

ภาคผนวกที่ 5

คู่มือความปลอดภัย มั่นคง อาชีวอนามัย และสิ่งแวดล้อม (SSHE-MS)



**PTTEP**

PTT Exploration and Production Public Company Limited

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## **SSHE Management System**

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**Document Number: 11038-STD-SSHE-000-R06**

**March 2023**

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Document Owner	Safety, Security, Health and Environment Division (CSH)
Prepared by	[REDACTED] (Engineer, Planning and Assurance)
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Review			
	Name	Signature	Date
Document Custodian	[REDACTED] VP, Process Safety and Assurance Department	[REDACTED]	21-Mar-2023
Document Reviewer	[REDACTED] Manager, Planning and Assurance Section	[REDACTED]	22-Mar-2023
	[REDACTED] VP, Environment Management Department	[REDACTED]	23-Mar-2023
	[REDACTED] VP, Safety Management Department	[REDACTED]	22-Mar-2023

Approval			
	Name	Signature	Date
Document Owner	[REDACTED] SVP, Safety, Security, Health and Environment Division	[REDACTED]	23-Mar-2023
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This document shall be reviewed every 5 years from the date of approval or revised earlier if necessary.

Revision History			
Rev.	Description of Revision	Authorized by	Effective Date
0	New	PEP	November 2005
1	<p>This PTTEP SSHE MS replaces the PTTEP SSHE MS – Standard.PSH.009, Rev.0 issued November 2005. Changes to the document include:</p> <ul style="list-style-type: none"> <li>• CEO accountability towards SSHE MS.</li> <li>• SSHE organisation structure and linkage among SSHE Department, SSHE advisors and operating Assets.</li> <li>• Roles and responsibilities of key positions as well as integration of supplementary part into the main context.</li> <li>• Integration of the supplementary part into the main context.</li> </ul>	CEO	October 2008
2	<p>This PTTEP SSHE MS Rev.2 replaces Rev.1 October 2008. Changes to the document are detailed below:</p> <ul style="list-style-type: none"> <li>• Position titles changes that reflect new organisation structure issued on 1 April 2010.</li> <li>• SSHE Vision and Mission and SSHE Policy updates.</li> <li>• Integration of OHSAS 18001:2007 into this Management System, especially the aspects of participation and consultation in Element 3 Organisation and Resources. (3.4 – SSHE Communication).</li> <li>• Definitions of the roles and responsibilities of the management representative.</li> <li>• Comprehensive changes made as a result of the SSHE MS internal audit conducted in October 2010.</li> <li>• Customisation of SSHE MS Element 5 and 6.</li> <li>• Exclusion of some of the previously existing content. Only clearly focused and distinctly targeted content was retained.</li> </ul>	CEO	December 2010
3	<p>This PTTEP SSHE MS Rev.3 replaces Rev. 2 (Dec.2010). Significant changes to this document include:</p> <ul style="list-style-type: none"> <li>• SSHE Documentation Management Standard document structure aligned with (SSHE-106-STD-330), ARIMS and PEGS documents.</li> </ul>	CEO	November 2011

Revision History			
Rev.	Description of Revision	Authorized by	Effective Date
	<ul style="list-style-type: none"> <li>SSHE MS elements have been revised so as to comply with the IOGP Guidelines for the Development and Application of Health, Safety and Environmental Management Systems (IOGP Report No. 6.36/210). Planning part is now highlighted in Element 5 of the SSHE MS. Titles of Element 5 and 6 have also been updated as follows: <ul style="list-style-type: none"> <li>Element 5: Implementation and Operational Control to Planning and Operational Control.</li> <li>Element 6: Monitoring and Measurement to Implementation and Monitoring.</li> </ul> </li> <li>SSHE Culture is now included in Element 1 – Leadership and Commitment to support the Step Change in SSHE initiative, further enabling speedier Company movement towards becoming an LTI-Free Organisation by 2013 and a TRI-Free Organisation by 2015.</li> <li>Updated SSHE KPI rationale (Leading and Lagging Indicators) is now included in Element 6 - Implementation and Monitoring.</li> <li>List of SSHE Standards and document codes referred to in each SSHE MS element and sub-element have been revised.</li> </ul>		
4	<p>This PTTEP SSHE MS Rev.4 replaces Revision 3.</p> <ul style="list-style-type: none"> <li>The style of the manual was changed to explain how SSHE is managed in PTTEP.</li> <li>The document highlights the available SSHE Standards and their supporting SSHE Procedures and Guidelines.</li> <li>Updated Company SSHE Vision, Mission and Policy.</li> <li>Incorporated the new way SSHE is organised within the Company (SSHE Operating Model).</li> <li>More detail provided In Section 6.4.1 SSHE Risk Assessment.</li> <li>The Hazard and Effects Management Standard, SSHE-106-STD-410 has been removed as it was a duplicate of SSHE-106-STD-400 Risk Management Standard.</li> </ul>	CEO	November 2016

