

# **Gender-Informed Geothermal Workplace Health and Safety Management Procedure**

for the Indonesia Geothermal Resource Risk Mitigation (GREM) Project



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# Abbreviations

DP3A	<i>Dinas Pemberdayaan Perempuan dan Perlindungan Anak</i> (Women's Empowerment and Child Protection Service)
GBV	Gender-based Violence
GREM	Geothermal Resource Risk Mitigation
GRM	Grievance Redress Mechanism
IWRC	Independent wire rope core
JSEA	Job Safety Environment Analysis
KPI	Key Performance Index
LOTO	Lock Out Tag Out
MSDS	Material Safety Data Sheet
PPE	Personal Protective Equipment
PSEA/SH	Protection from Sexual Exploitation, Abuse/ Sexual Harassment
SH	Sexual Harassment
SEA	Sexual Exploitation and Abuse
SWA	Stop Work Authority
VAC	Violence Against Children

# Executive Summary

## **Gender-Informed Geothermal Workplace Health and Safety Management Procedure for the Indonesia Geothermal Resource Risk Mitigation (GREM) Project**

The Geothermal Resource Risk Mitigation (GREM) Project, a joint initiative of the Indonesian Government and the World Bank, aims to accelerate the development of geothermal power generation in Indonesia. This procedure is intended for adoption and implementation by Developers and Contractors to ensure compliance with the environmental and social management plans and standards set by PT SMI and the World Bank.

This procedure outlines strategies to ensure a safe, inclusive, and gender-sensitive working environment within geothermal project sites. It provides protocols addressing the needs and risks for all workers, including considerations for gender-specific safety requirements, enhancing both well-being and productivity. This document serves as a guideline for establishing a workplace culture that is conscious of gender differences and promotes equitable safety practices. It consists of four chapters: (1) Introduction; (2) Roles and responsibilities; (3) Geothermal workplace health and safety management; (4) Appendix.

### **Chapter 1: Introduction**

The introduction defines the purpose and scope of the gender-informed health and safety procedure. This gender-informed geothermal workplace health and safety procedure aims to ensure a safe and inclusive workplace, address unique health and safety needs, prevent gender-based violence (GBV), sexual exploitation and abuse (SEA), sexual harassment (SH), and foster a secure environment. It also seeks to safeguard the health of both workers and the community through proactive safety management that considers gender and is responsive to the specific needs of female workers. This procedure integrates gender considerations into the management of occupational health, safety, and security (OHS&S) within the World Bank Group's operations, ensuring equal protection for men and women. The scope of this procedure covers key components, which include (1) Health and Safety Training: Provide comprehensive OHS training to all workers, including specific training on handling hazardous materials, chemicals, and waste. This training should be inclusive and consider the different needs of men and women, (2) Personal Protective Equipment (PPE): Ensure that PPE is available and suitable for all workers, taking into account gender-specific requirements. (3) Facilities and Amenities: Provide adequate facilities such as toilets, potable drinking water, and first aid kits, ensuring they are accessible and safe for both men and women. (4) Gender-Based Violence (GBV) and Sexual Harassment (SH): Implement measures to prevent and address GBV, SEA, and SH. This chapter also includes references

to relevant Indonesian laws and regulations, World Bank guidelines, and PT SMI procedures related to health, safety, and gender considerations.

## **Chapter 2: Roles and Responsibilities**

This chapter defines roles and responsibilities for various positions, including HSE Manager, Project Manager, Construction Manager, HSE & Social Coordinator, Health & Safety Officer, Community Liaison & GRM Officer, Construction Supervisor, Workforce, and Security Personnel, to ensure effective health, safety, and environmental (HSE) management and adherence to gender-sensitive practices.

## **Chapter 3: Geothermal workplace health and safety management**

This chapter covers multiple key aspects of geothermal workplace health and safety management including providing a safe workplace for all employees, conducting Job Safety Environment Analysis (JSEA) that accounts for gender differences, and requiring work permits with necessary documentation. This chapter also addresses occupational health by including medical assessments, work and health insurance, and first aid provisions. It highlights risk management by providing job task modifications for pregnant or nursing employees, mandatory and suitable personal protective equipment (PPE), and inclusive health and safety training for both men and women. Waste management practices are outlined for handling hazardous materials, and disciplinary actions for non-compliance with safety standards are specified. The chapter also includes recognition and rewards for contributions to health and safety performance, designated smoking areas, site induction, and PPE provision for visitors. Maintaining workplace cleanliness, safe use and maintenance of tools and equipment, and safety measures for heavy equipment, excavation, confined space entry, lifting, and working at height are also addressed. Precautions for working near power lines, safety measures for land clearing, minimizing risks during hot work, and protecting people and equipment from illegal operations through lock out/tag out/energy isolation procedures are detailed. Additional precautions include handling hydrogen sulfide (H<sub>2</sub>S), safe manual handling techniques, material storage practices, safety measures for flammable and hazardous materials, and the safe handling and storage of pressurized drums and containers. Electrical safety measures, the use of barricades, compliance with safety signs, security management for construction sites, the authority to stop work in unsafe conditions, and mechanisms for reporting and resolving grievances are also covered. This chapter also provides step-by-step processes for grievance redress of general (non-GBV) cases and GBV cases.

## **Chapter 4 Appendix**

The appendix includes the SWA (Stop Work Authority) Card and Form, the GBV Reporting and Handling Mechanism, the GBV and VAC (Violence Against Children) Code of Conduct, and

GBV/SEA/SH/VAC Incident Log. The SWA Card and Form empower employees to stop any work activity or behavior they deem unsafe, ensuring immediate attention to potential hazards. The GBV Reporting and Handling Mechanism and GBV/SEA/SH/VAC Incident Log provide a structured approach to reporting and addressing instances of gender-based violence, ensuring that all incidents are managed promptly and fairly. Additionally, the GBV and VAC Code of Conduct outlines the expected behavior and responsibilities of all employees to prevent and address instances of gender-based violence and violence against children, fostering a safe and respectful workplace environment for everyone.

In conclusion, this document serves as a practical resource for employees, supporting the effective implementation of health and safety procedures in the geothermal workplace for the GREM Project, while highlighting the importance of integrating gender considerations into all aspects of health and safety management. By implementing this procedure, it is expected that developers and contractors under the GREM Project will create a more inclusive work environment for all employees and protect every worker. It is recommended that the implementation of this procedure be supported by strong commitment from the top management of developers and contractors, as well as adequate training for the workers who will be responsible for its execution.



# 1. Introduction

## 1.1. Background

The Geothermal Resource Risk Mitigation (GREM) (“The Project”) has been initiated by the Government of Indonesia (GoI) in collaboration with the World Bank through PT Sarana Multi Infrastruktur (“PT SMI”). The primary goal is to foster the development of geothermal power generation projects in Indonesia. This new initiative aims to provide early-stage financing for both public and private developers, facilitating an increase in geothermal power generation capacities across the country. PT SMI serves as a financial intermediary, overseeing the public and private developer windows of the GREM Facility for developers involved in geothermal power projects, referred to as "Developers" or "Sub Borrowers." The GREM Project is designed to streamline the mobilization of private and public funds, with the overarching objective of nurturing the development of the geothermal market.

This procedure shall be adopted and implemented by Developers and Contractors to ensure compliance with environmental and social management plans and standards set by PT SMI and the World Bank, particularly in relation to health and safety management.

This procedure outlines the requirements needed to manage and mitigate geothermal occupational hazards, health and safety risks through a gender-sensitive approach. It acknowledges and highlights the differences between male and female workers to enhance the safety of all employees. This procedure will become an integral component of the Developers and Contractors in establishing a strong structure to ensure risks and impacts are managed effectively.

## 1.2 Objectives

The objectives of this procedure include:

- Ensure work is carried out in a safe, healthy, environmentally friendly, and inclusive work practice for all employees
- Minimize work accidents
- Ensure the health and safety of all personnel and the workplace
- Protect workers from unsafe situations and conditions, including cases of GBV and SEA/SH
- Prevent and address all forms of discriminations and gender-based violence
- Responsive to the specific needs of female workers
- Ensure worker and community health, safety and security

## 1.3 Definition and Scope

The gender-informed workplace health and safety management procedure aims to integrate gender considerations into the management of occupational health, safety, and security (OHS&S) within the World Bank Group's operations. This approach ensures that both men and women are equally protected and that their specific needs and vulnerabilities are addressed.

The scope of this procedure is as follows:

- ❖ **Health and Safety Training:** Provide comprehensive OHS training to all workers, including specific training on handling hazardous materials, chemicals, and waste. This training should be inclusive and consider the different needs of men and women.

- ❖ **Personal Protective Equipment (PPE):** Ensure that PPE is available and suitable for all workers, taking into account gender-specific requirements including proper sizing, fit, and comfort.
- ❖ **Facilities and Amenities:** Provide adequate facilities such as toilets, potable drinking water, and first aid kits, ensuring they are accessible and safe for both men and women.
- ❖ **GBV and SEA/SH:** Implement measures to prevent and address GBV, sexual exploitation and abuse, and sexual harassment. This includes:
  - Signing and adhering to a Code of Conduct that respects local community cultures and addresses social safeguard issues related to gender, SEA, and GBV, both in the community and workplace.
  - Raising awareness about grievance redress mechanisms (GRM) for reporting GBV cases, ensuring these mechanisms are transparent, secure, and confidential.
  - Providing specialized training for project personnel and contractors on handling SEA/SH cases using a survivor-centered approach.
  - Developing standard operating procedures (SOP) and protocols for dealing with SEA/SH cases.
  - Risk Assessment and Monitoring: Conduct risk assessments for GBV and require contractors to complete checklists on GBV/SEA/SH. Contractors should also prepare a code of conduct for their workers and staff.
  - Stakeholder Engagement: Engage with stakeholders, particularly focusing on female participants, to explain the GRM mechanism and promote awareness of PSEA/SH (Protection from Sexual Exploitation, Abuse/ Sexual Harassment). Develop visibility materials in local languages to ensure the messages are culturally appropriate and sensitive.

By incorporating these elements, the Gender-informed Workplace Health and Safety Management Procedure aims to create a safer and more inclusive working environment for all employees, addressing the specific needs and vulnerabilities of both men and women. This procedure serves as a guide to provide guidance and ensure occupational health and safety principles are applied in the Company ("Developers and Contractors"), observed by the personnel and have gender informed impact.

The following definitions of terms in this procedure shall be understood by the Company or personnel.

- **SOP** - Standard Operating Procedure is step-by-step task instructions or task sequences for operating and maintaining equipment & facilities.
- **JSEA** - (Job Safety Environment Analysis) is used as a tool to identify as early as possible the hazards that may arise while performing tasks.
- **Sloping** - slopes created using excavated soil.
- **Excavation** - the act or process of removing soil, perforating something eg. deep foundation, tunnels, pits.
- **Benching** - like sloping in a step cutting the sides of the trench.
- **Trenching** - Supports for the excavated walls.
- **Confined space** - means any enclosure with limited means of entry and exit, which is usually not well ventilated, and usually contains a known potential hazard.
- **Worker** - all hired personnel dedicated to work in the project area including staff, subcontractors, casual, community labor, temporary worker and employee.
- **Community worker** – or local worker is a person originated from community hired to do specified work in project area.

- **Temporary worker** – hired personnel who work temporarily for the specific work for the project.
- **Subcontractor** - Person or Company hired for supplying goods or services for the project.
- **Gender** - The social, behavioral and cultural attributes, expectations and norms associated with being male or female.
- **GBV** (Gender-Based Violence) - An umbrella term for any harmful act that is perpetrated against a person's will and that is based on socially ascribed (that is, gender) differences between males and females. Gender-based violence includes acts that inflict physical, mental, or sexual harm or suffering; threats of such acts; and coercion and other deprivations of liberty, whether occurring in public or in private life.
- **GRM** (Grievance Redress Mechanism) - Institutions, instruments, methods, and processes by which a resolution to a grievance is sought and provided.
- **SEA** (Sexual Exploitation and Abuse) - Sexual exploitation: any actual or attempted abuse of a position of vulnerability, differential power or trust, for sexual purposes, including, but not limited to, profiting monetarily, socially or politically from the sexual exploitation of another. Sexual abuse: actual or threatened physical intrusion of a sexual nature, whether by force or under unequal or coercive conditions.
- **SH** (Sexual harassment) - Any form of unwanted verbal, non-verbal, or physical conduct of a sexual nature with the purpose or effect of violating the dignity of a person, in particular when creating an intimidating, hostile, degrading, humiliating, or offensive environment. This may include unwelcome sexual advances, or requests for sexual favors, and may take place through online activity or mobile communications as well as in person.

