



جابتن كرجا راي

JABATAN KERJA RAYA
KEMENTERIAN PEMBANGUNAN
NEGARA BRUNEI DARUSSALAM



GUIDELINE OF
PROJECT SAFETY AND HEALTH PLAN
PREPARATION

Prepared by:
Health, Safety and Environment Section
Department of Administration and Finance
Public Works Department





TABLE OF CONTENTS

1. INTRODUCTION	1
1.1 Purpose	1
1.2 Scope and Application	1
2. TERMS AND DEFINITIONS	2
3. PRINCIPLES OF A SAFETY AND HEALTH PLAN	3
4. PROJECT SAFETY AND HEALTH PLAN	4
4.1 Description of Project	4
4.2 Project Management Organisation	4
4.3 Workplace Safety and Health Committee	4
4.3.1 Formation of Workplace Safety and Health Committee (SHC)	4
4.3.2 Workplace Safety and Health Committee (SHC) Plan	4
4.4 Workplace Safety and Health Officer (WSHO) / Workplace Safety and Health Coordinator (WSHC)	5
4.5 Design of Plant or Temporary Structures	5
4.5.1 Site Layout Plan / Temporary Work Zone (TWZ)	5
4.5.2 Design of Plant or Temporary Structures	6
4.6 Medical Check Up	6
4.7 Safety and Health Training	7
4.7.1 Training Plan / Training Matrix	7
4.7.2 Training Record	8
4.7.3 Basic Training Programs	8
4.8 Emergency Response Plan (Preparedness, Response and Evacuation)	8
4.8.1 Emergency Response Team Chart	8
4.8.2 Identify Type of Emergency	8
4.8.3 Emergency Response Team	8
4.8.4 Site Evacuation Plan	8
4.8.5 Fire Response Plan	9
4.8.6 Accident / Injury Response Plan	9
4.9 Hazard Identification, Risk Assessment and Risk Control	9
4.10 Monthly Report	10
4.11 Site Safety and Health Information Board	10
4.12 Notification and Reporting of Accident, Dangerous Occurrence	10
4.13 First Aid Facility	10
4.14 Portable Firefighting Equipment	10
5. LIST OF REFERENCES	11
5.1 Occupational Safety and Health Specifications & Bill of Quantities, Public Works Department, 2013	11
5.2 Ministry of Development Health Safety & Environment Manual, 2012	11
5.3 Workplace Safety and Health Act, Chapter 277	11
5.4 Workplace Safety and Health Regulations, 2014	11



