



PTTEP

SSHE

HANDBOOK FOR EMPLOYEE
AND CONTRACTOR

REVISION 2021





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Objectives of SSHE Handbook

This SSHE (Safety, Security, Health and Environment) Handbook is created to help employees and contractors realise their own duties which are fundamental statutory rights. It also provides safe working practice guidelines in Exploration & Production activities which are considered high risk business that might cause loss of life and property if there is no effective management system in place. Therefore, it is required that all PTTEP staffs and contractors clearly understand and strictly comply with this SSHE Handbook at all times.



Vision and Missions for Safety, Security, Health and Environment

Vision

A Zero-Incident Organization

Mission

- Prevent all incidents through proactive personal and process safety management.
- Embed SSHE mindset and leadership at all levels toward a generative SSHE culture.
- Recognize SSHE as a foundation towards competitive performance and innovation for long term stakeholders value creation.



SSHE Policy

Safety, Security, Health and Environment (SSHE) is fundamental for PTTEP's sustainable business. We put in place and adhere to an effective SSHE management system in order to ensure the safety and health of everyone involved in our operations and communities where we operate, environmental protection and the security of our people and assets.



To achieve our vision of being a zero incident organization, PTTEP shall:

- Work to achieve and sustain a generative SSHE culture through accountable leadership and involvement of all employees and contractors. Fundamentally SSHE performance is a line management accountability.
- Set measurable SSHE objectives, key performance indicators and targets that are used for continuous improvement for top quartile performance and achievement of applicable sustainable development goals (SDGs).
- Fulfill compliance obligations with all applicable SSHE laws, regulations, national and international standards as well as internal requirements of the PTTEP SSHE management system.



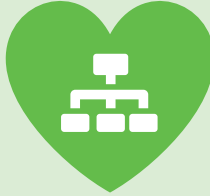
- Manage SSHE risks by identifying, analyzing, evaluating and treating them to As Low As Reasonably Practicable (ALARP) throughout PTTEP business lifecycle.
- Promote health of employees and contractors as part of an effective health management system.
- Reduce environmental footprints in alignment with low carbon pathway, circularity concept, and positive environmental value creation.
- Assess, monitor, and manage security risk and situation at all locations.
- Plan and prepare for emergencies and crises by providing resources, training, and holding regular drills and exercises.





- Apply Management of Change principles to operational, organizational, administrative and regulatory changes to ensure that the risk is identified, assessed, and controlled.
- Empower and reinforce employees' and contractors' right to use of the Stop Work Authority (SWA).
- Enforce zero drugs and alcohol programs in workplace to all employees and contractors.
- Improve SSHE performance continuously by workforce participation and consultation, learning from incidents, audits and reviews.

The successful implementation of this Policy requires total commitment from PTTEP employees and contractors at all levels.

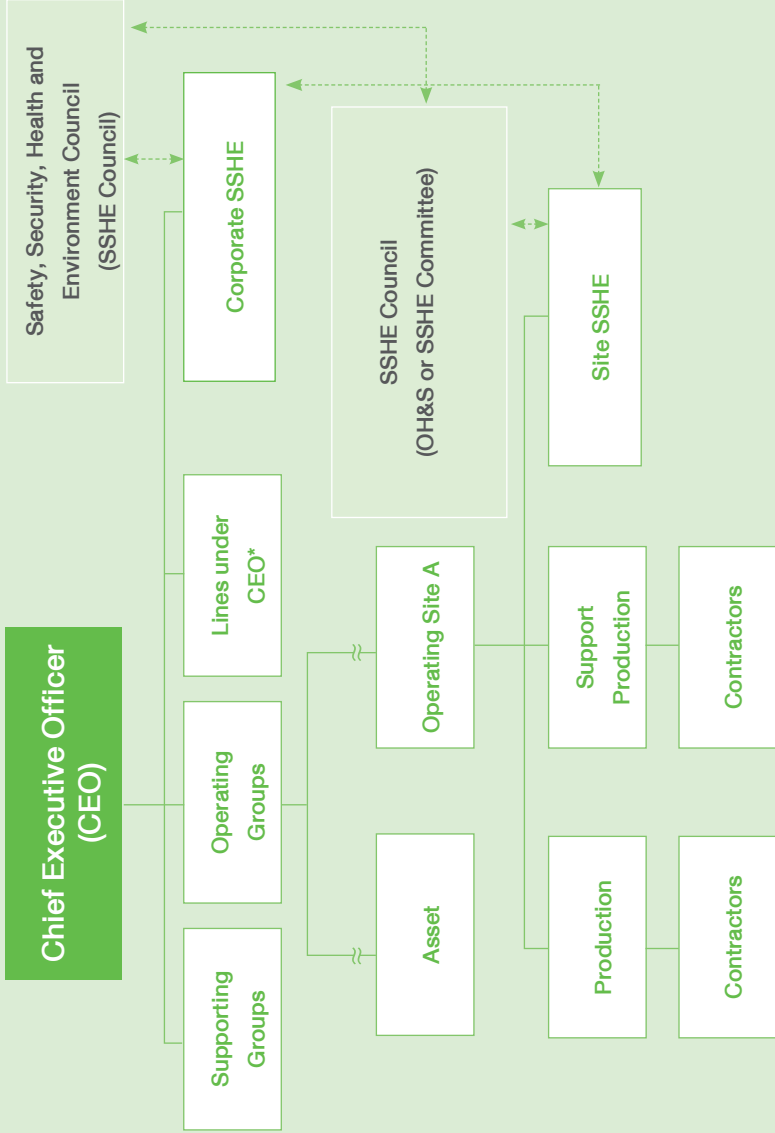


Structure, Roles and Responsibility on SSHE Management

PTTEP sets an Organization structure of Safety, Security, Health and Environment for employees, contractors and SSHE committee as follows.:



4.1 An Organization Structure of Safety, Security, Health and Environment



*Other Lines under CEO



4.2 SSHE Roles and Responsibilities

4.2.1 SSHE COUNCIL

- Appointed by Chief Executive Officer: the members comprised of CEO, all EVPs and selected SVPs.
- Organize committee meetings regularly to review SSHE performance.
- Endorse SSHE policies and strategies to serve PTTEP's growth, ensure that they are in alignment with PTT Group, and effectively monitor those implementation throughout PTTEP.
- Reinforce a transparent two-way communication on SSHE issues through line management and/or Occupational Health and Safety (OH&S) Committee.





4.2.2 CORPORATE SSHE

- Propose SSHE policy and strategies to CEO for endorsement.
- Propose annual SSHE Key Performance Indicators (KPIs) and targets to CEO and top management for effective implementation and continuous improvement.
- Prepare SSHE plan at corporate level and cascade to all relevant function, operating Asset / site in compliance with SSHE policy and strategic objectives.
- Develop SSHE Management System (SSHE MS) documents at corporate level for further implementation.
- Develop strategic plan for necessary resources, budget and technology to support company's growth and to effectively implement SSHE strategies.
- Conduct corporate oversight of legal and SSHE MS compliance to relevant functions and contractors.