## 1.4 References

- Law Number 7 of 1984 concerning Ratification of the Convention concerning the Elimination of All Forms of Discrimination against Women
- Law of the Republic of Indonesia Number 1 of 1970 concerning Work Safety;
- Law of the Republic of Indonesia Number 36 of 2009 concerning Health;
- Law of the Republic of Indonesia Number 13 of 2003 concerning Workforce.
- Law of the Republic of Indonesia Number 40 of 2004 concerning the National Social Security System which is relevant for the management of worker health and safety;
- Law No. 12 of 2022 concerning Crime of Sexual Violence;
- Law of the Republic of Indonesia Number 22 of 2009 concerning road traffic and transportation management.
- Government Regulation Number 74 of 2001 concerning Management of Hazardous and Toxic Substances (B3);
- Government Regulation Number 50 of 2012 concerning Implementation of Occupational Health and Safety Management Systems;
- Government Regulation Number 66 of 2014 concerning Environmental Health;
- Government Regulation Number 101 of 2014 concerning Management of Hazardous and Toxic Waste (B3);
- Presidential Regulation Number 55 of 2024 concerning Regional Technical Implementation Units for the Protection of Women and Children
- Presidential Regulation Number 9 of 2024 concerning the Implementation of Education and Training for the Prevention and Handling of Criminal Acts of Sexual Violence

- Presidential Regulation Number 98 of 2024 concerning the Implementation of Integrated Services in Handling, Protection, and Recovery of Criminal Acts of Sexual Violence by the Central Government
- Government Regulation Number 27 of 2024 concerning Coordination and Monitoring of the Implementation of Prevention and Handling of Victims of Criminal Acts of Sexual Violence
- Presidential Instruction no. 09/2000 concerning Gender Mainstreaming in National Development;
- Ministry of Women Empowerment and Child Protection (MoWECP) Regulation No. 5 of 2015 concerning Provision of Gender-Responsive and Provision of Gender Responsive and Child Care Work Facilities in the Workplace
- MoWECP Regulation No. 1 of 2023 concerning the Provision of RP3
- Circular No. SE3SE-3/MBU/04/2022 concerning Respectful Workplace Policy in State-Owned Enterprises
- Care Economy Roadmap and National Action Plan for a Transformative, Gender- Equal and Just World of Work 2025-2045. Ministry of Women’s Empowerment and Child Protection
- World Bank Group (WBG) General Environmental, Health and Safety (EHS) Guidelines on Occupational and Community Health and Safety, <https://www.ifc.org/wps/wcm/connect/29f5137d-6e17-4660-b1f9-02bf561935e5/Final%2B-%2BGeneral%2BEHS%2BGuidelines.pdf?MOD=AJPERES&CVID=jOWim3p>
- World Bank’s Environmental and Social Safeguards
- PT SMI’s Procedure of Occupational Safety, Health and Environment Management System (OSHEMS)
- PT SMI’s GREM Manual for Gender Action Plan Development, Gender-based Violence, and Violence against Children
- GREM’s Environmental and Social Management Frameworks
- World Bank’s Gender-based Violence and Violence Against Children Mitigation in Infrastructure Projects – Workshop Material.

## 2.Role and Responsibility

The table below summarizes the key roles with their duties and responsibilities for the implementation of this procedure during the project.

Title	Role and Responsibility
HSE Manager	<ul style="list-style-type: none"> <li>- Establish health, safety and security management procedures</li> <li>- Control the implementation of health, safety and security management procedures</li> <li>- Record and analyze data from HSE and Social Team at site and recommend improvements.</li> <li>- Coordinate with HSE and social site team regarding health, safety and security management procedures.</li> <li>- Monitoring and reporting of OHS performance / compliance at the company level.</li> <li>- Responsible for overseeing the implementation of gender integration in occupational safety and health (OSH), including the mitigation of GBV risks.</li> </ul>
Project Manager	<ul style="list-style-type: none"> <li>- Assist the Director and HSE Manager in implementing the gender-sensitive health, safety and security management procedure;</li> <li>- Coordinating between departments both at location and at head office;</li> <li>- Engage in management reviews and incident investigations;</li> </ul>
Construction Manager	<ul style="list-style-type: none"> <li>- Coordinate with HSE and social coordinator for compliance and implementation of the gender-sensitive health, safety and security management procedures.</li> <li>- Ensure compliance of construction activities at the project site with health, safety and security management procedures.</li> <li>- Support CESMP implementation</li> <li>- Coordinate with Community Liaison &amp; GRM Officer and HSE and Social Team to follow up grievances related to construction activities and health, safety and security management</li> <li>- Review and approve permit to work</li> <li>- Report to Project Manager</li> </ul>
HSE and Social Coordinator	<ul style="list-style-type: none"> <li>- Assist HSE Manager to ensure the implementation of the gender-sensitive health, safety and security management procedures in the site.</li> <li>- Monitor HSE performance related to health, safety and security management</li> <li>- Report implementation of health, safety and security management procedure on site to HSE Manager and HSE Superintendent</li> <li>- Assisting the Construction Manager in implementing CESMP</li> <li>- Oversee HSE performance related to health, safety and security and report to HSE &amp; Social Coordinator</li> <li>- Coordinate with HSE &amp; social team</li> </ul>
HSE Officer	<ul style="list-style-type: none"> <li>- Ensure the day-to-day implementation of the gender-sensitive health, safety and security management procedures in the site during construction activities.</li> <li>- Administratively under the supervision of the HSE and Social Coordinator</li> <li>- Coordinate with construction supervisor on the implementation of safety meeting, training, drill, observation, inspections etc.</li> <li>- Coordinate with HSE &amp; social team</li> <li>- Record HSE performance related to health, safety and security and report to HSE &amp; Social Coordinator</li> <li>- Conduct HSE induction training to worker and visitors</li> <li>- Conduct a visual inspection on housekeeping work</li> </ul>
Community Liaison and GRM Officer	<ul style="list-style-type: none"> <li>- Coordinate with local authorities and law enforcement agencies to ensure that the GBV Grievance Redress Mechanism (GRM) procedures align with applicable laws and regulations.</li> <li>- Coordinate with community to socialize the activity</li> </ul>

	<ul style="list-style-type: none"> <li>- Manage, receive, record and report grievances regarding impact from to health, safety and security including Incident, Accident and security disturbance.</li> <li>- Coordinate with Construction Manager, HSE &amp; Social Coordinator and HSE &amp; Social Team to follow up grievances related to health, safety and security.</li> </ul>
Construction Supervisor	<ul style="list-style-type: none"> <li>- Report to Construction Manager</li> <li>- Coordinate with HSE and social coordinator for compliance and implementation of health, safety and security procedure</li> <li>- Supervise construction activities at project site to prevent health, safety and security Incident</li> <li>- Ensure compliance of construction activities at project site</li> <li>- Prepare permit to work, onsite JSA</li> <li>- Involve in incident investigation and reporting</li> </ul>
Workforce	<ul style="list-style-type: none"> <li>- Obey all OHS rules</li> <li>- Participate in safety observation, safety meeting, training</li> <li>- Always wear correctly sized PPE during work</li> <li>- Report to Civil supervisor in case of any incident</li> </ul>
Security Personnel	<ul style="list-style-type: none"> <li>- Implement access control system</li> <li>- Report to Civil supervisor and Health and safety officer</li> <li>- Secure facilities during construction, incident, and emergency situations</li> <li>- Implement regular health check such as body temperature check.</li> <li>- Support and participate health &amp; safety activities such as safety meeting</li> </ul>

*Table 1 Roles and Responsibilities*

## 3. Workplace Health and Safety Management

### 3.1. Safe Workplace

A safe workplace refers to an environment where all employees are protected from hazards and risks that could cause physical or mental harm, including the specific hazards and risks faced by women and men, young workers, older workers, migrants or persons with disabilities. The Company must ensure a safe workplace, and all personnel are required to follow the established principles and procedures. Additionally, the Company should consult with all workers to gather feedback and to ensure continued improvement in the implementation of risk management, protective and preventive measures for both men and women's safety and health, ensuring gender differences are addressed.

### 3.2. JSEA

JSEA (job safety environment analysis) is used as a tool to identify as early as possible the hazards that may arise while performing tasks, work safety analysis must be carried out and involve workforces and take account of sex and gender differences. Any hazards are identified before work is started at each step of the task, which can lead to potential accidents. Appropriate control measures must be taken until the risks are low and acceptable in accordance with the hierarchy of controls: elimination, substitution, engineering controls, administrative procedures, and protective equipment. Residual risk should be at a low level. Meanwhile, JSEA that has been developed using the JSEA format can be added to the conditions before starting work in the field (Onsite JSEA). JSEA must be communicated to all workers involved.

JSEA will be provided for each job and written in Indonesian. Prior to construction work, Construction supervisor will prepare work permit to be submitted to and approved by Construction manager.

In work permitting process, SOP and JSEA will be attached. The initial JSEA document which already prepared by Health & Safety Officer will be re-assessed by Construction Supervisor to update actual existing hazards in work area to be constructed.

The Construction Manager will ensure that the current work sequence, as explained in the SOP, and the current hazard identifications, as explained in the JSEA, can guarantee that the work will be implemented in a safe manner. If the Construction Manager is satisfied with the work permit proposal, he will sign off on the acknowledgement.

As the work area owner, the authorized work permit will be issued by the Construction Manager after overseeing and reviewing the work permit proposal from the Construction Supervisor and the acknowledgment from the same Construction Manager.

### **3.3. Work Permit**

Prior to the execution of the work, the Construction Supervisor will prepare the work permit with attached licensing administration and JSEA documents. The work permit must be acknowledged by Construction Manager and EMU's HSE and Social Team, and will be approved by EMU's Site Manager.

The work permit consists of General work permit and specialized work permit. The General work permit is the main permit of a work activity.

The specialized permit is part of general work permit, which includes.

- Excavation permit
- Working at height permit
- Confined space entry permit
- Hot work permit
- Working near powerline permit
- Simultaneous operation permit

All employees engaged in the hazardous work must obtain a special work permit.

### **3.4. Occupational Health**

Occupational health relates to work and the work environment, including methods, working conditions, and work environment that can cause illness, injury or deviation from health, including non-conformity to work. This includes chemical, physical, biological, ergonomic, and psychological risks.

#### **a. Medical Assessment**

Medical assessments are carried out for prospective workforces and current workforces to ensure that their work can be carried out in a fit to task state. In the Covid-19 situation, a medical assessment will be carried out.

#### **b. Medical examination**

A medical check-up is an important requirement that companies must complete before assigning workers or recruiting prospective employees. Every worker may not perform work before being declared fit for work. This is done to avoid work accidents; therefore, workforce health checks must be carried out at least once a year or before being allowed to work or according to the minimum requirements of the Consortium. The medical examination result classification can be classified into:

1. Fit

2. Fit with notes
3. While not fit
4. Not Fit

After medical check-up, the health certificate or fit to work certificate published from medical facility will be kept by Health and Safety Officer, the health certificate with fit to work notes or not fit to work notes will establish if workforce can cover the task that he/she will be responsible for.

Medical check-up will be conducted in local medical facilities, or in regional medical facilities where the workforce originated from. For employment arrangements from 6 month to 1 year, the workforce will have yearly medical check-up. The medical check-up item can include:

- General Physical Examination
- Chest X – Ray
- Resting ECG
- Hematology Routine
- Blood Check Up
- Drug test (Random)
- Covid-19 Rapid Test

If the period of employment arrangements is  $\leq 1$  (one) month, a health certificate with a fit-to-work note from a doctor is acceptable. The health certificate must include measurements of vital signs (blood pressure, pulse, respiration, temperature, and rapid test results).