Revision History			
Rev.	Description of Revision	Authorized by	Effective Date
	<ul style="list-style-type: none"> <li>Process Safety Management Standard SSHE-106-STD-440 has replaced the Asset Integrity Management Standard SSHE-106-STD-430. Asset Integrity Management is documented in OEMS documents element 5 Reliability and Asset Integrity.</li> <li>Added Human Factors Engineering (Standard, SSHE-106-STD-450).</li> <li>Personal Protective Equipment (PPE) Standard, SSHE-106-STD-580 has been removed and the requirements have been incorporated in SSHE-106-STD-540 Operation Safety Management Standard.</li> <li>6.5.7 Management of SSHE Aspects been replaced by Sections for Environment Management, Security Management, Operational Safety Management and Occupational Health Management.</li> <li>Added 6.5.10 PTTEP Life Saving Program.</li> <li>References to CMS documents have been updated.</li> <li>Added for clarity Appendix B Key Accountabilities Function Group and Line Partner SSHE Staff.</li> </ul>		
5	<ul style="list-style-type: none"> <li>Company reorganisation (section 6.3) taken into account. References to CEO and President clarified.</li> <li>SSHE-SD Council becomes the SSHE Council.</li> <li>Section 6.6.3 Behaviour Based Safety amended to be SSHE Culture.</li> <li>Amendments after feedback from POS SSHE: <ul style="list-style-type: none"> <li>Replaced ISO14001:2004 with ISO14001:2015.</li> <li>Section 6.3.3 amended hierarchy of meetings.</li> <li>Section 6.5.3 amended reference to ISO14001 Implementation and Checklist Guideline.</li> </ul> </li> <li>Appendix B added responsibilities to title.</li> </ul>	CEO	March 2018

Revision History			
Rev.	Description of Revision	Authorized by	Effective Date
6	<ul style="list-style-type: none"> <li>Restructured the SSHE Management System contents to align with the new SSHE Operating Model.</li> <li>Incorporated the SSHE Corporate oversight activities and requirements stated in the Corporate Oversight of SSHE MS Standard (Document Code: 11038-STD-SSHE-301) into this SSHE Management System.</li> <li>Obsoleted the Corporate Oversight of SSHE MS Standard (Document Code: 11038-STD-SSHE-301).</li> <li>Revisited and amended the correspondence between PTTEP SSHE MS requirements and other recognized standard requirements, i.e. ISO, IOGP, and PTT Group OEMS.</li> </ul>	CEO	March 2023



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## INTRODUCTION

### 1.0 PURPOSE

The PTTEP's Safety, Security, Health, and Environment Management System (SSHE MS) is an integrated management tool essential to mitigate risks induced by the Company's operations or activities. The focus is on ensuring a safe work environment, preventing work-related accidents and injuries, and environmental impacts. The success of the SSHE MS requires total commitment from PTTEP staff and contractors at all levels.

This document provides an overview of how PTTEP manages SSHE and highlights the available SSHE MS documents to manage SSHE risks. The Corporate SSHE Division should conduct oversight activities to verify and validate the effectiveness of SSHE MS implementation regularly.

The PTTEP SSHE MS is aligned with the following:

- The International Association of Oil & Gas Producers (IOGP) applicable frameworks or guidelines; and
- The internationally recognized standards, e.g. ISO 14001, ISO 45001, etc.

(See the correspondence between PTTEP SSHE MS and other requirements in Appendix A)

The PTTEP SSHE MS comprises seven (7) key elements. The structure model and brief description of each element are illustrated in Figure 1 and Table 1, respectively.



**Figure 1: PTTEP SSHE Management System**

**Table 1: Key Elements of the PTTEP SSHE MS**

SSHE MS Element	Addressing
1. Leadership and Commitment	Top-down commitment and SSHE culture essential to the success of the SSHE MS
2. Policy and Strategic Objectives	Corporate intentions, principles of action, and aspirations with respect to SSHE
3. Organization, Resources and Documentation	Organization of people, resources, and documentation for sound SSHE performance
4. Evaluation and Risk Management	Identification and evaluation of SSHE risks for activities, products, and services, and development of risk reduction measures
5. Planning and Operational Control	Planning the conduct of work activities, including planning for changes and emergency response
6. Implementation and Monitoring	Performance and monitoring of activities and how corrective action is to be taken when necessary
7. Audit and Review	Periodic assessments of SSHE MS performance, effectiveness, and fundamental suitability

## 2.0 SCOPE

This SSHE MS applies to all operating assets, projects, and its subsidiaries where PTTEP has control as the operator. It also covers all operations, activities, and personnel working for or on behalf of PTTEP unless otherwise specified. However, as applicable, the SSHE MS can be used as a framework for projects and other business areas that are not directly related to exploration and production activities.

Where contractors are required to perform specific activities, the PTTEP Contract Holder shall determine through the mode of contract assessment whether the PTTEP SSHE MS will apply to those activities. The same conditions will apply to all sub-contracted personnel. In all circumstances, PTTEP will attempt to positively influence SSHE aspects of the work as far as practicable.

## 3.0 DEFINITIONS AND ACRONYMS

### 3.1 TERMS AND DEFINITIONS

All terms and definitions in this document can be reached at [SSHE Intranet > SSHE MS > SSHE Terms and Definitions](#).

### 3.2 ACRONYMS

All acronyms in this document are available at [SSHE Intranet > SSHE MS > SSHE Acronym](#).

## REQUIREMENTS

### 4.0 SAFETY, SECURITY, HEALTH, AND ENVIRONMENT MANAGEMENT SYSTEM

Below is an overview of how PTTEP manages SSHE by the seven (7) elements of the SSHE MS.

#### 4.1 LEADERSHIP AND COMMITMENT

Leadership, commitment, and active support from top management (CEO, EVPs, SVPs, or other designated persons) are critical for the success of the SSHE MS and the achievement of its intended outcomes.

Top management shall apply SSHE leadership to their own areas of responsibility and support others in the organization in relevant management roles. For example, but not limited to:

- Consider SSHE risks and impacts on business direction and decision making.
- Provide necessary resources to implement SSHE MS effectively.
- Ensure compliance with all applicable legislation and other related requirements.
- Encourage SSHE communication and listen to the concerns of the workforce.
- Lead as a role model to support SSHE activities.
- Promote the right to stop work if any unsafe situation is found.
- Impel the achievement of SSHE KPI and continual improvement.