- Promote SSHE awareness and consistently communicate relevant SSHE issues.
- Organise SSHE trainings in compliance with legal programmes and PTTEP training standards with legal and SSHE MS requirements.
- Ensure that SSHE risks are identified, assessed, and managed to be As Low As Reasonably Practicable (ALARP) in all operating Asset / site.
- Organize Environmental Impact Study including compliance audit and monitoring report according to mitigation measures.
- Support all operating Assets / site in implementing SSHE MS efficiently and effectively, such as emergency exercise, incident reporting, etc.
- Monitor, analyze and review SSHE performance for continuous improvement.
- Act as Corporate SSHE Audit to ensure that all relevant functions are in compliance with SSHE MS and legal regulations





- Consolidate, analyze and prepare annual SSHE report.
- Act as PTTEP representative in being official member of International Association of Oil and Gas Producers (IOGP) for correspondence and cooperation
- Collaborate with PTT groups in terms of SSHE management, including SSHE performance data submission and incident reporting.
- Act as corporate function to collaborate with external authorities agencies related to SSHE such as Department of Mineral Fuels (DMF), Office of Natural Resources and Environmental Policy and Planning (ONEP)
- Promote SSHE Culture in the company to achieve the target of zero incident organization
- Act as SSHE Council Secretary



4.2.3 Occupational Health and Safety (OH&S) Committee

- Appointed as the committee to performance duty in accordance with Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational, B.E. 2549 (2006), Chapter 2: Committee of Occupational Health and Safety Committee of the Workplace
- Review SSHE policy and plan, including non work-related safety, in order to prevent and reduce incidents, illness, or nuisance resulting from work and unsafe situation before proposing them to management.
- Report and provide recommendations to management on mitigation measures or means of improvement in complying with relevant SSHE law and SSHE MS requirements for safety of staff, contractors, and third party.
- Encourage everyone to follow the company's laws, rules and regulations. Support SSHE activities in operating Assets / site, including SSHE trainings for employees, managers and staff at all levels.



- Review SSHE performance with site SSHE, identify problems, obstacles and recommendations for continuous improvement and report to management when completing one year of duty.
- Prepare fire fighting and emergency response plan, conduct emergency drills and evacuation exercises in accordance with the plan at least once a year.

4.2.4 SITE SSHE

- Be appointed as a function that is reported directly to the highest management of the operating Asset / site, in complying with Ministerial Regulation on the Prescribing of Standard for Administration and Management of Occupational Safety, Health, Environment B.E. 2549 (A.D. 2006), Chapter 3.
- Prepare SSHE plan in accordance with Corporate SSHE policy, Key Performance Indicators and targets before proposing to management.
- Create SSHE MS documents including Asset / site-level SSHE handbook in alignment with corporate SSHE MS for effective implementation.
- Supervise, inspect, and advise operating Asset /site to follow regulations and corporate SSHE MS.



- Identify types of Personal Protective Equipment appropriate to risks of each activity for staff and contractors to wear while performing task.
- Support operational activities and conduct SSHE training for staff, contractors, or involved parties in order that they are aware of any work-related incidents and occupational illness, including fire prevention and emergency preparedness.
- Identify, assess, define the mitigation measures on each environmental aspect. Follow up the compliance audit and report environmental performance in accordance with company's standards.
- Examine and evaluate working environment of the operating Asset / site, e.g. light, noise, heat, and chemical measurement, etc. Report results and mitigation measures to management.



- Report incidents, analyze root causes and prevention measures. Collect SSHE statistics, prepare SSHE performance report and provide recommendations to management and corporate SSHE.
- Cooperate with Corporate SSHE, local government offices and external agencies in order to effectively manage SSHE in compliance with legal requirements.
- Act as OH&S Committee secretary.



4.2.5 Roles and Responsibilities on Safety, Security, Health and Environment of Employees and Contractors

4

Roles and Responsibilities	CEO	EVP	SVP
Be a leader and a model in promoting SSHE Culture within the organisation to achieve the target of zero accidents	✓	✓	✓
Endorse SSHE policy and strategic direction.	✓		
Review and endorse annual SSHE KPIs and targets.	✓	✓	✓
Review and endorse SSHE plan in accordance with policy and strategic direction to achieve annual SSHE KPIs and targets.	✓	✓	✓





VP	Manager	Supervisor	Employee	Contractor
✓	✓	✓		
✓				
✓	✓			



Roles and Responsibilities	CEO	EVP	SVP
Provide necessary resources, manpower, budgets, and technology for effective SSHE implementation.	✓	✓	✓
Supervise staff under responsibility carry out work in compliance with legal and SSHE MS.	✓	✓	✓
Strictly comply with SSHE legislation, SSHE MS, and SSHE Plan, including training as per legal and company's standards.	✓	✓	✓
Conduct Job Safety Analysis (JSA) prior to carry out any work, identify control measures or SSHE instructions.			





VP	Manager	Supervisor	Employee	Contractor
✓				✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓
	✓	✓	✓	✓

4



Roles and Responsibilities	CEO	EVP	SVP
Supervise to wear proper Personal Protective Equipment in accordance with activity risks.			
Wear Personal Protective Equipment in accordance with activity risks and maintain it in a good condition at all times.	✓	✓	✓
Report any incident, injury, illness, and nuisance. Observe and report any unsafe act / condition to site SSHE and supervisor immediately and in a transparent manner.	✓	✓	✓





VP	Manager	Supervisor	Employee	Contractor
	✓	✓	✓	✓
✓	✓	✓	✓	✓
✓	✓	✓	✓	✓

4



4

Roles and Responsibilities	CEO	EVP	SVP
Investigate and identify root causes for incident, injury, illness, and nuisance. Provide recommendations for effective SSHE management.		✓	✓
Review SSHE performance for continuous improvement	✓	✓	✓

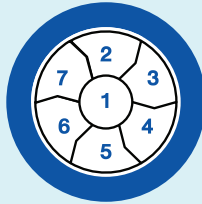




VP	Manager	Supervisor	Employee	Contractor
✓	✓	✓	✓	✓
✓	✓			✓

4





Safety, Security, Health and Environment Management System (SSHE MS)

PTTEP SSHE MS is an integrated management tool that defines our corporate SSHE policy, vision and strategy which are essential parts for operational and risk control in the organization.

SSHE MS focus on safe working environment, prevention of incident and injury, including environmental impact mitigation.



PTTEP SSHE MS is designed to align with International Association of Oil and Gas Producers (IOGP) Management System and other international standards such as ISO 14001:2015, ISO 45001:2018.

PTTEP SSHE MS comprises of 7 key elements. The structure model and brief description are as follow.





Element 1

Leadership and Commitment

Address : Top-down commitment and SSHE culture, essential to the success of the SSHE MS.