If the period of employment arrangements is more than 1 (one) month and up to 6 (six) months, a health certificate with a fit-to-work note from a doctor is required. The health certificate must include measurements of vital signs (blood pressure, pulse, respiration, temperature, and rapid test results), as well as examination results from an ECG and a chest X-ray.

Another item of medical check-up shall be determined based on potentially health hazard at workplace, which shall be mandated by HSE & Social Coordinator in cooperation with company or local doctor.

#### **c. Work and Health Insurance**

In maintaining occupational health and safety of all workers, the Developers and Contractors will register all workers with duration of work more than 3 (three) month to become members of BPJS KETENGAKEKERJAAN (Labor Insurance) and BPJS KESEHATAN (Medical insurance). Usually, the process of registration and activation will take 1 (one) to 2 (two) months.

#### **d. First Aid**

The Developers and Contractors will provide first aid kits at various work locations, if required, certified first aid personnel will be provided.

Certified first aid expert will be appointed and may serve as a health and safety officer with a first aider certificate. First aid expert will handle minor first aid case such as minor injuries and will be focused on victim evacuation to referred medical facility. Any other severe case such as serious injuries, fracture, poisoning, etc., will be handled by medic at the referred hospital/ medical facility.

The first aid kit provided onsite may include contents described in Table 2:



No.	Description
<b>Evacuation Kit</b>	
1	Stretcher
<b>Minor Injury Care Kit</b>	
1	White cotton
2	5 cm wide gauze
3	10 cm wide gauze
4	Gauze paste 10 cm
5	Plaster roll fabric width 2.5 cm
6	Fast plaster
7	Scissors
8	Wound cleanser (rivanol alcohol)
<b>Medicine</b>	
1	Pain relievers (ibuprofen, acetaminophen)
2	Stomach pain medicine
3	Gastric medicine
4	Headache medicine
5	Wound cleanser
6	Cough medicine
7	Burn cream or gel
8	Eye drops
9	Calamine lotion
10	Tawon scrub oil (Topical medicated oil for minor ache and pain)
<b>Female-Specific Supplies</b>	
1	Menstrual Products: Tampons, sanitary pads, or menstrual cups
2	Sanitary Wipes: Individually packaged wipes for personal hygiene
3	Disposable Bags: Small bags for hygienic disposal of sanitary products
4	Menstrual pain relievers

*Table 2 First Aid Kit Box Content*

### 3.5. Risk Management

Ensure that all risk management procedures address the specific needs of female employees. This includes addressing risks such as menstruation, pregnancy, and breastfeeding in the context of workplace safety and emergency response.

Job task modifications should be provided for female employees who are pregnant or nursing. Several considerations include, but not limited to:

- Ensure that pregnant or nursing employees are reassigned to tasks that do not pose a risk to their health, safety, or the well-being of the child

- Offer flexible break times for nursing employees to express breast milk, to designated clean and private spaces for this purpose
- Regularly review job tasks to minimize exposure to hazards such as chemicals, heavy lifting, heavy temperatures, or other strenuous activities that may pose risks to maternal health

Risks of violence, including GBV and SEA/SH should be assessed, including concerns about working alone on site or away, or late into the evening, and access to safe parking or transport home.

GBV prevention and response measures should be in place for communities near a large labor influx. In managing this risk, communicate to local communities on the available channel for grievance reporting and GRM.

Developers and Contractors allow for flexibility with working time, overtime and shift work to accommodate workers' life demands from outside of work, such as family, medical, etc.

### **3.6. Personal Protective Equipment**

PPE shall have gender consideration and is considered the 'last line of defense', therefore, the requirement to use designated PPE is mandatory. Different types of PPE, suitable for different tasks and fit all workers, should be available and worn to reduce the seriousness of the injury. The distribution of PPE is based on its condition over a certain period of time. Developers and Contractors should provide women equal access to PPE adapted to religious or local customs for modesty in consultation with women, such as headscarves or longer work clothing.

Ensure that PPE is regularly inspected for wear and tear, and is replaced as necessary to prevent unnecessary risk due to damaged or ill-fitting PPE. Provide a process for workers to report issues with their PPE and request replacements in a timely manner. Ensure that women are equally able to access new or correctly sized PPE when needed.

#### **3.6.1 Safety Helmet**

Safety helmets must always be worn at work locations. Places where safety helmets are not required include: inside office, toilet, smoking area, security hut, prayer room and ablution. Safety helmet also not required inside vehicle or heavy equipment closed cabin. Safety helmet should have gender consideration and be adjustable for all workers.

#### **3.6.2 Eye, Ear and Face Protection**

Safety glasses or goggles should always be used in the workplace and keep cleaned. Safety goggles and / or face shield must be used in welding and grinding work.

#### **3.6.3 Hearing Protection**

Hearing protection equipment must be used in areas with high noise levels. According to Minister of Manpower Regulation Number 5 of 2018 on Occupational Health and Safety in the Workplace, earplugs or earmuffs must be used in noisy areas (with a noise level above 85 dB) or where there is a warning sign indicating 'mandatory wear hearing protection'.

The Health & Safety Officer will install PPE signs or warning signs in noisy areas, such as near generators, rotating equipment, machinery, etc., where the noise level is above 85 dB. Machine operators or workers who are continuously exposed to noise during work must wear hearing protection.

### **3.6.4 Safety Shoes / Foot Protection**

Safety shoes which have metal protection and non-skid protection should always be used in the workplace except in certain areas such as indoors, etc. Safety shoes should have gender consideration and be available in different sizes to ensure they fit all employees.

The safety shoes must be worn in areas that contain trip, fall, slip, pinch, or stabbed hazards. It is permitted not to wear safety shoes in certain safe area such as the office, camp, or toilet.

### **3.6.5 Hand Protection**

Work gloves are needed to protect hands, they shall have gender consideration and be selected according to work criteria and according to their designation such as hand protection for public works, electrical work, welding work, chemical, hot work will differ from each other.

Manual handling work will require to use cotton gloves.

Electrical installation work will require to use electrical resistance gloves.

Hot work or welding work require to use welding gloves.

Work with exposure to chemical will require chemical rubber gloves.

Lifting or heavy duty work will require lifting heavy duty gloves.

### **3.6.6 Respiratory Protection**

Respiratory protective equipment should be used in the work area according to the hazards present, such as in dusty areas or areas with potential toxic gases. Different types of respiratory protection devices will be required for each specific hazard.

Based on the onsite JSEA, Construction Supervisor and Health & Safety Officer will determine the need of respiratory protection. For example, working in dusty area will require a dust mask, while working near potential toxic gases or in confined spaces will require a chemical mask with cartridge or an SCBA (Self-Contained Breathing Apparatus), etc.

### **3.6.7 Body Protection**

Work clothes or uniforms must be worn, and the work clothes must cover up to the sleeves and consider gender differences. For hot work, such as welding, the welder must also wear an apron. Uniforms provided to all workers in different sizes, taking into account sex and gender differences, and be adapted to local customs for modesty.

### **3.6.8 Special Protective Equipment**

For some jobs such as working at heights it requires special protective equipment such as fall protection devices and accessories such as body harnesses, short straps, anchors, connectors and safety straps.

Chemical rubber gloves and goggles are required for spill handling.

Special protective equipment can be used to deal with the Covid-19 situation, such as face shields, gloves, masks, goggle and coveralls. Additionally, necessary supporting equipment includes thermometers, hand sanitizers, disinfectants, handwashing soap, and handwashing facilities.

### **3.7. Inclusive Health and Safety Training**

Developers and Contractors need to provide field health and safety training to all workers and ensure both men and women have equal access to the training and benefit equally from the related protocols (i.e., live-line protocols, tag-out procedures). The training needs to include topics related to ESHS, OHS, HIV/AIDS, as well as preventing GBV and VAC within the project.

Offer training on gender-informed OHS practices to all members and workforce, including managers, supervisors, and frontline workers to increase their awareness of gender-related hazards, encourage respectful conduct, and tackle unconscious bias.

#### **Targeted Training Specifically for Women Workers**

Developers and Contractors should implement a dedicated, gender-sensitive training programs tailored specifically to the needs and challenges faced by women workers in OHS. This targeted training should aim to empower women with the knowledge and skills necessary to work safely and confidently in all work environments, particularly in roles where they may be underrepresented or exposed to unique risks.

Key components to be included in the targeted training for women workers are, namely:

- Ensure that training content is designed to address the specific safety concerns that women may face. This could include handling equipment, managing PPE to properly fit women, and understanding gender-specific risks;
- Include guidance on how to mitigate risks that may have different effects on women's health, such as exposure of chemicals; and workplace GBV and VAC, including on how to report incidents and seek support;
- Implement targeted training that actively participate women and address any barriers that may prevent their full involvement, such as catering to women's schedules and offering training in accessible locations.

### **3.8. Workplace Hygiene**

#### **3.8.1 Periodic House Keeping**

Housekeeping will be carried out weekly to ensure hygiene of the workplace. The house keeping activity will be done in wellpad and base camp and will cover security hut, toilet, cellar, sump, muster point and smoking area. A visual inspection using a checklist will be conducted by HSE staff after housekeeping.

#### **3.8.2 Waste Management**

Waste Management outlines safe practices when handling, storing and transporting hazardous materials. For individual workers, workforces identified as having possible contact or exposure to hazardous / waste materials in their work will be provided with adequate PPE. Please refer to the waste management and spill response plan procedures.

### **3.9. Safe Transportation**

Developers and Contractors should provide bus transportation for all the employees in, at least, one of its operations sites to ensure safe commuting to and from their village. Safety measures, such as well-

lit and secure transportation routes (i.e., security cameras and emergency contact information available), should be in place to address potential threats or harassment.

Developers and Contractors should consider the possibility of providing separate seating for female employees, particularly during travel on public transport or mixed-gender buses. This could involve the allocation of specific seats or areas for women. In cases where separate seating is not feasible, efforts should be made to provide a safe and respectful environment within the transportation vehicle, including maintaining clear communication protocols with drivers and ensuring that any incidents of harassment or inappropriate behavior are swiftly addressed.

### **3.10. Fire Prevention**

Refer to the emergency response plan procedure.

### **3.11. Separate Living, Praying, and Sanitary Facility**

Adequate toilet and bathroom facilities with fresh water must be provided by the Employer. Developers and Contractors will ensure the availability of showers and toilets in the camp and portable toilets at several work locations. Developers and Contractors should ensure gender consideration and provide equal access to separate living, praying, and sanitary facilities (toilet, changing room, shower, female sanitary hygiene disposal facilities), and other facilities appropriate for male and female workers.

During access road upgrade, portable toilet will be provided partially based on work progress, the proposed portable toilet will be in:

- STA 3+000 (Spoil disposal area no. 4) for work progress from STA 0+000 to 5+000,
- STA 8+000 (spoil disposal area no. 5) for work progress from STA 5+000 to 13+000
- STA 15+500 (spoil disposal area no. 6) for work progress from STA 13+500 to 18+000

During wellpad and base camp construction activity, 1 (one) portable toilet will be provided in the area. Permanent bathroom (shower) and toilet with septic tank system will be prepared and constructed in the base camp and wellpad area before being utilized by drilling contractor.

#### **Gender Requirements for Facilities**

- Separate facilities for men and women must be clearly marked, ensuring that workers can access them with respect to their privacy needs. This includes safe, secure locations for female workers to change, shower, and dispose of sanitary waste.
- In addition to providing sanitation facilities, there must be a proper and safe disposal system in place for sanitary waste, including female hygiene products, to prevent contamination and ensure a hygienic work environment
- Ensure adequate lighting and security measures around facilities to ensure safety, particularly for women, during nighttime hours.

### **3.12. Lactation Room**

#### **Provision of Private Space**

Developers and Contractors provide an appropriate private, clean, and safe space for breastfeeding mothers to express milk, and also provide a safe and hygienic refrigerator for the milk to be stored.

#### **Essential Facilities**

The lactation room should include comfortable seating, a flat surface for placing equipment, electrical outlets for breast pumps, and a sink with running water for washing hands and cleaning pumping equipment. Proper ventilation and adequate lighting should also be provided to create a supportive and pleasant environment.