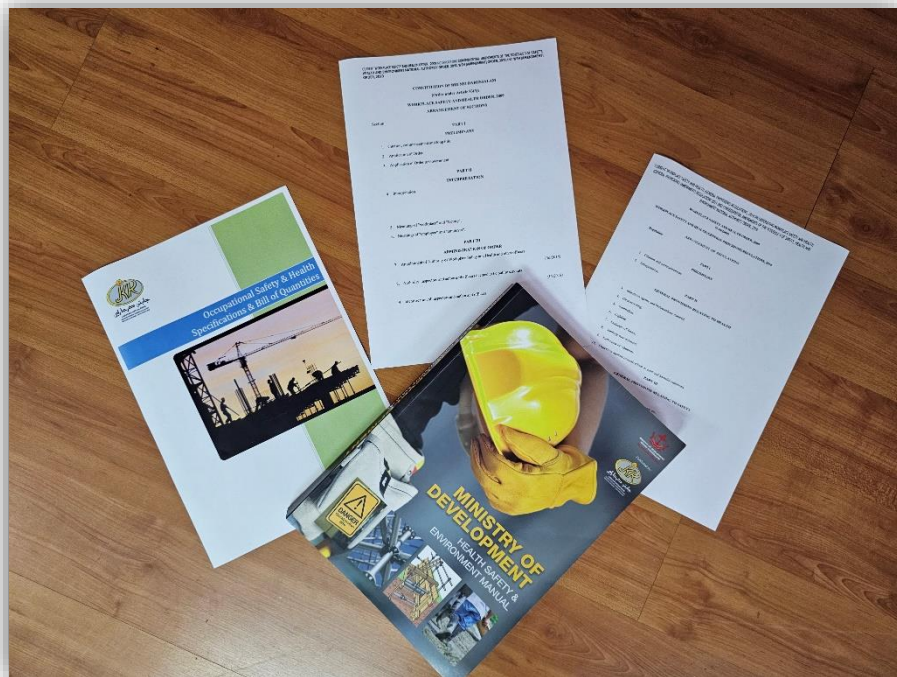
1. INTRODUCTION

1.1 Purpose

The purpose of this guideline is to provide a systematic and objective approach to assist the contractor in planning the safety, health and environment of the contracts/works which is awarded by Public Works Department. It is one of the requirements under the Public Works Department's Occupational Safety and Health Specifications and Bill of Quantities and in accordance with the Workplace Safety and Health Act, Chapter 277 and its Regulations. This guideline can be used as a reference by the Officer In-Charge or Project Consultant to check and review the Project Safety and Health Plan submitted by contractor.

1.2 Scope and Application

This guideline shall apply to all projects with contract value above B\$50,000.00 awarded by Public Works Department. This guideline provides guidance for the contractors to plan on the protection of employees, public and properties from hazards and its associated risks, the elimination of work-related injuries, disabilities, occupational diseases, near misses and fatalities.



2. TERMS AND DEFINITIONS

TERMS	DEFINITIONS
Activity	A scope of work required for the project.
Project Manager	A person assigned and responsible to organise, plan and execute the projects.
Contractors	a company assigned to execute the work activities.
Consultants	A company assigned to design, monitor and advise in project execution.
Competent Person	Someone who has sufficient training and experience or knowledge and other qualities that allows them to assist properly.
Officer In-Charge	The Public Works Department's Officer who are supervising the project.
Hazards	Anything potential to cause harm.
Risk	A combination of the likelihood of an occurrence and severity of the outcome.
Acceptable Risk	Risk that has been reduced to a level that can be tolerated by the organisation.
Audit	A structured process whereby information is collected relating to the efficiency, effectiveness and reliability of the total health and safety management system of an organisation. Safety audits are conducted in evaluating the compliance with legislation and are used as a guide for designing plans for corrective actions within a health and safety program.
Inspection	A thorough and systematic examination of the physical conditions of a workplace and the character of the practices that take place in it.
Lost Time Injury (LTI)	An injury sustained by an employee that will ultimately lead to the loss of productive work time in the form of worker delays or absenteeism. An injury is considered a lost time injury only when the worker is unable to perform the regular duties of the job, takes time off for recovery or is assigned modified work duties for the recovery period.
Document	Information and its supporting medium.
Record	Document stating results achieved or providing evidence of activities performed.
Procedure	Specified way to carry out any activity or process.
Flow Chart	A diagram showing the flow of any process.



3. PRINCIPLES OF A PROJECT SAFETY AND HEALTH PLAN

A Project Safety and Health Plan is a documented project-specific plan prepared for the purpose of reducing or eliminating risk of any activities carried by contractors.

The Project Safety and Health Plan may consist in parts of existing documentation (e.g. OSHMS Document). A contractor is required to have a safety and health management system and may use the required documents to constitute a Project Safety and Health Plan. Such documents should fulfil the following:

- Address all hazards comprehensively;
- Relevant to the specific workplace/worksites covered in the Project Safety and Health Plan; and
- Readily available at the workplace/worksites covered in the Project Safety and Health Plan.