Element 2

Policy and Strategic Objectives

Address : Corporate intentions, principles of action and aspirations with respect to SSHE.

Element 3

Organization Resources and Documentation

Address : Organization of people, resources and documentation for sound SSHE performance.

Element 4

Evaluation and Risk Management

Address : Identification and evaluation of SSHE risks, for activities, products and services, and development of risk reduction measures.



Element 5

Planning and Operational Control

Address : Planning the conduct of work activities, including planning for changes and emergency response.

Element 6

Implementation and Monitoring

Address : Performance and monitoring of activities, and how corrective action is to be taken when necessary.

Element 7

Audit and Review

Address : Periodic assessments of SSHE MS performance, effectiveness and fundamental suitability.



SSHE Requirements

6.1 General Rules

All employees and contractors working within PTTEP premises need to comply with general SSHE rules as follows :

- Complete medical checkup and fitness to work associated with the risks of work to be performed.
- Do not work under the influence of drugs or alcohol.
- Wear proper clothes and make sure that a security badge is always clearly visible while on PTTEP premises.
- Study, understand, and strictly follow site rules, maintain good housekeeping and safe working environment, as well as use resources efficiently.





- Complete SSHE training as required by laws and site regulations such as:
 - o SSHE training courses for general and new employees for at least 6 hours, and additional 3 hours when changing work types or work practices.
 - o SSHE training for safety officers at a supervisory level for 12 hours.
 - o SSHE training for safety officers at management level for 12 hours.
 - o Basic Fire Fighting.
 - o Basic First Aid.
 - o Site SSHE Induction.
 - o Other SSHE training courses in accordance with the risks of work to be performed.



- Conduct Job Safety Analysis (JSA) prior to carrying out the work, including preventive measures/barriers to manage risks to As Low As Reasonably Practicable (ALARP). Also, communicate to all involved parties for implementation.
- Wear Personal Protective Equipment (PPE) associated with the risks and maintain PPE in a good and reliable condition.
- Manage the generated wastes in compliance with PTTEP's standard before demobilization.
- Report any incident, injury, illness, and nuisance. Observe and report any unsafe act/condition to site SSHE and supervisor immediately and in a transparent manner.
- Investigate the root causes of incidents and identify corrective/preventive measures for effective SSHE management.



6.2 Specific SSHE Requirements

All employees and contractors need to comply with specific SSHE requirements as follows:

6.2.1 SSHE Notification as per Legal Requirements: SSHE information shall be displayed on notice boards in all PTTEP worksites to notify necessary information to employees and contractors, i.e.

- SSHE Policy
- Rights and duties of employers and employees
- Lists, duties, responsibilities, and minutes of meetings of Occupational Health and Safety (OH&S) Committee
- Safety warning signs
- Results of work-environment measurement such as noise contour map



6.2.2 Life-Saving and Process Safety Rules


















Safety warning signs and symbols related to Life-Saving and Process Safety Rules shall be displayed in all PTTEP operating assets/sites by selecting the icons that are relevant to the risks of each operating assets/sites.



In case that Life-Saving and Process Safety Rules do not cover warning signs and safe signs, worksite safety signs are to be applied.



Examples of Thai Industrial Standard Institutes (TISI) safety signs
(Standard for Safety Colours and Safety Signs)

Geometric Shapes	Meaning	Safety Colour	Cross Colour
 Red circle with diagonal cross	Prohibition	 Red	 White
 Circle	Mandatory	 Blue	 White
 Triangle	Warning	 Yellow	 Black
 Square	Safety Condition	 Green	 White
 Square	Fire Equipment	 Red	 White



Symbol Colour	Example		
 Black	 NO ENTRY	 NO PHOTOGRAPH	 NO LITTER
 White	 WEAR HELMET	 WEAR SAFETY GLASSES	 WEAR EARMUFF
 Black	 BEWARE ACID	 CAUTION RISK OF ELECTRIC SHOCK	 BEWARE HOT SURFACE
 White	 FIRST AID FIRST AID	 EMERGENCY EXIT	 EMERGENCY EYE WASH
 White	 FIRE HORSE REEL	 FIRE ALARM	 FIRE EXTINGUISHER



6.2.3 Personal Protective Equipment (PPE)

Basic PPE requirements that employees and contractors shall wear while working in specific areas are

- Safety Helmet
- Safety Glasses
- Coverall
- Safety Shoes or Safety Boots

Employees and contractors shall conduct risk assessment with line supervisor and site SSHE to select appropriate PPE. Employees and contractors shall be trained on PPE use and maintenance.

6.2.4 Permit to Work (PTW)

All employees and contractors shall be trained on PTW for the work that may create risks to personnel, property and environment as required by PTW procedure of each operating Asset / site.

Key PTW Requirements

- All personnel performing work under a permit shall be trained and competent on PTW systems.
- Performing authority shall conduct Job Safety Analysis (JSA) and identify preventive measures / barriers to manage risk to ALARP.
- Approval authority shall ensure that all associated risks have been appropriately prevented and controlled, and clearly verified in the permit.



- SSHE toolbox talk shall be conducted at worksite involving all relevant workers prior to commencing work.
- If a handover required for any work extended over their specific duration, incoming shift personnel and subcontractors shall be aware and completely understand of that work. Good communication during shift handovers and handover note are essential and evidential.
- Once the work is completed, area authority shall inspect that worksite is re-instated to its normal condition prior to returning to operational responsibility / job handover.

6.2.5 Working at Height (WAH)

Working at height means work in any place where a person could fall 1.8 meters outside a protected environment. In case other regulations are required for working from a height of less than 1.8 meters, the control measures shall be considered as appropriate.

Key WAH Requirements

- A permit to work is required for working at height.
- Prepare working area and inspect working at height equipment such as certified scaffold, scaffold tag, barricades, and warning signs.
- Apply proper Personal Protective Equipment (PPE) such as a safety helmet with a chin strap, fall protection equipment (a full body harness, an anchorage, and a lanyard with a shock absorber).



- Dropped objects must be considered while working at height.
- Avoid working at height in poor weather conditions.
- Carefully dismantle the scaffold and other equipment. Ensure that the working area is safe before handover to area authority.

6.2.6 Contractor SSHE Management

Contractors working in PTTEP premises shall fully understand and strictly follow all applicable legislations, SSHE contract requirements, and other site-specific regulations.

Contractor shall concisely have SSHE management in place as follow:

- Develop SSHE policy, strategic objectives, targets and SSHE Monitoring Program.
- Set up SSHE rules, regulations, and requirements.
- Complete the SSHE training courses in accordance with work risks and SSHE contract requirements.
- Complete and certified for Permit to Work (PTW) system in the operating sites.
- Conduct Job Safety Analysis (JSA) and identify preventive measures / barriers prior to commencing work, and properly communicate via Toolbox Talk.