### **Safe Milk Storage**

To ensure the health and safety of expressed milk, Developers and Contractors must provide a safe and hygienic refrigerator within the lactation room. The refrigerator should be designated exclusively for milk storage to prevent contamination and maintain optimal temperatures.

## **3.13. Drinking Water Supply**

A proper supply of drinking water should be provided for workers, gallons of drinking water will be supplied at work points. Drinking water stations should be located in safe, well-lit areas that are convenient for workers, including women who may have additional mobility or safety considerations due to their roles or shift timings.

## **3.14. Personal Conduct While on Duty**

### **Respectful Workplace Conduct**

All workers are expected to maintain a professional and respectful attitude while on duty. Harassment, discrimination, or offensive behavior toward any colleague, regardless of gender, ethnicity, or role, is strictly prohibited.

### **Smoking**

No smoking is allowed in the public space on construction sites or vehicles. Smoking is allowed only in certain designated areas. The designated smoking area during construction of wellpad, base camp, spoil disposal will be organized by the contractor's with dedicated smoking area sign, ashtray and trash bin. During road upgrade, the location of smoking area with ashtray and trash bin will be determined by Construction Supervisor.

### **Alcohol and Drug**

It is the Developers and Contractors' policy to maintain a work environment free from the influence of alcohol and drug.

- Workforces and sub-contractors will be induced on an alcohol and drug-free policy in during HSE Induction training.
- Alcoholic drinks and / or illegal drugs should not be used or permitted on the job site at any time. Violations will be subject to disciplinary action.
- Alcoholic beverages (including low alcoholic beverages) are strictly prohibited inside the company, workplaces in all locations, facilities and offices.
- The possession, distribution, and/ or sale of drugs/narcotics, including but not limited to marijuana, amphetamines, morphine, THC/ganja, cocaine, etc.,) in the workplace is prohibited and considered as a criminal offense against the law. Being under the influence of alcohol while working in the workplace is prohibited according to company policy and will be subject to disciplinary action. Based on the case, the disciplinary action will be determined by the Construction manager, in the form of Verbal warning and/or written warning 1, 2 or 3.

- Every workforce and contractor of the company must comply with this no drug and alcohol abuse policy.
- Health and Safety Officer in collaboration with local medical facility will conduct random drug/alcohol tests during recruitment to ensure this policy is met. The test will include a suspect test and a test after an accident / incident.
- Company workforces or contractors who refuse to take the test are subject to disciplinary action in accordance with Company Policy or Contractual Agreements. The disciplinary action will be determined by Construction manager, in the form of Verbal warning and/or written warning 1, 2 or 3. The company must stop the hiring process in the event of a prospective workforce who refuses to take the test during pre-placement.

### **3.15. Workplace Visits**

Before entering the site, each visitor will receive a site induction briefing which includes site rules, overview of significant EHS hazards and risks, PPE, prohibited activities or areas and emergency response procedures in case of an emergency.

Visitors will also be provided with PPE according to the gender and size specific requirements and be accompanied during the visit.

Developers and Contractors must ensure that workplace visits are accessible and inclusive for all, including visitors with disabilities or specific needs. Measures include:

- Providing alternative induction materials such as visual aids, if required
- Ensuring pathways and facilities on-site are accessible for individuals with mobility challenges

### **3.16. Rules on Using Tool and Equipment**

#### **3.16.1 General Rules on Tool and Equipment**

The following rules must be followed when using tools and equipment:

- Always use the right tools to do the job, for example never use a spanner as a hammer etc.
- All equipment must be in good condition; for example, do not use tools that are damaged or worn.
- Check all tools before use (e.g., checking connections, hoses, power cords, etc.).
- Make sure the appliance safety shield is in place before using it.
- Wear all necessary PPE, such as eye and hand protection, etc.
- Keep the power cord away from water, oil, heat or sharp edges.
- Keep the grinding wheel well. Never force grinding blades on work; this might cause a dangerous splash from the wheel.
- Disconnect all equipment after use and return to storage.
- Report immediately if any tools or equipment are damaged to superiors.

#### **3.16.2 Heavy Equipment**

Heavy equipment, including bulldozers, graders, excavators, trucks, and vehicles over 2 tonnes, can only be operated by qualified personnel assigned to the equipment. According to Minister of Manpower Regulation Number 8 of 2020 on Occupational Safety and Health for Lifting and Transport Equipment, all workers, regardless of gender, are permitted to operate this equipment, provided they possess the required certification or license.

General machine operating rules are:

- Only operators who have a valid operating license, pass a medical examination and have taken an induction interview are permitted to operate the unit
- Newly commissioned units must be thoroughly inspected to ensure that they meet operational safety requirements.
- The unit will always be operated according to the manufacturer's operating instructions.
- The operator will always ensure that the unit can be operated safely by making a complete pre-use inspection. This checklist shall be available in the unit for each inspection / inspection.
- All machine damages must be reported to the workshop supervisor.
- Before moving loads, ensure that the weight is centered, within the unit capacity, stable, does not obstruct the operator and that it is secured properly. Never leave heavy equipment with weights in high positions.
- The operator is responsible for ensuring that the work area is free from obstructions and / or hidden hazards.
- If any of the machine's safety functions are not functioning properly, work should be stopped until the damage is repaired.
- No machine is permitted to carry additional personnel unless a second seat is reserved for that purpose
- Heavy equipment should not be used to lift or unload personnel working at height work.

### **3.16.3 Hazards of Excavation Works**

#### **a. Buried**

The most common serious hazards is buried. Workers could be killed or seriously injured if the trench or excavation collapses. Hoarding is most often caused by:

- Vibration from construction equipment or traffic in construction.
- Machine that is too close to the edge of the ditch.
- Land weight that has been removed (spoil bank).
- Soils that do not stick together, such as sandy soils are not cohesive and can easily slide back into trenches. On the other hand, clay usually holds up well.
- Previously excavated land is unstable as previously undisturbed land.
- Water that could cause the ditch walls to collapse.
- Land slides

#### **b. Other Hazards**

- Contact with electricity, water, sewage, natural gas, or other types of utility lines that can cause serious injury or death by drowning, exposure to chemicals, or electric shock.
- Toxic gases can be released during excavation.
- Being hit by a vehicle while working in or near traffic.
- Crushed, swung, etc.

### **3.16.4 Worker Protection**

- Civil Supervisor will perform an onsite JSEA before work begins.
- Civil Supervisor will supervise the operation at all times especially when conditions change.
- Use a protection system for trenches or other excavations at a depth of 1.5 m or more.

### **3.16.5 Protection System**

Civil supervisor will assess if the slope has 45° inclination and determine the slope protections, such as:



- Build sloping / slope using excavated soil
- Build benching like sloping by cutting the sides of the trench with ratio of width to height 1: 1
- Supports for the trenching walls.
- Shielding, also called trench guard, is a structure placed in the excavation to prevent the sides of the earthen trench from collapsing.

### **3.16.6 Prevent Drowning in Digs or Pits**

- Refilling (Back Filling). Unused and open pits, ponds, or ditches must be refilled and re-greened.
- Drying (Draining). Unpolluted water in pits or ponds that are not in use should be drained by cutting the attached walls and allowing the water to flow through tributaries followed by reforestation.
- Covering. Small holes to be used to catch running surface water must be covered with bamboo or wood.
- Guarding. Active excavation work must be guarded by guards or security personnel.
- Fence (Fencing). Temporary fences should be installed around active excavation works. A permanent fence with a nameplate must be installed in a hole or pond of permanent water resources.
- Install safety sign or safety barricade or warning sign in potential drowning area. These signs should be clearly visible and designed to be easily understood by all workers.

### **3.16.7 General Excavation Rules**

- Workers must obtain an excavation work permit approval from Construction Manager and Construction Superintendent before starting excavation work.
- Cross-sectional drawings showing the original and excavated surface must be approved by Construction Manager and Construction Superintendent.
- Machine position must be further than 1.5 m from open excavation edge.
- A Confined Space Entry Permit is required from Construction Manager and Construction Superintendent if excavation is more than 2.5 meters deep.
- All material removed from excavation must be located at least 0.6 m, from the side edges.
- In areas of unstable ground, additional work and excess loads are required to be removed.
- Slopes of all excavations must be cut completely and straight and all loose rock on slopes must be removed.
- Excavation surfaces and bases must be cleaned of all mud, dirt and other debris.
- If a facility is found during excavation, the site must be checked first and excavation must be carried out carefully to avoid damage to the facility.
- Safe means of access / egress must be provided for all excavations. This includes ensuring that ladders, steps, and other safety equipment are gender-responsive and can be used comfortably and safely by all workers.
- Excavations crossing public roads must be accompanied by safety signs and diversion notices. Specialized personnel can be assigned to manage traffic.
- Check the depth of existing piping or electrical instrumentation before carrying out mechanical excavation.

## **3.17 Confined Space**

Confined space is any enclosure that has limited means of entry and exit, is usually not well ventilated, and usually contains known potential hazards.

### **3.17.1 General Requirement**

- Confined space entry is not permitted for any reason without the proper completion of the work Permit and signed by the Construction manager and Construction Superintendent. Entry to confined spaces should be avoided if there is a means of doing work from outside.
- All reasonable efforts should be made to eliminate hazardous conditions, which will require the use of gas detector and/or respiratory equipment. The provision of appropriate equipment will be tailored to the specific needs of all workers, ensuring that gender-responsive gear is available (e.g., respirators and safety equipment that fit both male and female workers comfortably and effectively).
- Confined spaces may not be entered until the Pre-Entry Requirements have been completed.

### **3.17.2 How to identify Confined Space**

- a. Access into and out of confined spaces with a diameter of 0.5 m or upper open spaces, such as: holes, trenches / excavations > 2.5 m depth can be considered a confined space.
- b. Lack of adequate ventilation can be dangerous in the presence of lethal gases and organic matter
- c. Not designed for ordinary work such as fuel storage tank and septic tank maintenance.

### **3.17.3 Pre-Entry Requirements**

- a. Isolation
  - Measures, such as barricades, should be taken to prevent unauthorized persons from entering hazardous areas.
  - All tubes, pipes, etc. Entry or exit from confined spaces should be closed vacated as close as possible to confined spaces.
  - All electrical, mechanical, pneumatic or hydraulic equipment, which can create hazardous conditions, must be disabled, locked and tagged.
  - For “non ordinary work” such as any entry/ maintenance/repair inside fuel storage tank or septic tank maintenance and cellar drainage pipe installation will require confined space entry permit.
- b. Disposal of contents
  - Liquid and solid objects and other contents must be removed before entering
- c. Purging
  - If the confined space atmosphere contains flammable gases or vapors, the gases must be purged / released.
- d. Ventilation
  - Vapors and gases must be removed by ventilating the space. Forced ventilation is preferred over natural ventilation e.g., using blower.
  - Confined space ventilation should not be started until all material has been moved from the vessel to a safe location.
- e. Testing / Monitoring
  - The atmosphere in confined spaces must be tested / monitored prior to entry.
  - The atmosphere must be retested every day.
  - If personnel have to be in a tank or vessel for a long time, it is advisable to test for H<sub>2</sub>S, hydrocarbons and oxygen in a confined space.
- f. Work Permit
  - Entry to all confined spaces must be controlled with the issuance of a Confined Space Entry Permit.
  - Construction manager and Construction Superintendent will be the authority to approve the Permit.

- g. Personal protective equipment
  - Skin and eye protection must be provided.
  - If required in pressure demand, standalone equipment or hose lines, for oxygen deficient atmospheres and toxic gases should be used.
  - Belts and harnesses must be worn unless it is determined by the Health and Safety Officer that the use of such equipment would create a greater hazard to personnel.
  - Gender-specific PPE considerations should be made to ensure that both male and female workers are provided with properly fitting, high-quality equipment.
- h. Standby Personnel
  - At least one standby person should be appointed to monitor work in confined spaces and to provide emergency assistance. Standby personnel should be equipped with breathing apparatus, have access to appropriate fire-fighting equipment, and maintain communication in confined spaces.
  - Consider providing additional personnel when more than one person enters a confined space.
- i. Entry Conditions
  - The Civil supervisor is in charge to determine the personnel who will enter confined spaces.