PTTEP also encourages all workforces to commit and prevent all incidents through proactive personal and process safety matters. It is the ultimate intention for achieving a zero incident organization.

**Reference:** Roles and responsibilities are defined in each SSHE MS document.

#### 4.2 POLICY AND STRATEGIC OBJECTIVES

##### 4.2.1 SSHE Policy

In an effort to improve performance, the PTTEP SSHE Policy addresses the safety, security, health, and environmental objectives, aspirations, principles of action, and commitments. It shall be formulated in accordance with the organizational context and include a commitment to:

- Manage SSHE-associated risks.
- Fulfill its compliance obligation.
- Engage the workforce participation and consultation.
- Continuously improve the SSHE MS and its performance.

The Corporate SSHE Division outlines the SSHE Policy. It shall be annually reviewed and approved or endorsed by CEO if there are any changes. Then, SSHE policy shall be communicated within the organization and be available for interested parties.

**Reference:** 11038-PCY-SSHE-001 SSHE Policy

#### **4.2.2 SSHE Strategic Objectives**

The Corporate SSHE Division shall develop the SSHE vision and missions that indicate the purpose statement of the organization to achieve the desired outcomes. After endorsement by the CEO, the SSHE vision and missions shall be communicated to all employees via appropriate channels.

In addition, the Corporate SSHE Division should define the strategic objectives and develop roadmaps to ensure its achievement by considering the following factors.

- Business requirements and direction
- Key focused areas from SSHE risks and aspects
- Competitive performance from industry benchmarking
- Balancing between available resources and capability
- Milestones of each strategic plan with short and long-term priorities

A designated roadmap should be considered in the annual Work Program and Budget (WPB) and communicated to SSHE focal point for acknowledgment and alignment.

To ensure the international recognition of SSHE MS, all operating assets shall certify ISO 14001 for the environmental management system.

**Reference:** SSHE Intranet > Home > SSHE Vision, Missions, and Policy > Vision and Missions

#### **4.2.3 SSHE Key Performance Indicator (KPI)**

SSHE KPI shall be established to measure the effectiveness of SSHE MS implementation and performance management within the organization by comparing results with a set of indicators. SSHE KPI shall be:

- Consistent with SSHE policy.
- Applicable at both company and line organization levels.
- Communicated to all concerned parties.
- Monitored its results regularly.

The Corporate SSHE Division shall establish the rationale for developing SSHE KPI and propose the annual targets to the SSHE Council for endorsement. It is recommended to set KPI targets by benchmarking with peers or other companies in the oil and gas industry (e.g. IOGP) for being a top quartile performer.

Achievement of the KPI will directly affect the staff remuneration through the performance management system. Each line management shall consider adding SSHE KPI into individual performance evaluation, as applicable.

**Reference:** 11038-STD-SSHE-202 Corporate SSHE Plan, SSHE KPI's and Performance Monitoring Standard

## **4.3 ORGANIZATION, RESOURCES AND DOCUMENTATION**

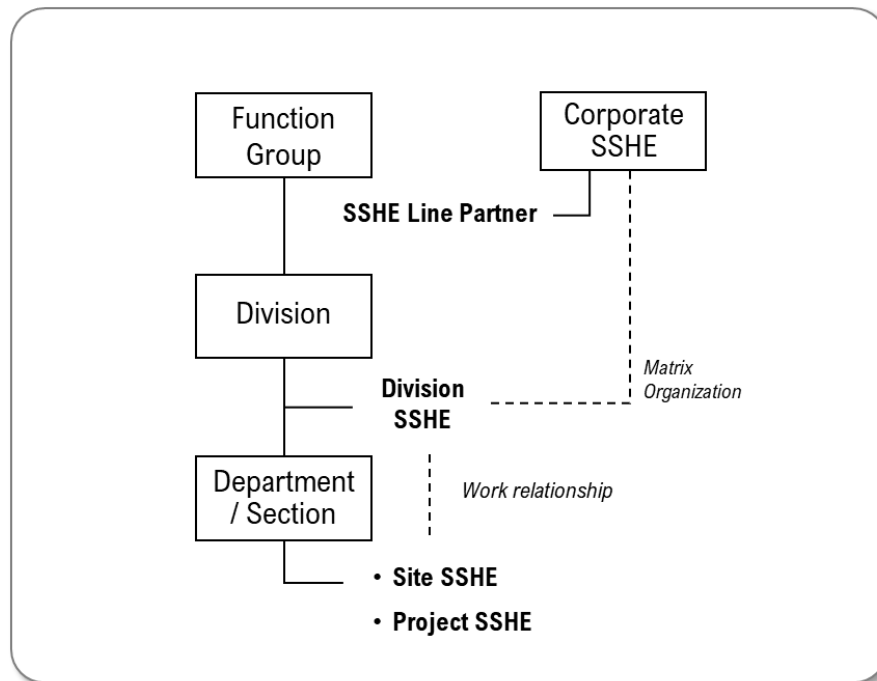
### **4.3.1 SSHE Organization and Resources**

Top Management is responsible for reviewing and setting the Company's SSHE vision, missions, policy, and strategic objectives.

SSHE is everyone's responsibility. However, to ensure the effectiveness of policy and management system implementation, the SSHE organization or SSHE operating model is established by applying the principle of PTTEP matrix organization where:

- The Corporate SSHE Division serves as the Center of Excellence to set SSHE direction, provide support for the activities that require in-depth expertise and perform corporate oversight activities.
- SSHE professionals reporting to Line Management are responsible for implementing the SSHE MS in their organization. In case additional support is required in a short period or capability limit, they may consult with or request manpower support from the Corporate SSHE Division via Service Level Agreement (SLA) or Request for Services (RFS).
- SSHE function is identified as a corporate-governed function. Thus, the SSHE professionals working at the division level, called SSHE focal points, will have a solid-line reporting directly to their Line Management and a dotted-line reporting to the Corporate SSHE Division Senior Vice President (SVP). The objective is to ensure full accountability at Line Management while allowing Corporate SSHE Division to provide guidance relating to PTTEP policy and standards and ensure compliance where necessary.