- Provide, inspect, and maintain tool and equipment in safe and good working condition.
- Provide and apply Personal Protective Equipment (PPE) associated with work risks.
- Prepare emergency response plan and regularly conduct emergency drills/exercises.
- Report any incident, injury, illness, and nuisance. Observe and report any unsafe act / condition to site SSHE, supervisor, and PTTEP contract holder immediately and in a transparent manner.
- Conduct internal and external SSHE meetings with PTTEP contract holder to review SSHE performance for continuous improvement.
- Conduct SSHE internal audit and cooperate with PTTEP for contractor SSHE compliance audit.
- Supervise subcontractors to strictly follow all applicable legislations, SSHE contract requirements, and other site-specific regulations.
- Promote contractors and subcontractors to understand roles and rights for applying stop work authority in unsafe situation.



6.2.7 Working in Confined Space

Confined space means a space that with limited entry and egress with insufficient ventilation to remain hygienic and safe condition, e.g., tunnels, wells, pits, tanks, silos, pipes, furnaces, containers, or other objects of similar characteristics. Any workers in confined space must be trained and certified for “Confined Space Training Course” as well as passed medical examination performed by a licensed medical practitioner. Personnel involved with confined space are as follows:

- Approval Authority is a person who is responsible for granting the confined space permit.
- Entry Supervisor is a person who is responsible for planning operations and preventive measures, and ensuring the safeguarding equipment and PPE are properly applied.
- Rescue Service is a person designated to look after the confined space’s entry with proper rescue or and life-saving equipment. This includes the capacity to communicate with authorized entrants for rescuing them in case of emergency.





- Authorized Entrant is a person who is authorized to enter a confined space which is potentially exposed hazards, the entrant must wear proper PPE.

Key Requirements

- The Confined Space Entry Permit is required.
- Barricades and warning signs must be clearly displayed, record all entries and exits of the confined space.
- Isolate all potential hazardous energy, e.g., electricity, pressure, chemicals, etc.
- Regularly Measure and record atmospheric hazards during operations, e.g., oxygen, flammable gases, and toxic gases. The level of oxygen concentration in a confined space is between 19.5%-23.5%. The flammable gas is no greater than 10% of its LEL (Lower Exposure Limit). Other toxic gas concentration is no greater than its exposure limit.
- There shall be no hazardous atmosphere within the confined space by ventilation or other measures. Proper PPE shall be applied.
- Use suitable equipment in the confined space such as explosion-proof or intrinsically safe equipment.



- Emergency response plan shall be in place and its drills shall be established with Authorized Entrants. All necessary equipment such as fire extinguisher or first aid kits shall be sufficient and ready-to-use.
- Before commencing work, ensure that all applicable laws and regulations of confined space entry are fully complied.

6.2.8 Working with Electricity

Employees and contractors working with electricity must be trained and certified for “Electrical Safety.”

Key Requirements for Working with Electricity

- Permit to work is required for working with electricity.
- Work planning and safe operating procedure are in place when working with electricity.
- Prior to commencing electrical works, Job Safety Analysis (JSA) shall be conducted and properly communicated via Toolbox Talk.
- Isolate all potential hazardous energy sources and apply proper lockout/tagout (LOTO) by trained and competent person. The isolation of hazardous energy (or LOTO) shall be tested prior to beginning work.
- Select appropriate electrical tools and equipment to match the voltage levels of the load and work environments.



- Install electrical safety equipment that is suitable for its intended use and working conditions in which it is operated, e.g., insulation sheets, electrical wire insulation, porcelain insulators, etc.
- Apply proper PPE that is used for electrical hazards protection and match the voltage levels e.g., insulating gloves and sleeves, non-conductive helmet, electrical shock resistant footwear manufactured with non-conductive electrical shock resistant soles and heels, etc.
- Emergency preparedness and response plan shall be in place and regularly exercised. This includes the adequacy and readiness of fire extinguishers and first aid equipment.

6.2.9 Material Handling

Material handling can be performed mechanically or manually. Employees and contractors associated with material handling must complete material handling safety training course.

Key Requirements for Mechanical Lifting

- Lift plan shall be developed and approved by authorized person prior to starting lifting activities.
- Crane operator and forklift truck operator shall be competent, certified, and authorized to operate crane and forklift truck.

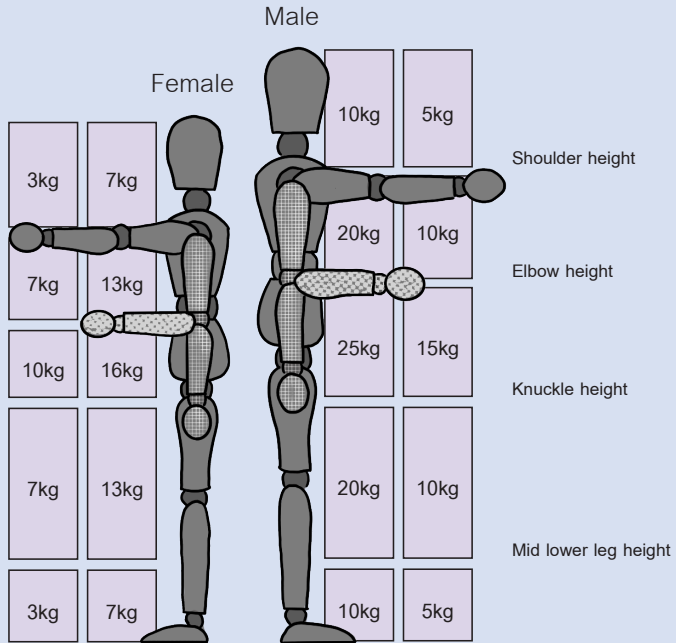


- All personnel involved with the lifting operation, i.e., crane operators, signaler, riggers and site lifting controllers, shall clearly understand communication signals and the type of hand signals used.
- All lifting equipment and accessories shall be inspected and certified with PTTEP colour code standard prior to use. The use of lifting equipment exceeding the load limit is prohibited.
- Barricade working area within the swing radius of the crane properly and clearly display Life Saving Icon.
- Apply proper PPE for the type of work.



Key Requirements for Manual Handling

- Assess the weight to be carried out. The maximum weight a person can lift shall not exceed 23 kilograms.



The guideline for manual lifting and lowering
(Source: Health and Safety Executive, 1992)



- Stand close to the load.



- Squat down bending at the knees and keep the back straight upright.
- Begin the lift using the legs by straightening them. Do not lift with the back.
- Do not twist the body during lifting.
- Keep the load close to the body and ensure that the eyesight is not blocked by the item.



6.2.10 Chemical Management

Chemical safety management involves considering all risks associated with the chemical life cycle, i.e., selection, purchase, transport, storage, use, disposal and emergency response. Persons working with chemicals shall understand the physical and chemical characteristics of all chemicals they work with. Furthermore, the logistics and warehouse personnel, and chemical users shall be trained for chemical safety prior to carrying out the work.