### **3.17.4 Confined Space Hazards**

- a. Oxygen Deficient Atmospheres
  - 19.5% - Minimum acceptable oxygen level.
  - 15 - 19% - Decreased ability to work. Coordination breakdown. Early symptoms.
  - 12-14% - Respiration increases. Poor judgment.
  - 10-12% - Respiration increases. lips are blue.
  - 8-10% - Mental failure. Fainting Unconsciousness Nausea. Gag.
  - 6-8% - 8 minutes - fatal, 6 minutes - 50% fatal, 4-5 minutes - recovery period.
  - 4-6% - Coma in 40 seconds. Dead.
- b. Oxygen enriched atmosphere - Oxygen level above 21%.
  - This can cause flammable and flammable materials such as hair, clothing, materials, etc. to burn violently when ignited.
  - Never use pure oxygen for ventilation.
  - Never store or place the compression tank in a confined space.
- c. Flammable atmosphere
 

2 Important Factors:

  - Oxygen content in the air.
  - The presence of flammable gases or vapors.

Ignition Source:

  - Spark or electric equipment.
  - Welding / cutting operations.
  - Smoking
- d. Toxic Atmosphere
 

Products are stored in a limited space:

  - Gas is released when cleaning.
  - Material is absorbed into the walls of confined spaces.
  - Decomposition of materials in confined spaces.

Work carried out in confined spaces:

- Welding, cutting, brazing, soldering.
- Painting, scraping, sanding, degreasing.
- Sealing, binding, melting.
- e. Hydrogen Sulfide (H<sub>2</sub>S)
  - A natural product of organic decay, lethal, sour gas, damp odor and rotten egg gas.
  - Characteristics: colorless / invisible, resembles a "rotten egg", heavier than air, explodes when mixed with the right proportion of air / oxygen, burns with a blue flame, can be dissolved in liquid.
  - Can be found in geothermal drilling, production, plant operations, sewage etc.
  - The standard of odor level is in accordance with the Decree of the State Minister of the Environment no. KEP-50 / MENLH / 11/1996 is 0.02 ppm.
- f. Extreme Temperature
  - Very hot or cold temperatures.
  - Steam cleaning in confined spaces.
  - Moisture factor.
  - Work processes in confined spaces can increase temperature extremes.
- g. Other Hazards
  - Slippery / Wet Surface
  - Increased chance of electric shock.
  - Falling Objects

## 3.18 Lifting

### 3.18.1 General Rules

- All portable and fixed lifting equipment should be checked and tested regularly before use.
- Never lift loads above the capacity of the lifting and rigging equipment.
- Ensure loads are "free" from obstructions before lifting.
- Never connect, shorten or abuse two slings.
- Use wood pallets to protect the slings from sharp edges.
- Use only safety hooks and the correct chain.
- All lifting operations must be under the control of a competent person (Rigger).
- Use a tagline of sufficient length to control the lifting.
- Return all lifting equipment to storage after use, report any identified damage.
- Rigging and lifting activities will be suspended during bad weather.
- Do not use broken lifting equipment.
- Never fix the chain with bolts or by welding.
- Never stand or walk under suspended weights.
- Do not climb on hooks or objects that are being lifted.
- Perform the lifting gradually until the sling is loose and is out of the lifting tool.
- Position the crane hook directly over the load to prevent the load from swinging when lifted.
- Lower the load at the lowering point, never lower it directly on the sling.
- Lowering the sling angle and horizontality will increase the stress on the sling and reduce the strength capacity of the sling. The angle must never be less than 30 degrees.
- Attach only one end (shackle) to the hook whenever possible.
- When using the hoist chain, check the current inspection mark and do not exceed the indicated hoist load rating.
- Do not attach the sling to itself; use shackles.
- Rigging & signaling should be carried out only by properly licensed personnel.

- Use a safety barricade within the lifting radius

### **3.18.2 Color Coded Inspection**

- Color coding to set the Inspection Period,

- Blue: Period January - June
- Green: Period July – December

Color coding on lifting gear such as pad eyes, webbing slings, chain, shackles will give information to worker that the lifting equipment they are using are fit for use gears. The color code will also remind the health and safety officer to reinspect the lifting gear.

### **3.18.3 Sling Size and Capacity**

- The usage type is IWRC (Independent Wire Rope Core) / 6 x 19

- ½ " 2 Tons
- 9/16 " 2 ½ Ton
- 5/8 " 3 Tons
- ¾ " 4 ½ Ton
- 7/8 " 6 Tons
- 1 " 8 Tons
- 1 3/8 " 15 Tons
- 2 3/8 " 45 Tons

- The size of the slings and their capacities and for the inspection must refer to:

- ANSI / ASME B 30.9
- ANSI / ASME B 30.10
- API 9A

## **3.19 Working at Height**

Working at height is considered work carried out at a height of 6 ft or 1.8 m and above, on the ground or deck and has a risk of falling from a high position. This work requires both male and female workers to be equipped with fall protection such as body harness and tools such as ladder and scaffolding. According to Minister of Manpower Regulation Number 9 of 2016 on Occupational Safety and Health in Work at Heights, all workers, regardless of gender, are allowed to work at heights, provided they possess the required certification.

### **3.19.1 Scaffolding Safety**

- Scaffolding must be constructed and inspected by qualified & competent personnel. This person has scaffolding competencies certificate such as scaffolder certificate and inspector scaffolding certificate.
- Ensure that:
  - Scaffolding is constructed properly and is suitable for the purpose.
  - The scaffold is maintained in the relevant conditions throughout its use.
  - All scaffolding must undergo a weekly inspection using an approved Scafftag.

### **3.19.2 Erection of scaffolding:**

- Ensure that the ground / decking is suitable to sustain the proposed load.

- Base plate should be used at every opportunity to distribute vertical standard loading.
- On an uneven position, start an erection if possible - at the highest point, this will make leveling easier as the scaffolding takes place horizontally.
- All standard vertical posts must be built upright.
- All horizontal transom and ledger posts must be constructed flat.
- All scaffolding must have adequate intermediate vertical standards and horizontal transoms if necessary.
- All scaffolding must have adequate front and side bracing if necessary.
- Guardrail must be provided.
- The toeboard must be made of scaffolding, wood, or steel battens.
- Access ladders must be secured so that the sides of the ladder are equally supportive and secure for both male and female workers, especially considering height or physical differences.
- If possible, access ladders should be constructed by themselves within the confines of the scaffold.
- Sufficient scaffold boards (minimum 4) must be provided on each working platform by fastening or using metal clamps.
- To prevent distortion, all scaffolding must be secured to adjacent structures.
- Side / hanging scaffolding must be adequately attached to the main structure of the facility.
- Screens must be provided on the side of the scaffolding adjacent to the aisle or road to prevent material or tools from falling.
- Make sure there are no protruding pipes, low headroom, etc. Which could cause damage or injury to passing personnel.
- After completing the task, every effort should be made to dismantle the scaffolding as soon as possible.
- Put dividers and markers around the scaffolding during work.
- All scaffolding materials must be stored in an approved location.
- Anyone erecting, modifying or dismantling scaffolding, must wear a harness with double lanyard installed
- Both male and female workers must receive equal and inclusive training on scaffolding safety procedures, ensuring they understand how to safely erect and dismantle scaffolding and use the appropriate equipment
- Tasks related to scaffolding erection should be distributed in a way that ensures equal opportunities for both male and female workers, with consideration for their physical capabilities

### **3.19.3 Fall Protection**

- Guardrail or personal safety net and drop protection system must be used for surfaces 2 meters or more above lower level with unprotected sides.
- Personal fall arrest systems include full body harness, shock absorbing lanyard or self-pulling rope (for heights greater than 4 meters), anchoring connector and anchoring support such as beam or support structure. The harness will not be secured by attaching the lanyard to itself. Only lock type snap hooks will be used on the security lanyard.
- Personal fall arrest systems must be inspected prior to each use for wear, and other damage. Any damaged components must be removed from the work area.
- For work on roofs or other similar surfaces with a slope of less than 1: 4 (vertical to horizontal) where the anchoring system and lanyard length will not allow vertical fall, a belting can be used.

### **3.19.4 Ladder**

- The ladder hand rail is installed at least 1 meter above the top of the landing platform.
- Choose the right ladder for the job
- Health and Safety officer will check the stairs before use
- Check for loose or damaged rungs, rails, missing screws, hinges, bolts, nuts, or other hardware.
- Make sure the straight ladder has safe legs.
- Never use a broken ladder.
- Use the barricades
- Maintain the area around the ladder at a 4: 1 ratio. This means that the step of the ladder is one meter away from a wall or other vertical surface for every four meters of the height of the ladder to the top support point.
- When working from a ladder: Only reach or lean it back so the belt stays between the ladder rails. Maintain balance by centering your body between the stair rails.
- In order not to move, tie the ladder as close as possible to the top support point.
- Never lean the ladder against an unstable surface.
- Go up and down the stairs carefully.
- Ensure proper technique is followed at all times during ascending and descending at the four individual points of contact with the ladder. If one point fails, then it is still related to the other three points.
- Never go up or down stairs using the rope as a point of contact only, this is unsafe action and has the potential for personnel to fall from a height.
- Tools used at height must be attached using a lanyard and carried in the tool belt.
- Check ladders and bottom of shoes for slippery substances.
- Do not climb higher than the second tread from the top of the rung.
- Ensure that ladders are accessible and suitable for workers of different body types and sizes, including providing adjustable ladders if needed

### **3.20 Power Line**

Workforces may be exposed to occupational hazards from contact with direct power lines during construction activities. Precautions and controls associated with direct power lines include:

- Allow only trained workers for the installation of electrical connections, Workers are not directly involved with power transmission and distribution activities operating around power lines or substations, must comply with local laws, standards and guidelines relating to minimum safe distances

### **3.21 Land Clearing and Surveying**

- Civil Supervisor must ensure that all operators and workers are aware of the hazards of land clearing and the existing control measures.
- During land clearing, Civil Supervisor must always inspect the work area
- Land clearing activities should not be carried out at night
- Please refer to Land clearing and restoration sub plan for more detailed mitigations
- Land clearing activities should take into account the specific needs of female workers, particularly when working in environments that may require additional accommodations for physical workload or access to amenities such as sanitation and rest areas.

### 3.22 Hot Work

The Hot Work Permit Procedure (known as the Cutting and Welding Permit Procedure) is designed to minimize the potential for fire and / or explosion, whenever "Hot Work" is performed. The term "Hot Work" is intended to include:

- e. All or all work that involves the use of electric, oxygen / acetylene welding equipment - gas cutting or heating equipment, grinding and use of friction cutting equipment and other work, which involves using, or causing open flames, sparks or other sources of ignition. Grinding and welding in construction work include, but are not limited to, maintenance and repair work, connecting rebar and wire mesh, welding poles, welding pump manifolds, etc.
- f. Hot work permits must be obtained for all high fire and explosion hazard areas.
- g. Fire monitoring personnel, fire extinguishers are required when Hot Work is being carried out.
- h. Welding and cutting work with a cutting torch by the welder must be equipped with a face shield, apron and welding gloves.

### 3.23 Lock Out / Tag Out / Energy Isolation

The Isolation and Hazard / LOTO procedure is designed for the purpose of:

- a. To protect people and equipment from illegal operations.
- b. To ensure that only special isolated and marked equipment is worked on.

Ensure that portable electrical equipment, extension cables, generators, welding equipment used in construction work are protected by energy insulating devices such as covers etc. Inspections must be carried out at least once every 3 months. All open energy equipment must be switched off and secured immediately prior to operating again. When the equipment is not in operation, it should be locked, or the key should be removed to prevent unauthorized personnel from operating it.

Equipment that is not in operation or damaged must be labeled (tagged) to indicate its status, whether it is out of operation or under repair.