The typical structure of the PTTEP SSHE operating model is shown in Figure 2, and additional details of the model are explained in Appendix B.



**Figure 2: SSHE Operating Model at PTTEP**

Furthermore, Line Management is accountable for allocating sufficient resources to support the SSHE MS implementation; refer to PTTEP Delegation of Authority and Signature (DAS). Necessary resource allocations, including personnel, budget, time, equipment, etc., are regularly reviewed to ensure continuity and effective implementation.

Interfacing roles and responsibilities with the Corporate SSHE Division are identified and demonstrated via the RACIE chart in Appendix C.

#### 4.3.2 SSHE Contractor Management

Many activities or operations in PTTEP are carried out by contractors. Consequently, SSHE risks arising from their activities or operations shall be appropriately managed throughout all phases of the contracting process

PTTEP Contract Holder shall comply with the SSHE contractor management process and ensure the SSHE requirements are understood and implemented by contractors. The key processes start with contractor selection and execution as follows:

- Assess initial SSHE risks from the contracting activities.
- Conduct SSHE capability assessment and/or evaluation.
- Prepare contract SSHE management plan, including bridging document.
- Review the SSHE monitoring program and SSHE performance.
- Complete SSHE contract close-out evaluation.

**Reference:** 12148-PDR-SSHE-302/01 SSHE Contractor Management Procedure

## SSHE Communication

The process of SSHE communication shall be implemented to improve personnel's knowledge that prevents at-risk behaviors and enhances safe work practices. Once the information or message is sent, the sender shall consider receiving feedback and understanding from receivers. SSHE communication process may include, but not limited to:

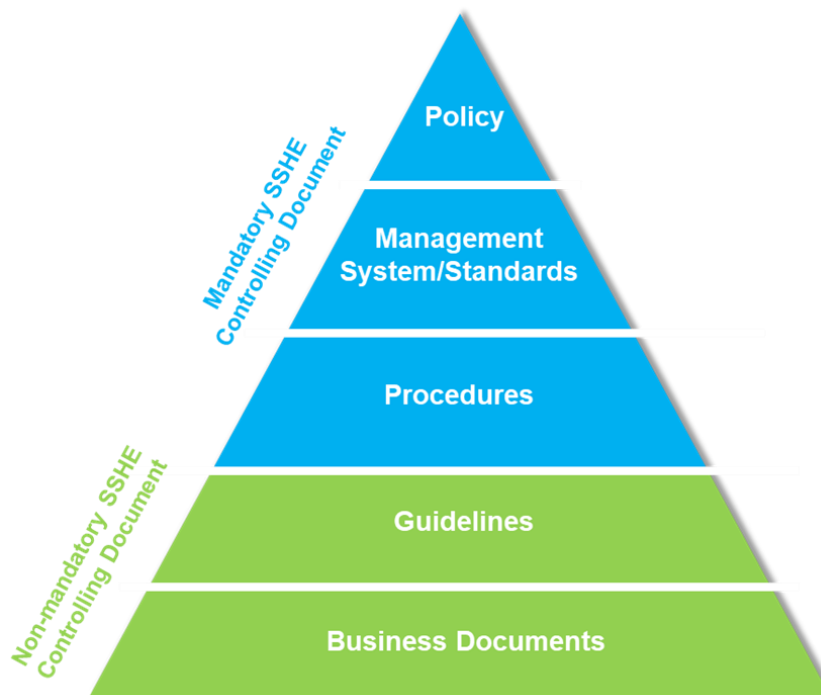
- Internal communication involves the communication of all necessary SSHE information that exists within PTTEP. It can be done through various means, e.g. meetings, toolbox talks/pre-job briefings, emails, publications, awareness campaigns, reports, etc.
- External communication involves communicating all-important SSHE information coming in to and going out from PTTEP. It may be with joint venture partners, government agencies, public organizations, local communities, etc.
- Participation and consultation shall engage employees and contractors in sharing their feedback or decision-making related to SSHE matters.

**Reference:** 11038-STD-SSHE-303 SSHE Communication Standard

### 4.3.3 SSHE Documentation Management

The hierarchy of the SSHE documents complies with the PTTEP document management requirements. The documentation hierarchy is categorized based on the level of enforcement, approval authority, and the levels of detailed content illustrated in Figure 3. In conflicts between documents from different tiers, the higher-tier document prevails. Legal requirements in the country where PTTEP operates shall be complied with at all times. Each SSHE MS document shall be:

- Created in a consistent and reliable format with accurate content.
- Maintained to ensure continued accuracy and validity.
- Reviewed periodically to ensure its sufficiency for use.
- Communicated to all related parties.
- Accessible from designated locations.



**Figure 3: Document Hierarchy**

**Reference:** 11038-PDR-SSHE-304/01 SSHE Documentation Management Procedure

#### 4.3.4 SSHE Training and Competency

Both employees and contractors shall be able to perform work safely and meet SSHE expectations with adequate knowledge, competency, and experience. The competency management process involves an assessment of the worker for defined work elements. A gap identified will enable an individual development plan containing actions (training, coaching, assignment, etc.)