The Project Safety and Health Plan has to:

- Establish clear individual responsibilities for Safety and Health at Workplace/Worksites;
- Integrate Project Safety and Health Plan of specific workplace/worksites into organisation Safety and Health Management System;
- Provide a systematic approach for eliminating or reducing risk of any activities;
- Ensure that all reasonable control measures and methods have been taken prior to commencement of works; and
- Ensure the adoption of a holistic approach to worksite hazard and risk management.

The Project Safety and Health Plan is to be developed by a competent person and approved by the Project Manager. There must be an adequate supervision to ensure that the plan is being implemented at the workplace.

The Project Safety and Health Plan shall be monitored and reviewed periodically to ensure its relevance and effectiveness. It must also be properly documented and kept safe and readily available at the workplace and to be submitted to the Officer In-Charge of the project/work/contract.

A full template of a Project Safety and Health Plan (including examples and samples) is provided in **PART A**; the Project Safety and Health Plan can be tailored to better suit the contractors/suppliers/vendors' needs and nature of work tasks.

The template in editable format are available in **PART B**.



4. PROJECT SAFETY AND HEALTH PLAN

4.1 Description of Project

The first section of Project Safety and Health Plan requires the project description to be the cover page of the document such as the Project Title, Location, Contract Period and other parties involved.

4.2 Project Management Organisation

In this section, contractor shall provide the information on name, designation, contact details of the key person in the project management organisation including details from the client, subcontractor and consultant. The purpose of this information is to provide a good communication and contact between the project team and interested parties, such as authorities or visitors. This document is also to be displayed on the Site Safety and Health Information Board.

4.3 Workplace Safety and Health Committee


The purpose of this section is to ensure the project site complies with the Workplace Safety and Health (Workplace Safety and Health Committees) Regulations 2014. This section is applicable for project sites where there are fifty (50) or more persons employed. Contractor shall appoint a Chairperson, a Secretary (Workplace Safety and health Officer/Coordinator) and a Workplace Safety and Health Committee members (employer/management representatives and employee/person at work representatives).

4.3.1 Formation of Workplace Safety and Health Committee (SHC)

In order to demonstrate that the committee has been formed, the contractor shall provide the name and designation of the chairperson, the secretary, management representatives and employee representatives in the form of organisation chart and table. This document also needs to be displayed on the Site Safety and Health Information Board.

4.3.2 Workplace Safety and Health Committee (SHC) Plan

To ensure the committee is performing their functions, the contractor shall provide the committee members with activity plan including to equip members with basic knowledge of their functions, meetings, workplace inspections, promotion programs and others. The activity plan shall be listed within contract period, compliant with regulations requirements and shall be monitored.



4.4 Workplace Safety and Health Officer (WSHO) / Workplace Safety and Health Coordinator (WSHC)

The purpose of this section is to ensure the project site complies with Section 28, Workplace Safety and Health Act, Chapter 277. The contractor is required to provide evidence of the appointment of fulltime registered Workplace Safety and Health Officer (WSHO) or Workplace Safety and Health Coordinator (WSHC) for the worksite in the duration of the contract period. The contractor should briefly describe the roles and responsibilities of the WSHO/WSHC for the project.

List of documentation to be attached:

1. Copy of Certificate of Approval from SHENA (Workplace Safety and Health Co-Ordinator)
2. Copy of Certificate of Approval from SHENA (Workplace Safety and Health Officer)
3. Copy of Job Description/Duties and Responsibilities.
4. Safety and Health-Related Scope of Work Checklist for WSH Officer & Workplace Safety and Health Co-Ordinator

4.5 Design of Plant or Temporary Structures

This section aims to ensure that the contractor prepares and plans to isolate the work area from the public and prepare the temporary plant or structure that will be used in the project.

4.5.1 Site Layout Plan/Temporary Work Zone

The contractor shall prepare a site layout plan to show their plans for the management of the work area or temporary work zone on or beside the road. The site layout plan must include location of barriers for passageway, working area, rest area, storage and waste area and warning signs. The approved site layout plan shall be displayed on the Site Safety and Health Information Board and to be updated as necessary. More examples of layout plans for typical road works can be referred to from the MOD HSE Manual.