Key Requirements

- A purchase of new chemicals shall be assessed and approved by SSHE and Permit & License discipline through New Chemical Registration.
- All chemicals shall be registered for controlling type, quantity, use, and storage.
- All chemicals require Safety Data Sheet (SDS) with labels following Globally Harmonized System of Classification and Labelling of Chemicals (GHS) and NFPA 704
- Logistics of all chemicals shall comply with the requirements of the United Nation Recommendations on the Transport of Dangerous Goods (UNRTDG).
- Persons working with chemicals shall understand and follow all information outlined in the Safety Data Sheet. Proper PPE shall be applied.
- Chemical spill response plan shall be in place and regularly exercised among those working with chemicals, i.e., warehouse and logistics personnel, and chemical users. Fire extinguishers and first aid equipment shall be sufficient and ready for immediate use.





Components Of A GHS-Compliant Label

product identifier	AMMONIA		pictograms
signal word	DANGER		
hazard statement	TOXIC IF INGESTED		
precautionary statements	<p>Wash hands thoroughly after handling. Keep container tightly closed when not in use. Keep away from heat, sparks and open flames - may explode when exposed to high heat. Use in an open area that is well-ventilated. Breathing in ammonia is irritating and corrosive. Wear protective gloves and safety goggles to prevent burns and irritation.</p> <p>If swallowed: Immediately call Poison Control or doctor/physician. Drink water or milk to dilute ammonia.</p>		
supplier information	ABC Chemicals - 123 Main Street - Cincinnati, OH - www.abcchem.com - 800-733-5252	<p>See Safety Data Sheet (SDS) for further details regarding safe use of this product.</p>	

A GHS/ NFPA 704 Chemical Label

<p>CLASS 1: EXPLOSIVES</p> <p>Division 1.1, 1.2 and 1.3 Division 1.4 Division 1.5 Division 1.6</p>	<p>CLASS 5: OXIDIZING SUBSTANCES AND ORGANIC PEROXIDES</p> <p>Division 5.1 Oxidizing substances Division 5.2 Organic peroxides</p>
<p>CLASS 2: GASES</p> <p>Division 2.1 Flammable gases Division 2.2 Non-flammable, non-toxic gases Division 2.3 Toxic gases</p>	<p>CLASS 6: TOXIC AND INFECTIOUS SUBSTANCES</p> <p>Division 6.1 Toxic substances Division 6.2 Infectious substances</p>
<p>CLASS 3: FLAMMABLE LIQUIDS</p>	<p>CLASS 7: RADIOACTIVE MATERIALS</p>
<p>CLASS 4: FLAMMABLE SOLIDS</p> <p>Division 4.1 Flammable solids Division 4.2 Substances liable to spontaneous combustion Division 4.3 Substances which in contact with water emit flammable gases</p>	<p>CLASS 8: CORROSIVE SUBSTANCES</p> <p>CLASS 9: MISCELLANEOUS DANGEROUS SUBSTANCES AND ARTICLES</p>

An UNRTDG Transportation Label



6.2.11 Environmental Management

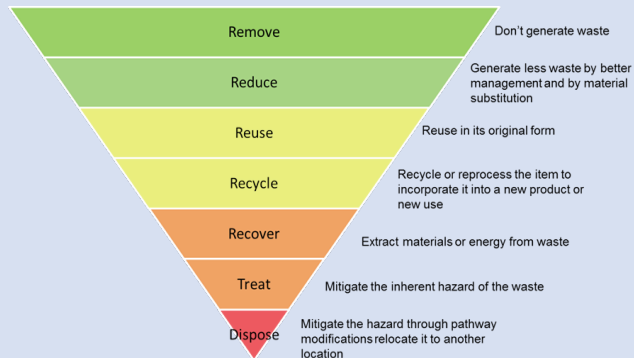
Employees and contractors shall strictly follow the requirements of Environmental Management Plan and related laws to prevent and mitigate environmental impacts.

- Comply with mitigation measure and monitoring program in accordance with Environmental Impact Assessment (EIA) report for exploration, production, and decommissioning activities.
- Control and prevent oil or chemical spills from any operations. Regularly conduct spill response drills and ensure that spill response equipment is ready to use.
- Reduce greenhouse gas and air pollution emission. Improve energy efficiency and promote renewable energy consumption.
- Efficient use of water resources. Minimize freshwater consumption in the process and enhance water recycling.
- Conserve and revitalize the biodiversity and ecosystem services in the operating Assets/site such as endangered species, local seedings, and including forestation.
- Cultivate the value of responsible resource uses to protect, preserve, and prolong natural resources and environment.



6.2.12 Disposal Management

Employees and contractors shall manage waste from their operations or worksites in accordance with PTTEP standard before demobilization by strictly complying with waste management plan and applying “5R’s” Hierarchy: Remove, Reduce, Reuse, Recycle and Recover to reduce an amount of waste generation or disposal as shown below.



5R's Hierarchy

The process of waste segregation and packing shall be done properly according to the following principles:



- Segregate waste and pack in the color-coding containers in the table below

Color Coding for Waste Container	Category	Sub-category
Blue	Non-hazardous waste	Non-recyclable waste
Yellow	Non-hazardous waste	Recyclable Waste
Red	Hazardous waste	All hazardous wastes, except battery, fluorescent lamp and light bulb
Orange	Hazardous waste	Battery, fluorescent lamp and light bulb

- Store waste in the designed area and deliver waste to licensed waste management facility.
- Prevent waste from spills, leaks, or contamination to environment. If leaks and spills happened, report the supervisor or person-in-charge immediately.



- Waste labelling on container is required: recyclable waste, general waste, battery waste, fluorescent waste, hazardous waste, infectious waste, and mercury-contaminated waste. The waste labels used for waste collection shall be prepared differently from waste labels used for transportation.
- PTTEP waste labels require the following information:
 - Waste characteristics (or attached SDS)
 - Present wording “Hazardous Waste” or “Non-hazardous Waste”
 - Specific name of waste
 - Applied UN number, if any
 - Weight or volume
 - Packaging sealed date
 - Details of proposed final treatment/disposal site
 - Criteria for container and transportation
 - Precaution statement
 - Asset/Project details which include name, address, and contact number
- The waste label should be clearly visible. Do not place the waste label with other information to avoid any confusion.

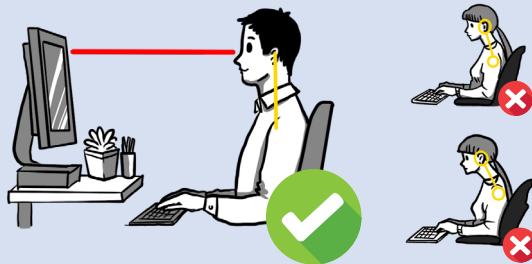


6.2.13 Working with Computer

Company usually provides suitable computer workstations for employees to prevent possible work-related injury and illness, e.g., adjustable ergonomic chairs, height-adjustable computer monitor, etc.

