ali										
		Air gun silencer	Mr. Ang										
		Supply ear plug	Pn. Ana										

A photograph of an orange industrial robot arm in a factory setting. The robot arm is mounted on a white cylindrical base and is positioned in the foreground. In the background, there are various industrial structures, including metal frames and overhead lighting. The robot arm has a yellow label on its side.

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