4.5.2 Design of Plant or Temporary Structures

If the project uses any of the following plant and structure, the contractor shall attach the copy of endorsed design by a Qualified Person (QP) or Professional Engineer (PE). QP/PE appointment letter may be attached.

- Formwork and support system;
- Scaffolding;
- Catch platform;
- Construction rubbish/debris disposal chute;
- Runways and ramp used by vehicles;
- Support for stability of structure where adjoining area to be excavated or piled;
- Loading platform;
- Material and passenger hoist;
- Gondola;
- Tower crane foundation.

4.6 Medical Check Up

To prevent any accident caused by personal factor (inadequate capability), the contractor is required to provide the copy of employee's medical checkup record/result for those who are involved in the following activities:

1. Tower crane operation;
2. Working at Height
3. Confined spaces;
4. Tunneling operation; and
5. Any other activities as specified by S.O (example of medical checkup for other activities is such as skin allergic test for those who are involved with chemicals in water treatment plant).

4.7 Safety and Health Training

4.7.1 Training Plan/Training Matrix

The contractor is required to arrange programs for the education and training of employees or any relevant person to avoid and prevent from unsafe conditions and unsafe acts in the worksite. Training programs are required to be planned and conducted by contractor to align with the current Code of Practice (COP) Workplace Safety and Health Management System issued by SHENA and to include:

1. Site Induction for every personnel working at site or any visitors who will enter to construction site. The contractor must develop project-specific induction course in safety and health. The contractor shall ensure that all employees under his control have gone through the induction course before commencing duties on site. The contractor shall keep in the safety and health file, a copy of the attendance registration of all employees who attended the induction course.
2. Toolbox talk shall be conducted as required, depending on the level of risks faced on the job, or the levels of experience of the employees.
3. Other training or program that will enhance the safety and health of employees or any of which related to the scope of work that will be done at the worksite e.g. working at height, confined space entry, electrical safety.
4. Mandatory training requirement by legislation (i.e. safety and health course for supervisors/ workers, Occupational First Aid, Management of Hazardous Substance, Lifting Machine Operator, etc.);
5. Safety and Health induction/orientation and awareness training for new employees as well as indirect contract workers which should cover (however not limited to) the organisation (WSH Policy; Hazard and risk associated with the workplace and industry; In-house Safety and Health Rules; Accident/ incident Reporting Procedures; AND Emergency Response Procedures.
6. Specific competency skills to safely operate plant, machinery, equipment, high-risk/ critical activities, etc.;
7. Training required to increase the awareness and knowledge of employees to conduct investigations;
8. Emergency response training (i.e. Occupational first aiders, fire marshal, rescue at height, etc.)



4.7.2 Training Record

The training shall cover the relevant activity(s) and an attendance registration must be kept safe and signed by all attendees. The registration of attendees and the content of the topic shall be kept on the site safety and health file as evidence of on-going training.

Contractor can develop list of applicable WSH training matrix incorporating the factors above (4.7.1). This may involve certification programs and on-going training for refresher, re-skilling and up-skilling.

4.8 Emergency Response Plan (Preparedness, Response and Evacuation)

To ensure the minimum fallout of any unexpected event such as fire, accident or natural disaster, the contractor should plan the actions to be taken in order to manage the situation. This section requires the contractor to develop an emergency response plan which consists of all potential events that could happen at the worksite including internal, external and third party (client, owner of workplace, neighbour) resources.

4.8.1 Identify Type of Emergency

Any potential unexpected events that could happen on site shall be identified by contractor including incidents, fire and other emergencies.

4.8.2 Procedure

Emergency procedure shall be developed specifically for the project.

4.8.3 Emergency Response Team (ERT)

Emergency Response Team (ERT) shall be appointed and assigned to roles and responsibilities.