### 3.24 Hydrogen Sulfide (H<sub>2</sub>S)

During construction, Hydrogen Sulfide (H<sub>2</sub>S) can be present during maintenance or cleaning hydrocarbon/fuel tanks, sump pit excavation, excavation narrow holes and confined spaces. H<sub>2</sub>S is very toxic, colorless, heavier than air, and flammable (according to MSDS). It smells like "rotten egg" at low concentrations and is odorless at high concentrations (it will lose its sense of smell very quickly).

The following H<sub>2</sub>S handling procedures should be compiled with:

- All possible H<sub>2</sub>S exposure within construction areas should be monitored. If there is exposure to gases, appropriate H<sub>2</sub>S Warning Signs and windsocks should be present. Workers must maintain a safe distance from hazardous locations (when not working) to reduce risks. H<sub>2</sub>S portable detector should be provided to identify the presence of H<sub>2</sub>S gas in suspected construction areas. The likely risk areas in the construction area includes but not limited to sump pit, cellar and other excavation area.
- The acceptable exposure limit for H<sub>2</sub>S is 10 ppm for 8 hours continuously. The exposure to H<sub>2</sub>S concentrations should not exceed 20 ppm.



- For areas where H<sub>2</sub>S concentrations may exceed 10 ppm, personal detectors should be installed, including audible and visual alarm systems. Emergency Contingency Plans should be developed.
- For any work carried out in an area with an H<sub>2</sub>S concentration of > 10 ppm, a worker must use an Independent Respiratory Device (SCBA). Workers may not work alone, are fully supervised and controlled by safety lines (similar to working in confined spaces). H<sub>2</sub>S gas cylinders for evacuation must be in the H<sub>2</sub>S area and be used only for emergencies.
- All personnel working in areas where H<sub>2</sub>S concentrations can exceed 10 ppm should be provided with training prior to starting work assignments.

#### Occupational Exposure Limit (OEL):

Workers are permitted to be exposed to the following limits: If a construction area is suspected to have H<sub>2</sub>S, Construction Supervisor will equip workers who will be working in the H<sub>2</sub>S area with an H<sub>2</sub>S detector. The Health & Safety officer will monitor H<sub>2</sub>S exposure. The exposure will be recorded automatically in the gas detector unit and can be downloaded to PC for monitoring purposes. During work, the alarm will sound automatically if the exposure limits has been reached. The permitted exposure limits are as follows:

#### Time Weighted Average 10 ppm (TWA):

- Maximum of 8 hours a day
- Maximum 15 ppm per 8 hours a day
- Short Term Exposure of 15 ppm:
- Maximum of 15 minutes
- Maximum of 4 exposures per 8 hours a day, each exposure should rest 60 minutes
- Exposure Limit 20 ppm. Do not be exposed at any time.

#### Toxicity Level:

- 1 PPM: H<sub>2</sub>S odor is felt
- 10 PPM: 8 hours OEL
- 20 PPM: OEL ceiling
- 100 PPM: odor loss in 2-15 minutes; burning throat, headache and nausea
- 200 PPM: loses odor quickly; burning eyes & throat
- 500 PPM: loss of reason and balance, respiratory failure within 2-15 minutes — requires immediate resuscitation
- 700 PPM: immediate unconsciousness, loss of bladder control, respiratory failure, and death are inevitable unless an immediate recovery.

## 3.25 Manual Handling

Always identify and know your lifting capacity. Get help with lifting any heavy object. Muscle and bone injury can result from improper removal.

Apply the basic principles of lifting:

- Use the muscles in the legs to lift rather than the weaker back muscles.
- Make sure you have a safe footing.
- Bend your knees close to the object.
- Keep your back straight and slightly bent from the hips.
- Hold it firmly and evenly.

- Gradual lift with legs straight and keeping back straight, not arched.
- Don't twist your body. Slide your legs and rotate your whole body.

Check travel areas and routes before moving material to ensure that all routes and storage areas are not blocked from slipping and tripping hazards.

Ensure that both male and female workers have equal access to well-maintained, safe storage and travel areas that are free from hazards. Check for objects that may have sharp edges, protrusions that can cause injury when moving the material.

### **3.26 Material Storage**

During access road upgrade, the material supplied such as rock, geotextile, geogrid, Reinforced Concrete Pipe, Galvanised Nestable Corrugated Steel Pipe, Reinforced Concrete Box Culvert, pavement materials will be stored near to work area and must not disturb road users, the material will be unloaded and stacked securely on stable foundation.

During wellpad construction, material supplied, such as Reinforced Concrete Pipe, Culvert Headwalls, Channels and other Drainage Features, Geotextile, pavement material, rebar, HDPE liner, etc., will be stored near the work area and must not disturb road users. The materials will be unloaded and stacked securely on a stable foundation.

### **3.27 Flammable Liquid**

Diesel fuel is the most widely used flammable liquid for construction work. To be aware of flammable liquid hazards, especially to eliminate fire hazards:

- Construction Supervisor and Fuel operator/ handler must review the Material Safety Data Sheet (MSDS) or label before handling the flammable liquid. Health and safety officer will provide MSDS in Bahasa.
- When handling or sampling flammable, gas, toxic and other hazardous materials, all related worker use appropriate PPE as indicated by the label or MSDS. Safety glasses should not be replaced with regular glasses when handling hazardous materials.
- Flammable/ flammable bulk liquid transfers should not be initiated before the safe position.
- Eye wash stations will be located near each refueling station and at the location of the storage and use of hazardous materials Use a suitable sample container
- Any container containing flammable / flammable liquids (drip pans, secondary containers, buckets, drums, etc.), which can develop a static charge, must be properly bonded before transferring content.
- All secondary containers and containers used to collect samples must be properly labeled and must be closed when not in use.

### **3.28 Hazardous Material**

Hazardous Material Identification

It is the Company's responsibility to provide accurate information about hazardous materials to workforces who will work with hazardous materials. Health and safety officer will provide Material Safety Data Sheet for those hazardous material, label, sign and tag also will be posted.

- All users of hazardous materials must follow the instructions provided by the manufacturer or can refer to the MSDS.
- All hazardous materials in the workplace must be identified.

- An MSDS for each hazardous substance must be provided, Health and safety officer will document and keep the MSDS database document, on daily basis the MSDS will be attached with work permit or saved in soft copy and will be kept with Civil supervisor. In storage facility such as fuel storage tank, the MSDS will be posted next to the chemical/substance or in access control hut. The MSDS will also be provided in Bahasa so that all workers can read and understand the content.
- This procedure must be followed to ensure that safe work practices are enforced and that proper PPE is provided.
- Ensure that all workers receive hazardous material information and are trained to carry out their work safety. MSDS training will be conducted by Health and Safety Officer.

Every worker in the workplace has a responsibility to use hazardous material identification information provided by the factory and the Developers and Contractors. Each worker must:

- Read the labels and MSDS provided
  - Follow the hazardous substance identification instructions given on the label and MSDS.
  - Wear the PPE recommended by the company
  - Follow safe work practices and procedures
- a. Two types of hazards:
- Physical Hazards: These may cause external damage to the body, such as combustible or explosive materials create a physical hazard.
  - Health Hazards: These can generally be classified as internal, where the health hazard affects the body from short term (chronic) exposure and long term (acute) exposure.
- b. Hazardous Product Warning Labels

Warning labels are designed to remind people that the material in the container is dangerous.

The label must provide the following information:

- Identification or name of hazardous substances
- Appropriate hazard warnings (physical and health).

Hazardous product warning labels are required on:

- All hazardous material containers used in the workplace.
- All containers of hazardous materials are shipped (transported) from one location to another.

When workforces handle hazardous materials:

- Do not mix hazardous products if they are not properly labeled.
- Never assume that unlabeled containers contain harmless products.
- Do not remove warning labels from hazardous material containers unless you replace them with the correct labels immediately.
- If there is a change in the information for a hazardous material, ensure that the warning label is updated.
- Check the MSDS hazardous materials if additional information is required.
- Workers must fully follow the instructions on the warning label.

c. Material Safety Data Sheet (MSDS)

The MSDS is designed to provide information about the components, characteristics and hazards of a product and how to handle it safely.

The eight sections of the MSDS Form are as follows:

- Part 1: Name of manufacturer, address, contact information and date.
- Part 2: Hazardous materials and identifying information.
- Part 3: Physical and chemical characteristics.
- Part 4: Fire and explosive hazard data.
- Part 5: Reactivity data.
- Section 6: Health hazard data.
- Part 7: Precautions for safe handling and use.
- Part 8: Control measures.

MSDS will be provided in Bahasa to ease worker to read the information.

d. Hazard Communication Program

- Hazard communication to worker will be in form of:
  - Daily safety meeting
  - JSEA
  - Spill response training
  - Medivac drill exercise
  - other media such as HSE board, banner, label and sign

e. Workforce training

- Workforce training is needed to ensure that everyone in the workplace who uses or handles hazardous materials knows how to work safely with them.
- Training should focus on the specific hazards each worker faces with hazardous materials located in their work area.
- The spill response training will be conducted by Environmental officer.

## **3.29 Pressurized Drums & Containers**

### **3.29.1 Drum Handling & Storage**

- a. It is prohibited to weld or cut the drums for storing hazardous materials causing fire or sparks.
- b. All drums must be properly labeled according to their contents and stored in a designated place in such a way as to prevent spills. If the drums are stored outside, they should be covered or treated with other precautions to minimize damage.
- c. The drum will be stored in a well-ventilated area and away from potential heat sources or open flames. If drums can be damaged by mechanical equipment, such as cranes, adequate barriers, or deterrents, will be provided.
- d. Drums containing flammable liquids should be kept separate from oxidized and corrosive or toxic chemicals. Storage drums should be equipped with drip containers and a drainage system that will bring leaks to a safe area. In addition, all drums should be inspected regularly to prevent chemical spills.
- e. Adequate fire extinguisher of a suitable type (powder or CO) will be provided in the drum storage area and “No Smoking” signs will be posted where flammable liquids are stored.

- f. The drums used for dispensing liquids should be stored on shelves away from potential hazards and equipped with drip containers and / or secondary containers.
- g. The drum should not be pressurized to empty its contents.
- h. If a drum is stored in a vertical position, it must be stacked a maximum of 3 tiers for metal drums and 2 tiers for plastic drums. If stored in a horizontal position, it must be stacked a maximum of 2 levels.
- i. Never use industrial gas cylinders in confined spaces except for self-contained breathing apparatus, fire extinguishers.
- j. All cutting torches, oxygen / acetylene must have flashback arrestors installed at each torch / hose connection.
- k. Cylinders must be securely fastened with chains or secured to a rack to prevent movement during use.
- l. All regulators and hoses on oxygen and acetylene cylinders must be depressed when not in use.
- m. All pressurized cylinders must be labeled

### **3.29.2 Storing Cylinders**

- a. Oxygen and Acetylene cylinder used for welding and cutting purposes will be stored on cylinder rack with upright position with protective covers in place
- b. During welding or cutting activity, Oxygen or other cylinders containing oxidizing agents must be stored at minimum 7 meters from ignition sources.
- c. Cylinders must be marked clearly indicating their contents.
- d. Empty and full cylinders should be stored separately. Empty cylinders must be identified to avoid confusion.

## **3.30 Electrical**

- a. During construction activities includes construction of Wellpad, base camp, electric generator set will be provided and will be used as electrical source for running some tools such as: grinder, welding machine, lighting, charging and other electrical appliance purposes etc.
- b. Installation, repair, and maintenance of electrical equipment energized by 480 volts or higher must be done by a qualified electrician.
- c. When electrically driven equipment becomes unsafe to operate, it must be locked and tagged immediately. Any generator sets with open v-belts must be safely covered.
- d. Adjustments to electrical equipment is prohibited unless instructed by qualified electrician.
- e. All extension cords or connection equipment plugs will be check weekly by Health and Safety officer and documented in HSE walk thru inspection form.