General recommendations:

- Install computer monitor in position that avoid glare or reflections. Adjust the brightness and contrast on the screen to suit lighting condition.
- Adjust the monitor height so that the top line of the screen is at or below eye level. Put monitor directly in front of the user and at least an arm length away.



- Adjust the chair to the proper height that allow the feet to rest flat on the floor or use a footrest.



- Back is fully supported with appropriate lumbar support when sitting vertical or leaning back slightly. Knees are about the same height as the hips and about 5 centimeters away from the edge of the chair.

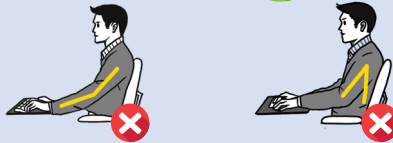




- Shoulders shall be relaxed, and upper arms hang normally at the side of the body. Elbows stay in close to the body and are bent at 90 degrees. Wrists should be straight and in-line with forearms with neutral wrist postures when using keyboard.



- Mouse shall be held gently with full palm and finger. Position the mouse to maintain a straight, neutral wrist posture.



- Take regular breaks when carrying out repetitive tasks or prolong use of computer.

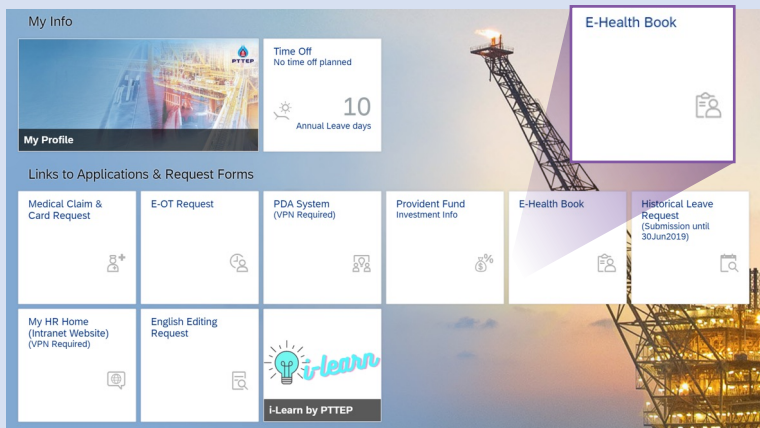


6.2.14 Annual Medical Check-Up

The company provides annual medical check-up and medical surveillance in accordance with the law requirements and the risks of exposure to health hazards such as hazardous chemical, noise, etc. All medical check-up results are kept in the company's electronic file named PTTEP Health Book Application that employees can access by themselves as described below.



1. To access PTTEP Health Book Application can be done via the following 3 channels.
 - Go to the system WeConnect. Choose Health Book.







- Go to web browser <https://pttephealthbook.bdms.co.th/#/> via Google Chrome, Microsoft Edge, or Safari.

← → ↻ 🔒 pttephealthbook.bdms.co.th/#/

- Download PTTEP Health Book Application at Google Play or Play Store

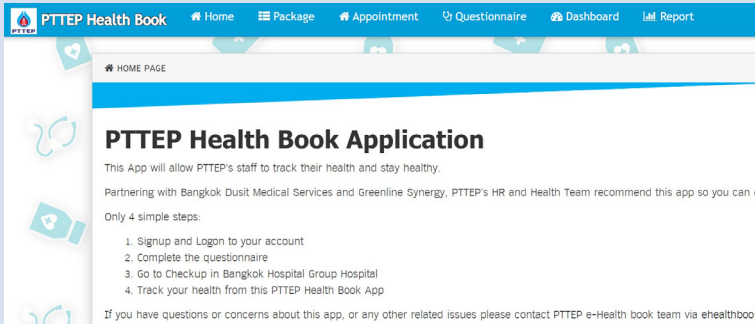


- In the first log in, employee shall register to ask for the password (by filling employee ID and employee email). Then, the password will be sent to the employee email for login and access to the Health Book application. Please be reminded that Health Book Application uses a different password from any PTTEP login so, employee may need to ask for the password reset in case you forget it.

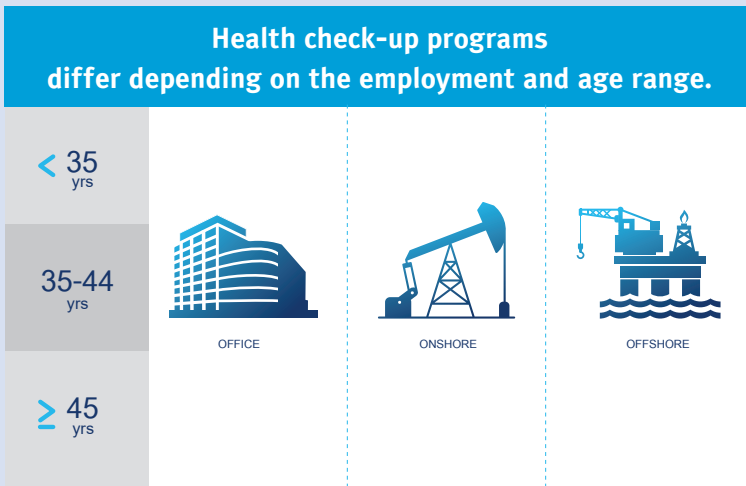
 Sign up	 Login
<input type="text" value="Name"/>	<input type="text" value="Type in your email"/>
<input type="text" value="Employee ID"/>	<input type="text" value="Type in your password"/>
<input type="text" value="Email"/>	<input type="button" value="Log in"/>
<p>By clicking on Sign up, you agree to terms & conditions and privacy policy</p> <input type="button" value="Sign up"/>	<p>Forgot your password?</p> <p>Don't have an account yet? Sign up</p>
<p>Already have an account? Log in now</p>	



- After login, employee can select each function to monitor the health examination results from both pre-employment and annual medical check-up program.




- Medical Questionnaire shall be completed before going for annual medical check-up.





- Appointment is used to select the date and hospital for annual medical check-up

New Questionnaire

-  เริ่มกรอกแบบสอบถาม

- Dashboard demonstrates your health information such as BMI, LDL, and the risk of cardiovascular disease.


🏠 APPOINTMENT

การนัดหมายตรวจสุขภาพ (Checkup Appointment)

APPOINTMENT REQUEST SENT

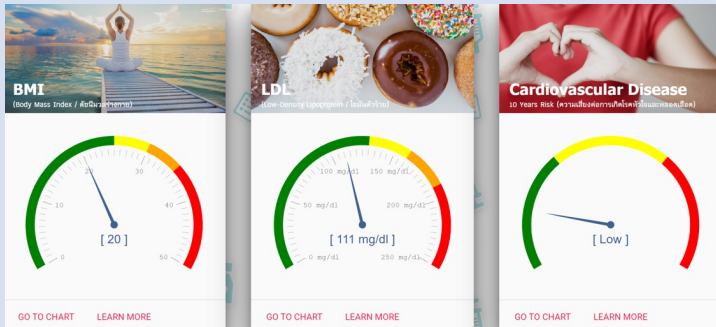
Appointment Date : Fri Mar 19 2021

Hospital : Samitivej Sukumvit Hospital

download appointment file to import into your calendar 



- Dashboard for Health Information by PTTEP








- Report is the database of your health examination results covering pre-employment, annual medical check-up, and medical surveillance program.