The Corporate SSHE Division shall outline the minimum requirements of SSHE training as a standard reference. At the same time, each Site/Asset/Project can develop its specific requirements depending on the local regulations and working environments. The key requirements of SSHE training are as follows:

- Determination of training needs shall consider factors, including regulations, tasks, workplaces, risk exposures, etc.
- Each training course shall have an evaluation method by appropriate means for measuring the effectiveness and quality of learning outcomes.
- Training records shall be available and accessible to each individual.
- The percentage of training validation shall be regularly monitored and updated to line management.

**Reference:** 11038-STD-SSHE-305 SSHE Training and Competency Standard



#### 4.3.5 SSHE Regulatory Compliance

PTTEP shall ensure the status of compliance with applicable compliance obligations and the effectiveness of prevailing controls, covering SSHE legal of the country where PTTEP operates and other requirements which PTTEP has to or prefer to comply with, e.g. ISO 14001, ISO 45001, etc.

The key processes shall be put in place, including but not limited to:

- Update and register SSHE compliance obligations.
- Review and determine the applicability to PTTEP's operations.
- Communicate the requirements to all concerned stakeholders.
- Take into account when implementing SSHE MS.
- Conduct compliance evaluation.

**Reference:** 11038-STD-SSHE-306 SSHE Regulatory Compliance Standard

### 4.4 EVALUATION AND RISK MANAGEMENT

#### 4.4.1 SSHE Risk Management

All activities and business processes throughout the project lifecycle, from acquisition to abandonment, shall apply the Hazard and Effects Management Process (HEMP) to effectively manage the SSHE risks, environmental aspects and effects associated with PTTEP's activities. The overall process comprises as follows:

- Risk Assessment: the process covers hazard identification, risk analysis, and risk evaluation.
  - Hazard Identification: the process of identifying the potential source of harm to people, the environment, or the asset.
  - Risk Analysis: the systematic process, either qualitative or quantitative, to analyze the consequences and frequency of occurrences of any potentially harmful events.
  - Risk Evaluation: the process by which acceptability of the estimated risk is judged in comparison with the PTTEP Risk Assessment Matrix (RAM) or risk acceptance criteria.
- Risk Management: the process of managing the risk by applying a hierarchy of control, i.e. elimination, substitution, engineering controls, administrative controls, and personal protective equipment.

**Reference:** 11038-STD-SSHE-401 SSHE Risk Management Standard

#### 4.4.2 Safety Case

The Safety Case is the means of ensuring and demonstrating that suitable and sufficient measures are in place to prevent a Major Accident Event (MAE) and reduce the effects of these events should they occur. An MAE is classified as those accidents that may cause multiple fatalities or equivalent environmental damage, production loss, plant damage, and reputation damage as per consequences rated severity level 5 in RAM.

All PTTEP facilities and activities with identified potential MAE shall have a safety case to demonstrate that all risks have been reduced to ALARP. The key requirements of the safety case are as follows:

- Facilities and operations/activities are at all times run in accordance with the arrangements defined in the Safety Case for the facility or activity.
- Able to demonstrate all MAE barriers are functioning by using appropriate means, i.e. safety critical elements and/or safety critical tasks.
- Safety case shall be updated throughout the life cycle of the facility.

**Reference:** 11038-STD-SSHE-402 Safety Case Standard

### 4.5 PLANNING AND OPERATIONAL CONTROL

#### 4.5.1 Operational Control

PTTEP shall define the SSHE requirements and work processes to manage SSHE risks and opportunities. They typically describe how things are consistently implemented by authorized and competent persons. Each step of activity execution should lead to the desired result.

The Corporate SSHE Division and line organization shall plan, implement, control, and maintain the processes to meet SSHE strategic objectives in the operations by:

- Establishing the requirements for the processes.
- Implementing the processes in accordance with SSHE requirements.
- Maintaining documents or other information to ensure the processes have been carried out as planned.

A systematic approach to SSHE management through the management of operational and verification controls can provide the organization with information to enhance the SSHE performance to achieve the intended outcomes. Examples of processes to be established are, but not limited to:

- Operational safety management includes, e.g. Permit to Work (PTW), Job Safety Analysis (JSA), contractor management, incident management, etc.
- Security management includes, e.g. security risk and threat assessment, security alert level, site security plan, etc.
- Process safety management includes, e.g. hazard and effect management tool, process safety information, operating manual, asset integrity, LOPC prevention, etc.

- Occupational health management includes, e.g. health risk assessment, fitness to work, medical emergency management, etc.
- Environmental management includes, e.g. environmental impact assessment, climate change, use of natural resources, pollution control, biodiversity and ecosystem services, etc.

PTTEP shall encourage a culture where everyone understands their SSHE responsibilities and be able to exercise “Stop Work” if an unsafe situation is observed.

In addition, it is required to collect and report both lagging and leading indicators according to the methodology and frequency specified in relevant documents. These data shall be analyzed and addressed the weakness and opportunities for improvement.

**Reference:** 11038-STD-SSHE-403 Process Safety Management Standard

11038-STD-SSHE-503 Environmental Management Standard

11038-STD-SSHE-504 Security Management Standard

11038-STD-SSHE-505 Operational Safety Management Standard

11038-STD-SSHE-507 Occupational Health Management Standard

#### **4.5.2 SSHE Plan**

SSHE Plan is a summary of focused SSHE activities or practical actions that are clearly defined, time-bound, and have allocated responsibilities. SSHE Plan shall be considered the following information.

- Requirements of SSHE MS and compliance obligations
- Management of significant SSHE risks
- Support the achievement of SSHE KPI

The annual SSHE Plan shall be developed by Corporate SSHE Division and other line organizations undertaking operational activities with some SSHE risks, e.g. drilling, logistics, engineering and construction, and production operations (as applicable). SSHE Plan shall be approved and monitored its progress by the top authority in the line organization.