## **3.31 Barricade**

- a. Barricade such as barricade tapes and safety cone will be used as temporary warning sign to a work area constructed or as a warning sign to communicate actual hazard onsite.
- b. Barricade tape will be installed as
  - Warning sign of heavy equipment radius
  - Warning sign of sump, slope, sediment trap
  - Warning sign of any trip or fall hazard assessed in the work area
  - Warning sign for work in progress boundary etc.
- c. Safety cones will be installed as:
  - Warning sign during utilizing heavy equipment or heavy vehicle
  - Warning sign during maintenance
  - Warning sign for Traffic route guide

- d. Barricades are always installed around dangerous areas. Place highly visible signs on barricades that identify hazards. These signs should consider universal design principles, ensuring that information is accessible to all workers.
- e. Permission to enter the barricaded area must be granted from the Civil Supervisor.

### **3.32 Safety Signs**

- Health and safety officer Team will put up safety signs in the workplace. These signs must be strategically placed to ensure visibility and understanding by all personnel, taking into account both male and female workers' perspectives, and their unique needs (e.g., height considerations, language preferences).
- All personnel must comply with the requirements of all safety signs on site.
- All personnel will not remove safety chains, signs unless directed by Health and safety officer

### **3.33 Security Management**

Access to Construction site will be restricted, depending on site-specific situations, security measures will include fencing/security barriers, signage, adequate lighting, manning of security personnel, and regular checking on worksite grounds.

Developers and Contractors should provide adequate security for women in the form of door locks and, in some cases, guards or security staff.

#### **Hiring and Management of Security personnel**

Security personnel will be recruited from local project workers. Recruitment of security personnel will be the responsibility of the Community liaison & GRM officer. Community liaison & GRM officer will coordinate with authorized local leader near construction area, to explain the labor needs, number and qualifications to be employed as security personnel to work in specific construction locations.

The need for security personnel at certain work points is determined based on project progress and assessment carried out by the community liaison officer and health & safety officer and with the approval of the Construction manager.

During land clearing, access road upgrade construction, wellpad construction, base camp construction, laydown construction, spoil disposal construction etc. Security personnel will be assigned at night to guard onsite heavy equipment and material.

At certain locations that require continuous security, such as at wellpad and base camp, security personnel will be assigned on day and night shifts. In this location access control system will be applied.

#### **Training**

Prior to working, all chosen security personnel must attend HSE induction training conducted by Health and Safety officer. Community liaison & GRM officer also must have brief them about their responsibility and code of conduct, including Individual Code of Conduct Implementing ESHS and OHS Standards Preventing Gender Based Violence and Violence Against Children.

#### **Security Personnel's Code of Conduct**

- Security personnel must enforce the rules that apply in the work environment, specifically those concerning security.
- Carry out the task of securing Company/Client assets

- At the wellpad or base camp location, security will have briefings for non-labor and visitors at access points including the Covid-19 protocol; measuring body temperature, checking the use of masks and washing hands.
- Security personnel must implement access control required for entering work areas, including:
  - Ensure all entrants have valid ID
  - Inspection of all incoming baggage, material and/or vehicles to ensure that no illegal weapons, alcoholic beverages or illegal drugs are brought into the work area
  - Authorized to deny entry for non workers or visitors if they do not comply with the entry requirements.
  - Escort visitor, vehicle, material when needed
  - Document and record access control log.
- Security personnel must carry out patrols around the work area to inspect threats and disturbances, as well as directing traffic.
- Security personnel must not use physical force except for self-defense.
- In giving warnings, security personnel must convey warnings in a firm, polite and respectful manner
- Take temporary security actions in the event of a crime, including:
  - Securing the place of incident
  - Help the victim
  - Report to the Community Liaison and GRM Officer who then coordinate with local police for further assistance.
- Give a sign of an emergency that could endanger people and could damage the property in the work location.
- Provide help and rescue assistance
- Develop daily security activity report and report to Community Liaison and GRM Officer.

### **3.34 Stop Work Authority**

Stop Work Authority (SWA) establishes the responsibility and authority of any individual to stop work when an unsafe condition or act could result in an undesirable event. In general terms, the SWA process involves a stop, notify, correct, and resume approach for the resolution.

This Stop Work Authority (SWA) applies to all employees and its business partners within this project.

Situations that Initiate the Use of Stop Work:

- Unsafe conditions;
- Incident occurs;
- Significant near-loss;
- Emergency situation;
- Alarm sounds;
- Change in conditions;
- Change in scope of work;
- Change in work plan;
- Anytime anyone feels that personnel, the environment, or equipment is at risk.

#### **Equal Authority for All Employees**

The principle of Equal Authority for All Employees ensures that all individuals—regardless of gender, role, or seniority—have the right and responsibility to halt work if they identify an unsafe

condition or perceive a risk to themselves or others. This includes recognizing that female workers may face barriers to speaking up, and measures should be taken to create a safe space for them to voice concerns, namely:

- **Empowering All Workers to Exercise SWA:** All employees, including women, should feel equally empowered to exercise their SWA. In many workplaces, particularly those in male-dominated industries, women may face gender-based barriers such as intimidation, dismissal of concerns, or fear of being perceived as weak or overly cautious. These barriers must be recognized and addressed to ensure that women feel confident in halting unsafe work when necessary.
- **Creating Safe Spaces for Women to Speak Up:** Take proactive measures to create safe spaces where women can voice their concerns without fear of retaliation, dismissal, or discrimination. This can include confidential reporting mechanisms and dedicated support channels for female employees.
- **Addressing Gender-Specific Safety Concerns:** Female employees may face unique safety concerns in the workplace that differ from those experienced by male employees. These concerns may relate to gendered risks (e.g., harassment, inadequate protective equipment for women, or physical safety in certain roles).
- **Zero Tolerance for Retaliation:** Female employees may hesitate to exercise their SWA due to the fear of retaliation—whether it be social ostracism, loss of work opportunities, or direct workplace retaliation. All concerns and exercises of SWA must be upheld in good faith and responded without retaliation.

### **3.35 Grievance Reporting**

All complaints shall be recorded on the GRM form and resolved according to the grievance / complaints process outlined below. Some possible complaints about occupational health, safety and security can be from Government and Community. GRM related to GBV cases is different from other cases.

Grievance redress for general or non-GBV cases will be handled with the following steps:

- A dedicated Community Liaison & GRM Officer will record and report all comments and complaints associated with the Project regarding emission and dust exposure to community. Any person or organization may send comments and/or complaints in person, by phone, drop box or email.
- All incoming grievances are recorded by name, address, description, location as per GRM Form
- The Grievance form will be located in Developers and Contractors' camp.
- Grievance records will be reported to the EMU Social Performance Team of Developers, the HSE and Social Coordinator of Contractors, and the Construction Manager.
- All grievances will be registered and acknowledged within 5 days and responded to within 10 working days by the EMU Social Performance Team of Developers.
- All grievance related to the Developers and Contractors scope of work and authority will be follow up by the Developers and Contractors with acknowledge from the EMU Social Performance Team.

Grievance redress for GBV cases must be approached with the utmost sensitivity, care, and adherence to gender-responsive principles. The process should ensure that survivors receive the necessary support and services, while maintaining a survivor-centered approach, confidentiality, respect, and non-discrimination.

Grievance redress for GBV related cases will be handles with the following steps:



### Step 1: Receive Complaints

- Complaints may be received from survivors, witnesses, village units, staff, or other parties, which are reported to the HSE Manager through the GRM channel provided (e.g., helpline), which ensures anonymity and has been previously socialized. The complaints need to be entered into the project complaint documentation system.
- When a case report comes in, the HSE Manager shall contact the appointed GBV focal point and service providers as soon as possible. The report recipient is not permitted to investigate cases. Case investigations are the domain of the GBV focal point and service providers.
- The reception of complaints must always be gender-sensitive, acknowledging the specific barriers that women and marginalized groups may face when reporting GBV. These barriers can include fear of retaliation, social stigma, and lack of support.
- The person receiving the complaint must be respectful to the survivor (not judge, not ask interrogative questions, and maintain confidentiality (the identity of the survivor, family or relatives who assist with reporting)).

### Step 2: Refer Cases

- The HSE Manager will inform the GBV focal point about the existence of the case.
- The HSE Manager, together with the GBV focal point and service providers, assess whether or not the case is project-related.
- Refer the survivor (whether or not the case is project-related) to the service providers, with the survivor's consent.
- The GBV focal point will inform the PMU and the World Bank Task Team Leader about the case with the following information: age and gender; case type; whether the case is project-related; whether the case has been handled by the respective case handling authority.
- If project employees are involved, the GBV focal point will record who the accused project personnel are and what role they played in the incident, then inform the Project Manager, HR Manager, and HSE Manager to resolve the matter in line with applicable HR & HSE policies, including the GBV Code of Conduct.

### Step 3: Assistance

- After the survivor is referred to a designated service provider, if necessary, the survivor will temporarily take shelter in a safe house provided by the service provider. The service provider will inform the survivor about: The right of survivor to control the sharing of information on the case, with whom and what implications that may follow; information about the limit of confidentiality, including what needs to be reported to the PMU and the World Bank; the right of survivor to decide what action to take to resolve the case.
- The survivor should be assured of their safety and protection from retaliation

### Step 4: Case Handling

- Service provider will refer the survivor to DP3A for assistance in resolving the case and to the Police according to established legal procedures. The survivor has the right to opt for litigation or non-litigation path.
- In this case, the Contractor and the GBV focal point are not justified to handle GBV case because the case handling must be carried out by service providers and the authorities. The GBV focal point must remain involved by tracking the case and ensuring that it is being handled appropriately by the service providers and authorities. The GBV Focal Point and service

providers should regularly monitor and assess the effectiveness of the grievance redress process. They should gather feedback from survivors to continually improve the system and ensure that the support provided is sufficient and meets the needs of all individuals involved.

The chart below explains the step-by-step process or flow of grievance redress for GBV-related cases, which can be adopted by Developers and Contractors.

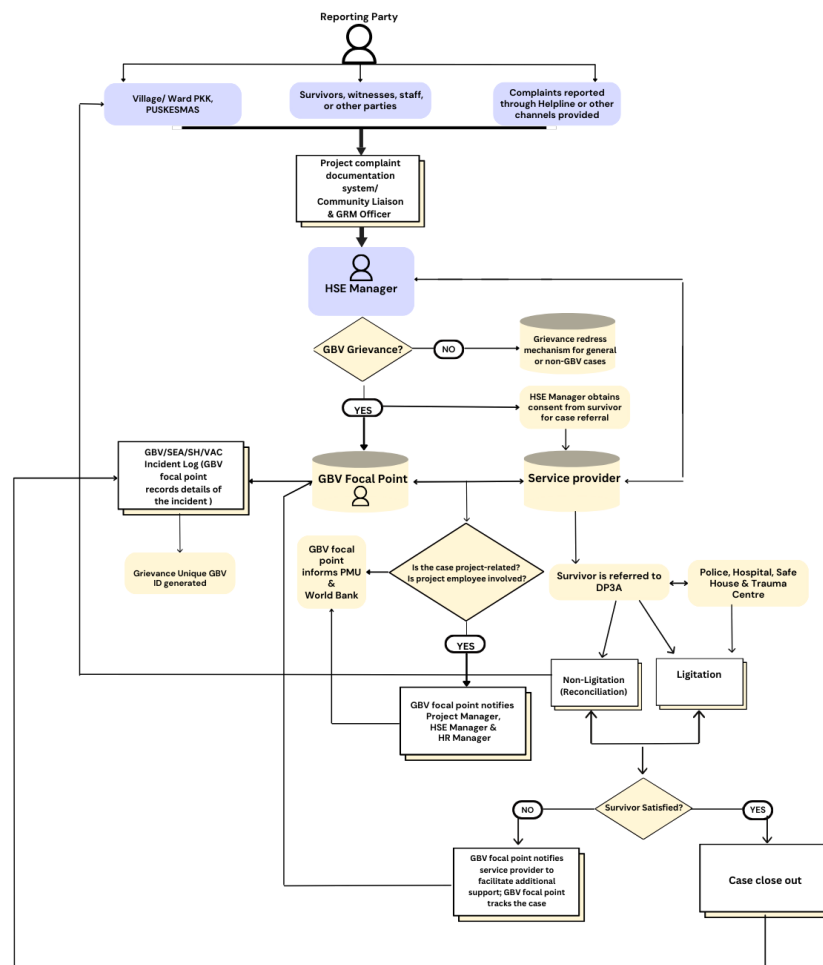


Figure 1 GRM flowchart for GBV-related cases

## 4 Appendix

### Appendix 1. SWA Form Template

#### Stop Work Authority Form/ *Form Penghentian Pekerjaan*

Date/*Tanggal* :