- Dashboard
- Pre-Employment Examination Report
- Annual Examination Report
- Pre-Placement Examination Report
- Medical Surveillance Examination Report
- Personal Analytic Report
- Health Risk Profile Report



Examples of pre-employment examination and annual medical checkup results

Annual examination report

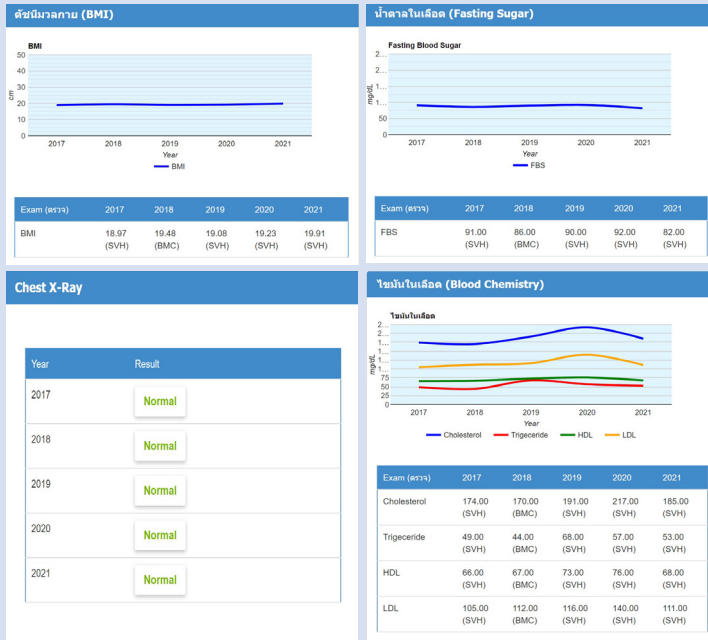
โรงพยาบาล (Hospital)	Samitivej Sukhumvit Hospital
รหัสโรงพยาบาล (HN)	1116015760
รหัสพนักงาน (Employee ID)	12345
ชื่อ - นามสกุล	สมหวัง ทุกสิง
Name - Surname	Somwang Tuksing
เพศ (Sex)	Female
อายุ (Age)	36
วันเกิด (Date of birth)	31/12/1985
วันที่ตรวจ (Checkup date)	19/03/2021 09:25
Checkup Program	แพทย์ผู้ג อารุทระหว่าง 35-44 ปี (Office)
Special Assignment	

การตรวจร่างกาย (Physical Examination)

ส่วนสูง (Height)	161 (cm)
น้ำหนัก (Weight)	51.6 (kg)
ดัชนีมวลกาย (BMI)	19.91
น้ำหนักเหมาะสมเมื่อเทียบกับส่วนสูง	
เส้นรอบเอว (Waistline)	67 (cm)
เส้นรอบเอวอยู่ในเกณฑ์ปกติ	
อัตราการหายใจ (Respiratory Rate)	
	18 (BPM)
ความดันโลหิต (Blood Pressure)	
	108/59 (mmHg)
ความดันโลหิตปกติ	
ชีพจร (Pulse)	
	46 (BPM)

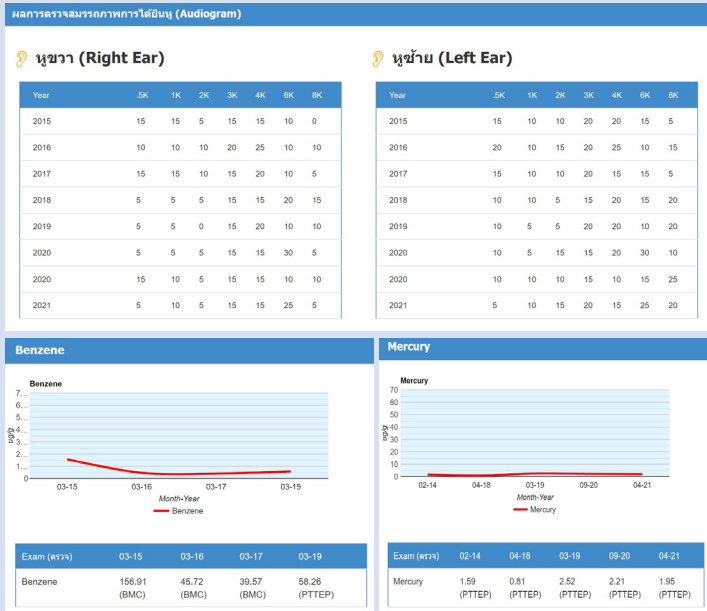


Comparative analysis of medical examination results for 5 Years





The results of medical surveillance.



- Any question on annual medical checkup, please email to medicalteam@pttep.com
- Any question on PTTEP Health Book Application, please email to ehealthbook@pttep.com



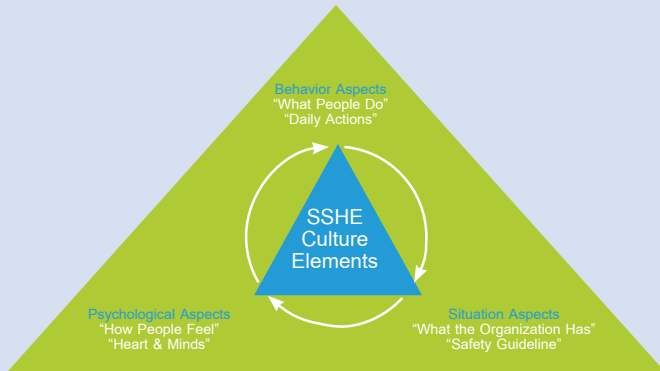
6.2.15 PTTEP SSHE Leadership Model



6.2.16 SSHE Culture

PTTEP SSHE Culture has been strongly promoted after the SSHE climate survey conducted in 2011. PTTEP focuses on three main aspects of SSHE Culture:

1. Psychological Aspects
2. Behavior Aspects
3. Situation Aspects



Psychological Aspect – PTTEP cultivates SSHE leadership among employees at all levels to let everyone aware on roles and responsibilities in commencing works safely. PTTEP top managements empower and reinforce the right to use of the Stop Work Authority when workers observe unsafe activities with understanding and willingness.