4.8.4 Site Evacuation Plan

Evacuation plan that indicates safe evacuation routes shall be developed.

4.8.5 Fire Response Plan

A plan containing information on the types of fire safety measures shall be provided in the designated premises and includes floor layout plans and fire evacuation procedures.

4.8.6 Accident/Injury Response Plan

A plan containing action plan during workplace emergencies shall be developed.

4.9 Hazard Identification, Risk Assessment and Risk Control

This section requires the contractor to show the procedure on how they manage the risk associated with the works that will be commenced with the report. The report or record of risk assessment shall consist of all job activities. To manage the risk, potential hazards shall be identified, assess their risk or likelihood of happening and effects they would have, and taking of necessary control measures for such hazards. Contractors can refer to Chapter 21 MOD HSE Manual as a reference on how to conduct risk assessment.

As per the WSH (Construction) Regulation, 2014, establishment and implementation of a permit-to-work (PTW) system is required for high-risk activities in the Building Operation and Work of Engineering Construction (BOWEC) including demolition work, excavation and trenching works (exceeding 1.5 metre depth), lifting operations involving crane operations, piling work, tunnelling work, work on scaffold where a person could fall more than 2 metres, hazardous work at height and confined space(s). High risk activities should be evaluated based on risk assessment matrix.

Example:

Severity \ Likelihood		1	2	3	4	5
		Very Unlikely	Unlikely	Fairly Likely	Likely	Very Likely
1	Insignificant	1	2	3	4	5
2	Minor Injury	2	4	6	8	10
3	Moderate Injury	3	6	9	12	15
4	Major Injury	4	8	12	16	20
5	Massive (Fatality)	5	10	15	20	25

Risk Assessment

No.	Hazards <i>What are the hazards?</i>	Impact and Consequence <i>Who might be harmed and how?</i>	Current Controls <i>What are already done?</i>	Severity	Likelihood	Risk Ranking (P,A,E,R)	Additional Control and Mitigation Measures <i>What needs to be done to eliminate or reduce impact of the risk?</i>	Severity	Likelihood	Residual Risk	Recovery Measures <i>What is needed to return to normal situation from the consequence?</i>		
1	Fall from Height	fatality broken body part	safety harness with lanyard	5	2	10	provide safe working platform			0	First Aid Rescue Team		
2	Falling Objects	head and body injury	helmet, safety shoes	4	2	8	install toe board install safety net			0	First Aid Rescue Team		
3	Heat stress	fitting	Rest Area	2	2	4	Advise workers to drink a lot of water			0	First Aid Room		
4						0				0			
5						0				0			
Overall						3	Overall						0

4.10 Monthly Report

A site safety and health monthly report consists of manhours, major/minor/near miss incidents, safety audit findings, OSH program, recommendation and others.

4.11 Site Safety and Health Information Board

The contractor is required to design the Site Safety Information Board and locate it at a suitable location such as rest area, labour quarters, site entrance and others. The purpose of the information board is to display and share any relevant information to any person entering the project site. The design and content of the information board depends on the size of the project and suitability.

4.12 Procedure of Notification and Reporting of Near Miss, Accident, Dangerous Occurrence

The contractor should demonstrate the notification and reporting of accident and dangerous occurrence procedure of the project.

4.13 First Aid Facilities

Contractor should provide the list of first aid facilities that will be used for the project. It can be part of the Emergency Response Plan.

4.14 Portable Firefighting Equipment

Contractor should provide the list of firefighting equipment that will be used for the project. It can be part of the Emergency Response Plan.

5. LIST OF REFERENCES

- 5.1 Occupational Safety and Health Specifications & Bill of Quantities, Public Works Department, Revision 01/2020
- 5.2 Ministry of Development Health Safety & Environment Manual, 2012.
- 5.3 Workplace Safety and Health Act, Chapter 277.
- 5.4 Workplace Safety and Health Regulations, 2014.