**Reference:** 11038-STD-SSHE-202 Corporate SSHE Plan, SSHE KPI's and Performance Monitoring Standard

#### **4.5.3 Management of Change**

Management of Change (MOC) is specified for systematically managing permanent and temporary changes to any work processes, facilities, operations, organizations, or regulatory requirements. It ensures that any risks or hazards arising from that changes are identified, assessed, and controlled and that business activities are not overlooked.

These changes shall require the multi-discipline or competent team (including Technical Authority or TA) to review the details of the proposed changes and impacts on SSHE objectives. Once changes are approved, all proposed mitigations and recommendations shall be in place prior to implementing those changes until close out.

Each responsible department in the organization shall establish the appropriate methodology to manage all changes associated with SSHE risks, e.g. product, workforce, knowledge, technology, etc., depending on the nature of the proposed changes.

**Reference:** 11038-STD-SSHE-508 Management of Change Standard

#### **4.5.4 Emergency and Crisis Management**

Preparedness and planning for an emergency or crisis are essential to preventing fatalities and injuries and reducing damages to the environment, property, and reputation. The ultimate objective of emergency and crisis management is to accelerate the resumption of normal operations.

Asset/Project/Site shall prepare the necessary resources, i.e. specific emergency response procedures, facilities, and personnel which specify roles and responsibilities and work scope to be followed. The emergency and crisis drills shall be conducted periodically. In addition, the recommendations from exercises/drills shall be completed to ensure the readiness of resources with different potential scenarios based on operational risks specific to each facility.

PTTEP defines the structure of emergency and crisis management at 3-Tier response levels according to their severity and potential impact as follows:

- Tier-1: Can be handled by an onsite Emergency Response Team (ERT).
- Tier-2: May request an external assistant from local authorities in the impact area resulting in the activation of the Emergency Management Team (EMT).
- Tier-3: May request an external assistant above from Tier-2 (e.g. international resources), resulting in the activation of the Crisis Management Team (CMT).

Business Continuity Management (or BCM) is an essential process to recover function quickly in the adverse situation affecting business interruption.

**Reference:** 11038-STD-SSHE-501 Emergency and Crisis Management Standard

## **4.6 IMPLEMENTATION AND MONITORING**

### **4.6.1 Incident Management**

All incidents are preventable, and if an incident occurs, the effort shall be undertaken to prevent their recurrence and occurrence.

The key requirements of incident management are as follows at a minimum.

- The incident shall be immediately notified to all relevant persons as per severity criteria.
- The incident shall be reported through provided means of communication.

- The incident investigation shall be conducted by an appropriate and competent investigation team as soon as possible when the scene is secured and safe to execute.
- The recommendations for corrective and preventive actions shall be followed up and closed out within the agreed timeline.
- Lessons learned from the incident shall be communicated to all concerned parties to prevent the reoccurrence of the incident.
- The incident statistics shall be recorded and analyzed.

**Reference:** 11038-STD-SSHE-601 Incident Management Standard

#### **4.6.2 SSHE Culture**

The SSHE culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to SSHE. To ensure the safe behavior of the employees, it requires strong, consistent, and systematic driving by leadership commitment at all levels through appropriate tools and techniques which suit the organizational culture.

The key aspects of an effective SSHE culture comprise of:

- Periodic SSHE culture survey and SSHE improvement plan.
- Behavior-Based Safety (BBS) observation and intervention tools.
- Encouragement of reporting culture.
- Incentive and disciplinary schemes.

**Reference:** 11038-STD-SSHE-603 SSHE Culture Management Standard.

#### **4.7 AUDIT AND REVIEW**

SSHE audit is a process used to verify if the SSHE MS and other compliance obligations are appropriately understood and executed. The organization shall

- Establish the audit program at planned intervals.
- Conduct the audit by competent persons.
- Take action to address nonconformities.

SSHE MS and its performance shall be regularly reviewed to ensure the achievement of the intended outcomes. Both audit and review processes shall be used to reinforce continuous efforts to improve SSHE performance.

**Reference:** 11038-STD-SSHE-701 Audit and Review Standard

## 5.0 OVERSIGHT ACTIVITIES

The Corporate SSHE division shall manage the oversight of SSHE MS to verify and validate the SSHE MS implementation executed by the line organization. This process shall focus on the specific subject based on performance and the concerned issues in each discipline. Then, a coaching program should be provided to the line organization that has a signal of ineffective SSHE MS implementation. In addition, SSHE focal points identified in the SSHE operating model can apply this process to manage oversight activity in their own disciplines.

Examples of oversight mechanisms are, but not limited to:

- Arrangement of Top Management Visit
- Engagement in SSHE KPI and plan setting
- Technical review of SSHE MS documents
- Participation in contractor audits
- Validation of the percentage of training programs
- Verification of SSHE operational controls
- Observation and participation in the emergency exercises
- System to check the accuracy of SSHE data reporting
- Process to review the quality of Incident investigations
- Involvement in developing the SSHE culture improvement plan

Oversight activities can be specified in the details of each SSHE MS document.