Behavior Aspects - According to several research studies, the underlying cause of incidents involves workers' unsafe behaviors as they perform tasks without realizing negative impacts from such behaviors. Behavior Base Safety (BBS) is an approach to observe safe and unsafe behaviors. All PTTEP employee are required to complete the BBS training course that enhance the skills in observing and identifying their colleagues' unsafe behaviors. The observer shall stop such unsafe acts and intervene by asking the observed to re-think about the potential hazards and bad consequences from unsafe behaviors.



The BBS helps reduce unsafe behaviors and incident rates in the organization, including promoting SSHE leadership and confidence to express opinions among all employees.



Situation Aspects - one of factor that helps generate SSHE Culture is the availability of SSHE Management System (SSHE MS) that control the risks of each operations. PTTEP has continuously developed SSHE MS by applying PDCA (Plan–Do–Check–Act) in accordance with International Association of Oil and Gas Producers or IOGP. The SSHE MS is considered as minimum requirement for all disciplines in PTTEP to be followed.



Effective SSHE MS implementation is necessary to consider the following aspects:

- Develop safe operating procedures by aligning with international standards, best practices, and any related laws.
- Organise training programmes to provide knowledge, understanding and advice to whom it may involve.
- Provide necessary resources such as safety devices, certified equipment, process control tool, budgets, etc.
- Supervise, emphasize, and promote employees and contractors to comply with SSHE MS.
- Conduct SSHE audit and review regularly.

Employees at all levels need to know their roles and responsibilities including two-way communication to solve problems and develop better systems/procedures that could lead to generate strong SSHE Culture.

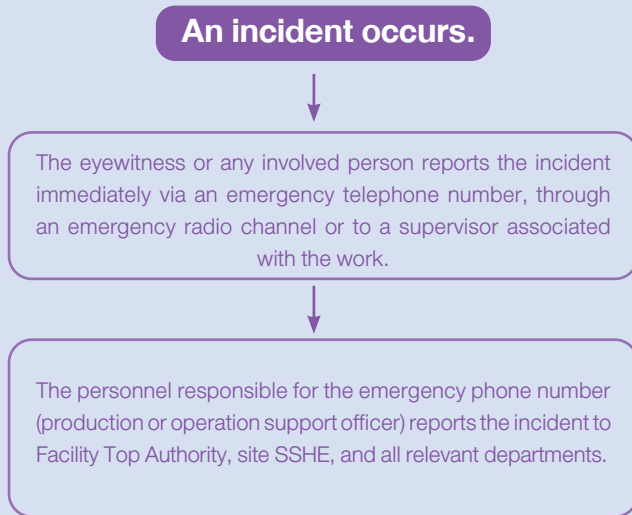
6.2.17 BBS Observation and Incident Reporting

For effective SSHE MS implementation, all employees and contractors shall immediately and transparently report any incident occurred in PTTEP operations to ensure that a case is properly managed and able to prevent any further incident. In addition, all employees and contractors shall observe and report both unsafe conditions / actions occurred in the organization



Key Requirements for Incident Reports

- Typical incident reporting workflow is illustrated below.



- Basic information of the incident to be reported are:
 - The exact location or place
 - Activity
 - Date and time
 - Description or summary
 - Consequence
 - Reporter name with contact number
 - Involved or injured person
 - Relevant pictures

Remark: Incident severity level 1 and 2 shall be reported via PTTEP online system within 48 hours, while incident severity level 3-5 shall be reported within 24 hours.



BBS Observation

The 5 steps to observe and report both safe and unsafe situation via Safety Observation and Communication (SOC) card are:

- 1) Plan for area(s) or task(s) prior to observation, this could help the observer's better preparation.
- 2) Stop and take time to observe workers' safe behaviors including tool, equipment, hazard environment, and reaction of observed worker.
- 3) Communicate observation results to observed worker on both safe and unsafe practices. Compliment the person who performing safe practices. For person who performing at risk practices, ask him/her to determine actions to eliminate that risk or stop work, if necessary.
- 4) Make a commitment to work safely. Record observation results in the SOC card and indicate improvement in action.
- 5) Submit the supervisor the SOC card to get advice and analyze statistics for improvement. Then pass the card to Site SSHE.



In addition, Hazard Report Card (HRC) is used to report the risks of non-conformance or unsafe conditions which the approach steps are as same as SOC.

6

PTTEP Hazard Report Card		PTTEP Hazard Report Card	
Report No. / No. Report Card: [] / []		Report No. / No. Report Card: [] / []	
Form Name / Date of Report: [] / []		Form Name / Date of Report: [] / []	
Location and area: []		Location and area: []	
User (Time) []		User (Time) []	
Title of the hazard / Issue (do you see? Risk or hazard): []		Title of the hazard / Issue (do you see? Risk or hazard): []	
Classification / Category Risk/Severity (S) Value / Please tick in the box <input type="checkbox"/> Catastrophic / Catastrophic <input type="checkbox"/> Major / Major <input type="checkbox"/> Moderate / Moderate <input type="checkbox"/> Minor / Minor <input type="checkbox"/> Negligible / Negligible		Risk Assessment Likelihood / Frequency / Hazard Severity <input type="checkbox"/> Very High / Very High <input type="checkbox"/> High / High <input type="checkbox"/> Moderate / Moderate <input type="checkbox"/> Low / Low <input type="checkbox"/> Negligible / Negligible	
Recommended corrective actions Action Identified / Action By / Submittal Date / Status		Recommended corrective actions Action Identified / Action By / Submittal Date / Status	
Signatures / Reporter: [] Unit / Department: [] / Job / Company: []		Signatures / Reporter: [] Unit / Department: [] / Job / Company: []	

A Hazard Report Card (HRC)

Employees can report SOC and HRC via both hard copies and electronic files.



6.2.18 Emergency and Crisis Management

Emergency and crisis management can be divided into 3-Tier response level as follows:

- Tier 1: Emergency situation that can be handled by on-site Emergency Response Team (ERT).
- Tier 2: Emergency situation that cannot be handled by the on-site ERT. It needs to request an assistant from Emergency Management Team (EMT) and local authorities.
- Tier 3: Crisis situation that is handled by the Crisis Management Team (CMT) and managed the incident by the CEO as CMT leader. The external assistant from both national and international authorities may be required.

General requirements:

- Every employee, contractor and visitor shall complete on-site SSHE induction and clearly understand site emergency plan, evacuation plan, emergency alarm, and muster/ assembly point.



- Each operating asset/site shall conduct on-site emergency response and crisis management exercise as required by the organisation itself or by applicable laws.
- Each operating asset/site shall set up an emergency response team (ERT) or duty roster that can respond to emergency and crisis situation at all times (24 hours).

In case of emergency, it is required to act as follow:

Follow site emergency and crisis management plan when in emergency situation.

Stop work and return working area in safe condition, if possible.

Report situation to the site's emergency call center
- name of reporter or witness
- the Incident scene
- description of the incident

Evacuate to the muster / assembly point, if required or heard an evacuation alarm.

Follow instructions of the person-in-charge at the assembly point.



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