Facility/ *Fasilitas* :

Location/*Lokasi* :

Department/Work Area/*Departemen/Pekerjaan*:

Cause of Operation Suspension/ *Penyebab Penghentian Operasi*:

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Conclusion and Actions Taken/ *Kesimpulan dan Tindakan yang dilakukan*:

- ☐ Operations have been completely halted/ *Operasi dihentikan secara menyeluruh*
- ☐ Facility operations are being repaired immediately/ *Operasi fasilitas diperbaiki segera*
- ☐ Crew reminded of SOPs for all tasks/ *Crew diingatkan dengan SOP semua pekerjaan*

I acknowledge that I have exercised my right to Stop Work Authority based on the observed unsafe condition or behavior. I understand the importance of reporting and addressing potential hazards promptly/ *Saya mengakui bahwa saya telah menggunakan hak saya untuk Kewenangan Menghentikan Pekerjaan (Stop Work Authority) berdasarkan kondisi atau perilaku tidak aman yang saya amati. Saya memahami pentingnya melaporkan dan menangani potensi bahaya dengan segera.*

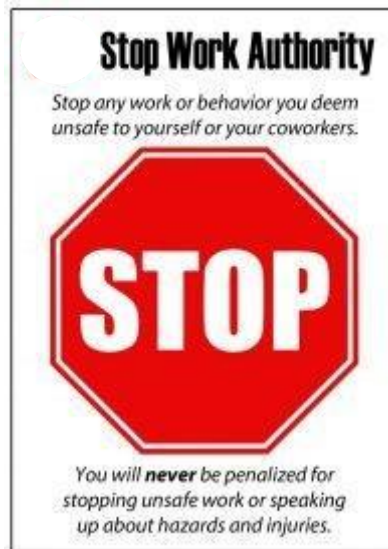
Signature/ *Tanda tangan*

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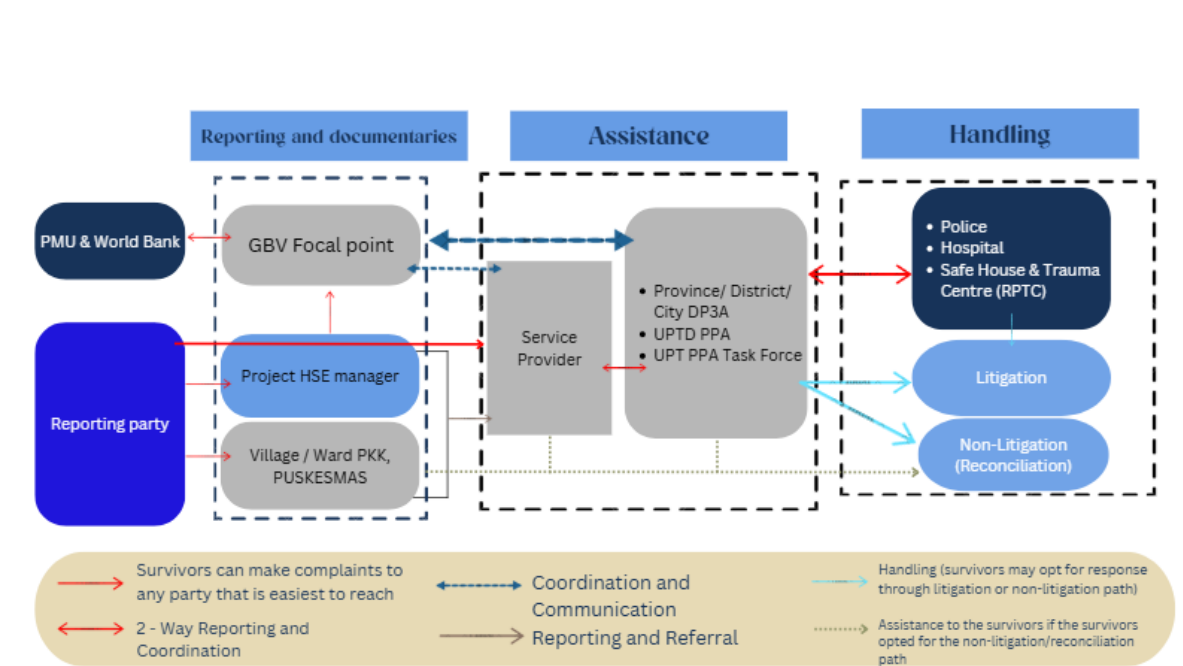
Name/ *Nama*

## Appendix 2. SWA Card

An SWA card is designed to ensure that employees understand they are accountable for their own safe behavior and are responsible for stopping any unsafe behaviors and work conditions they observe in the workplace. This card can be clipped to a lanyard or key pass and serves as an injury prevention tool. See below for an example of an SWA card.



## Appendix 3. GBV Reporting and Handling Mechanism



## Appendix 4. GBV and VAC Code of Conduct

This example of Code of Conduct preventing GBV and VAC are adopted from ESHS/OHS/GBV/VAC Codes of Conduct and Action Plan documented by the World Bank and can be found [here](#).

### **Individual Code of Conduct Implementing ESHS and OHS Standards Preventing Gender Based Violence and Violence Against Children**

I, \_\_\_\_\_, acknowledge that adhering to environmental, social health and safety (ESHS) standards, following the project's occupational health and safety (OHS) requirements, and preventing gender based violence (GBV) and violence against children (VAC) is important.

The company considers that failure to follow ESHS and OHS standards, or to partake in GBV or VAC activities-be it on the work site, the work site surroundings, at workers' camps, or the surrounding communities-constitute acts of gross misconduct and are therefore grounds for sanctions, penalties or potential termination of employment. Prosecution by the Police of those who commit GBV or VAC may be pursued if appropriate.

I agree that while working on the project I will:

1. Attend and actively partake in training courses related to ESHS, OHS, HIV/AIDS, GBV and VAC as requested by my employer.
2. Will wear my personal protective equipment (PPE) at all times when at the work site or engaged in project related activities.
3. Take all practical steps to implement the contractor's environmental and social management plan (CESMP).
4. Implement the OHS Management Plan.
5. Adhere to a zero-alcohol policy during work activities, and refrain from the use of narcotics or other substances which can impair faculties at all times.
6. Consent to Police background check.
7. Treat women, children (persons under the age of 18), and men with respect regardless of race, color, language, religion, political or other opinion, national, ethnic or social origin, property, disability, birth or other status.
8. Not use language or behavior towards women, children or men that is inappropriate, harassing, abusive, sexually provocative, demeaning or culturally inappropriate.
9. Not engage in sexual harassment-for instance, making unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct, of a sexual nature, including subtle acts of such behavior (e.g., looking somebody up and down; kissing, howling or smacking sounds; hanging around somebody; whistling and catcalls; giving personal gifts; making comments about somebody's sex life; etc.).
10. Not engage in sexual favors-for instance, making promises or favorable treatment dependent on sexual acts-or other forms of humiliating, degrading or exploitative behavior.
11. Not participate in sexual contact or activity with children-including grooming, or contact through digital media. Mistaken belief regarding the age of a child is not a defense. Consent<sup>1</sup> from the child is also not a defense or excuse.

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<sup>1</sup> Consent is defined as the informed choice underlying an individual's free and voluntary intention, acceptance or agreement to do something. No consent can be found when such acceptance or agreement is obtained using threats,

12. Unless there is the full consent' by all parties involved, I will not have sexual interactions with members of the surrounding communities. This includes relationships involving the withholding or promise of actual provision of benefit (monetary or non-monetary) to community members in exchange for sex-such sexual activity is considered "non-consensual" within the scope of this Code.
13. Consider reporting through the GRM or to my manager any suspected or actual GBV or VAC by a fellow worker, whether employed by my company or not, or any breaches of this Code of Conduct.
14. Promote gender equality by advocating for equal access to work opportunities, training, and resources for all individuals, irrespective of their gender.

With regard to children under the age of 18:

15. Wherever possible, ensure that another adult is present when working in the proximity of children.
16. Not invite unaccompanied children unrelated to my family into my home, unless they are at immediate risk of injury or in physical danger.
17. Not use any computers, mobile phones, video and digital cameras or any other medium to exploit or harass children or to access child pornography (see also "Use of children's images for work related purposes" below).
18. Refrain from physical punishment or discipline of children.
19. Refrain from hiring children for domestic or other labor below the minimum age of 14 unless national law specifies a higher age, or which places them at significant risk of injury.
20. Comply with all relevant local legislation, including labor laws in relation to child labor and World Bank's safeguard policies on child labor and minimum age.
21. Take appropriate caution when photographing or filming children.

### **Use of children's images for work related purposes**

When photographing or filming a child for work related purposes, I must:

22. Before photographing or filming a child, assess and endeavor to comply with local traditions or restrictions for reproducing personal images.
23. Before photographing or filming a child, obtain informed consent from the child and a parent or guardian of the child. As part of this I must explain how the photograph or film will be used.
24. Ensure photographs, films, videos and DVDs present children in a dignified and respectful manner and not in a vulnerable or submissive manner. Children should be adequately clothed and not in poses that could be seen as sexually suggestive.
25. Ensure images are honest representations of the context and the facts.
26. Ensure file labels do not reveal identifying information about a child when sending images electronically.

### **Sanctions**

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force or other forms of coercion, abduction, fraud, deception, or misrepresentation. In accordance with the United Nations Convention on the Rights of the Child, the World Bank considers that consent cannot be given by children under the age of 18, even if national legislation of the country into which the Code of Conduct is introduced has a lower age. Mistaken belief regarding the age of the child and consent from the child is not a defense.



I understand that if I breach this Individual Code of Conduct, my employer will take disciplinary action which could include:

1. Informal warning.
2. Formal warning.
3. Additional training.
4. Loss of up to one week's salary.
5. Suspension of employment (without payment of salary), for a minimum period of 1 month up to a maximum of 6 months.
6. Termination of employment.
7. Report to the Police if warranted.

*I understand that it is my responsibility to ensure that the environmental, social, health and safety standards are met. That I will adhere to the occupational health and safety management plan. That I will avoid actions or behaviors that could be construed as GBV or VAC. Any such actions will be a breach this Individual Code of Conduct. I do hereby acknowledge that I have read the foregoing Individual Code of Conduct, do agree to comply with the standards contained therein and understand my roles and responsibilities to prevent and respond to ESHS, OHS, GBV and VAC issues. I understand that any action inconsistent with this Individual Code of Conduct or failure to act mandated by this Individual Code of Conduct may result in disciplinary action and may affect my ongoing employment.*

Signature:

Printed Name:

Title:

Date:

## Appendix 5. GBV/SEA/SH/VAC Incident Log

GBV/SEA/SH/VAC Incident Matrix Involving Project Workers – Latest Date of Update: .....

GBV ID	Date Incident first identified/by who	Place of Incident	Age/Sex/ Education Level/ and other survivor details.	Type of Abuse	Date case reported and by who (if different from Column 2)	Witnesses <sup>2</sup>	Perpetrator/Suspect	Immediate actions taken <sup>3</sup>	Support Provided to Survivor/ to- date	Cultural or contextual considerations if applicable <sup>4</sup>	Investigation/ Legal Redress Progress (handled by service providers)	Feedback from the survivor if any <sup>5</sup>	Next Actions	Case Close out

<sup>2</sup> If available, details of any witnesses present during the incident, including their names, and whether they have been contacted or interviewed.

<sup>3</sup> Actions immediately taken by the survivor, the person reporting the incident, or the organization, such as providing emergency care, notifying authorities, or implementing temporary measures for the survivor's safety.

<sup>4</sup> Any cultural or situational factors that may influence the survivor's experience, such as stigma or fear of retribution, and the necessary sensitivity when handling the case.

<sup>5</sup> Any feedback or updates received from the survivor regarding their experience, including their satisfaction with the process, the support provided, or any concerns about how the case is being handled.