## ROLES AND RESPONSIBILITIES

Roles	Responsibilities
Line Management (Manager, Vice President, Senior Vice President, Executive Vice President, and Chief Executive Officer)	Line Management shall provide sufficient resources and support for SSHE MS implementation.
Senior Vice President, Corporate SSHE Division	<ul style="list-style-type: none"> <li>• Formulate PTTEP SSHE Policy, MS standards, procedures, guidelines, corporate SSHE strategic objectives, annual SSHE plan; and ensure compliance with related regulations and industrial standard</li> <li>• Formulate SSHE risk assessment profile and mitigation plan; as well as crisis management strategy</li> <li>• Oversee and ensure proactive measurement towards preventing possible SSHE incidents by using effective SSHE communication methods</li> <li>• Take advisory role and be company representative on any SSHE issues, incidents, and activities as defined by law and ensure the information provided is accurate</li> </ul>
SSHE Focal Point/Division SSHE	<ul style="list-style-type: none"> <li>• Manage SSHE-related risks by effectively implementing SSHE MS and compliance obligation within line organization</li> <li>• Establish and implement SSHE program in alignment with corporate strategic direction to improve SSHE performance of asset operation activities</li> <li>• Monitor and analyze SSHE performance to ensure effectiveness and progress of SSHE plan/SSHE MS/SSHE Program Implementation and develop improvement plan</li> <li>• Take advisory role and be line organization's representative to manage any SSHE issues, incidents, and activities</li> </ul>

## REFERENCES

Document Number	Document Title
<b>PTTEP Controlling Documents</b>	
-	SSHE Vision and Missions
11038-PCY-SSHE-001	SSHE Policy
<b>Other Reference Documents</b>	
-	PTT Group OEMS Level 2 Manual Version 2.9; March 2022
IOGP Report 510	Operating Management System Framework for controlling risk and delivering high performance in the oil and gas industry; International Association of Oil and Gas Producers (IOGP); 2014
ISO 14001	Environmental Management Systems - Requirements with Guidance for Use; International Organization for Standardization; 2015
ISO 45001	Occupational health and safety management systems - Requirements with guidance for use; International Organization for Standardization; 2018



## APPENDICES

### APPENDIX A: CORRESPONDENCE BETWEEN PTTEP SSHE MANAGEMENT SYSTEM AND OTHER REQUIREMENTS

ISO 14001:2015	ISO 45001:2018	IOGP Report 510 (2014)	PTT OEMS SSHE Level 2	PTTEP SSHE MS
4.1 Understanding the organization and its context  4.2 Understanding the needs and expectations of interested parties	4.1 Understanding the organization and its context  4.2 Understanding the needs and expectations of workers and other interested parties			SSHE Strategic Objectives  000 SSHE Management System
4.3 Determining the scope of the environmental management system  4.4 OH&S management system	4.3 Determining the scope of the OH&S management system  4.4 Environmental management system			000 SSHE Management System
5.1 Leadership and commitment  5.2 Environmental policy	5.1 Leadership and commitment  5.2 OH&S policy	Element 1 – Commitment and accountability  Element 2 – Policies, standards, and objectives	1.1 SSHE Policy  1.2 Visible Leadership	SSHE Vision, Missions, and Policy
5.3 Organizational roles, responsibilities and authorities	5.3 Organizational roles, responsibilities and authorities	Element 3 – Organization, resources, and capability	1.3 Resources	000 SSHE Management System

ISO 14001:2015	ISO 45001:2018	IOGP Report 510 (2014)	PTT OEMS SSHE Level 2	PTTEP SSHE MS
	5.4 Consultation and participation of workers			303 SSHE Communication Standard
6.1 Actions to address risks & opportunities	6.1 Actions to address risks & opportunities	Element 5 – Risk assessment and control	1.12 Legal & regulatory requirements	306 SSHE Regulatory Compliance Standard  401 SSHE Risk Management Standard  402 Safety Case Standard  503 Environmental Management Standard
6.2 Environmental objectives and planning to achieve them	6.2 OH&S objectives and planning to achieve them			SSHE Strategic Objectives  202 Corporate SSHE Plan, SSHE KPI's and  Performance Monitoring Standard
7.1 Resources	7.1 Resources			000 SSHE Management System
7.2 Competence  7.3 Awareness	7.2 Competence  7.3 Awareness			305 SSHE Training and Competency Standard

ISO 14001:2015	ISO 45001:2018	IOGP Report 510 (2014)	PTT OEMS SSHE Level 2	PTTEP SSHE MS
7.4 Communication	7.4 Communication	Element 4 – Stakeholders and customers		303 SSHE Communication Standard
7.5 Documented information	7.5 Documented information	Element 7 – Plans and procedures		304 SSHE Documentation Management Procedure
8.1 Operational planning and control	8.1 Operational planning and control	Element 6 – Asset design and integrity  Element 8 – Execution of activities	1.5 Security of Personnel and Asset  1.6 Occupational Health  1.7 Environmental Management  1.10 Employee Engagement, Behavior, and Culture	302 SSHE Contractor Management Standard  403 Process Safety Management Standard  504 Security Management Standard  505 Operational Safety Management Standard  507 Occupational Health Management Standard  508 Management of Change Standard  510 Life-Saving and Process Safety Rules Standard  603 SSHE Culture Management Standard

ISO 14001:2015	ISO 45001:2018	IOGP Report 510 (2014)	PTT OEMS SSHE Level 2	PTTEP SSHE MS
8.2 Emergency preparedness and response	8.2 Emergency preparedness and response		1.9 Emergency and Crisis Management	501 Emergency and Crisis Management Standard
9.1 Monitoring, measuring, analysis and evaluation	9.1 Monitoring, measuring, analysis and performance evaluation			202 Corporate SSHE Plan, SSHE KPI's and Performance Monitoring Standard  701 Audit and Review Standard
9.2 Internal audit	9.2 Internal audit			701 Audit and Review Standard
9.3 Management review	9.3 Management review			701 Audit and Review Standard
10.1 General  10.2 Nonconformity and corrective action  10.3 Continual improvement	10.1 General  10.2 Incident, nonconformity and corrective action  10.3 Continual improvement	Element 9 – Monitoring, reporting and learning  Element 10 – Assurance, review and improvement	1.4 Management Review  1.8 Incident Management  1.11 Inspections and Audits	601 Incident Management Standard  701 Audit and Review Standard

## APPENDIX B: SSHE OPERATING MODEL

The SSHE operating model aims to define a framework for managing SSHE activities between the Corporate SSHE Division and Line Management of other functions, including Operating Assets. It ensures that SSHE policy, objectives, strategic direction, management system requirements, and initiatives are effectively cascaded, aligned, and implemented throughout the organization.

It is intended that the SSHE operating model delivers effective SSHE management among work group and improve SSHE performance. However, the model is only a supporting framework. In order to achieve the zero-incident organization, a generative SSHE culture is still a foundation that requires the involvement and accountability of PTTEP staff and contractors at all levels.

SSHE operating model addresses the following areas:

- Roles and responsibilities of SSHE professionals in PTTEP's organization.
- Structure of SSHE professionals in each function group.
- Matrix organization principle.

### Roles and responsibilities of SSHE professionals in PTTEP's organization

The Corporate SSHE Division is responsible for setting SSHE vision and missions, as well as SSHE-related policies, for providing strategic direction in managing SSHE in PTTEP. The requirements are then translated into the SSHE Management System (SSHE MS), with which all Function Groups, development projects, operating assets, and support functions are required to strictly comply. Line management is accountable for SSHE implementation and performance.

To ensure the effectiveness of SSHE MS implementation as well as a clear understanding of roles and responsibilities among SSHE functions, the Corporate SSHE Division, by working with Line Management and HR, will develop/maintain related documentation to be a tool of communication which will periodically be updated according to the changed circumstances, i.e. Organization Function Description, SSHE RACIE, etc. In summary, the roles and responsibilities of SSHE professionals assigned to line organization are described using a simple three-tiered approach as follows:

Organization	Defined Concept	Main Roles
Corporate SSHE Division	Center of Excellence (Tier 3)	<ul style="list-style-type: none"><li>• SSHE Direction and Framework</li><li>• Expert Service for Complex Tasks</li></ul>
Function Group	SSHE Line Partner	<ul style="list-style-type: none"><li>• Executive Coordination</li><li>• SSHE Alignment</li></ul>
Division	Division SSHE (Tier 2)	<ul style="list-style-type: none"><li>• Advisory and Focal Point</li><li>• Execution and Compliance</li></ul>

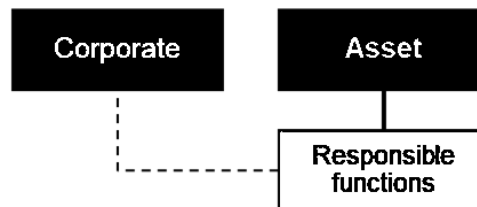


- Production Asset Group (Domestic and International)
- Engineering, Development, and Maintenance Group
- Operations Support Group

To ensure the appropriate SSHE Structure in each Function Group, the Corporate SSHE Division, with support from HR Team, will timely monitor the effectiveness of the operating model based on SSHE risks and activities, as well as the corporate direction. The revision of the model shall be reviewed and approved by the SSHE Council, EVPs and/or Management Committee (if required), while the personnel movement of SSHE professionals shall be approved by Job Family Champion, according to PTTEP Delegation of Authority & Signature (DAS).

### Matrix Organization Principle

The reporting line of Division SSHE personnel under the SSHE structure follows PTTEP matrix organization principles. SSHE operating model is classified as Corporate-governed Function, which means a function with solid-line reporting directly to line management in his/her functions and dotted-line reporting to Corporate SSHE Division. Its purpose is to ensure accountability at Asset/Function while allowing the Corporate SSHE Division to provide guidance on PTTEP policy and standards and to ensure compliance and conformance where necessary.



Both Solid-line Management and Dotted-line Management shall provide direction and key input to a function with dual line reporting (SSHE Focal Point) for getting mutual agreement during the work plan and KPI development process. During execution, it is recommended that both parties should communicate periodically, and dotted line management should monitor the performance/progress in a timely manner and may provide consultation as necessary.

For more details on the Matrix Organization Principle, please consult with Organization Development Department.



## **APPENDIX C: INTERFACING ROLES AND RESPONSIBILITIES WITH CORPORATE SSHE DIVISION**

The Interfacing Roles and Responsibilities with Corporate SSHE Division can be downloaded from [SSHE Intranet > SSHE MS > SSHE MS Documents > Corporate Tools > Appendix – SSHE Management System](#).



ภาคผนวกที่ 6

หนังสือนำเสนอรายงานผลการปฏิบัติตามมาตรการป้องกันและ  
แก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบ  
ผลกระทบสิ่งแวดล้อม ฉบับล่าสุด

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ที่ ปตท.สผ.ส.13247/00-2366/2023

27 กุมภาพันธ์ 2566

เรื่อง ขอนำส่งรายงานสรุปผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม ระหว่างเดือนมกราคมถึงเดือนธันวาคม พ.ศ. 2565 ของบริษัท ปตท.สผ. สยาม จำกัด

เรียน อธิบดีกรมเชื้อเพลิงธรรมชาติ

อ้างถึง หนังสือที่ ปตท.สผ.ส.13247/00-1089/2023 ลงวันที่ 27 มกราคม 2566

สิ่งที่ส่งมาด้วย 1. สรุปรายชื่อโครงการที่ขอนำส่งรายงานสรุปผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม ระหว่างเดือนมกราคมถึงเดือนธันวาคม พ.ศ. 2565 ในแปลงสำรวจบนบกหมายเลข เอส 1 ของบริษัท ปตท.สผ. สยาม จำกัด จำนวน 17 โครงการ จำนวน 1 ชุด  
2. รายงานสรุปผลการปฏิบัติตามมาตรการฯ 17 โครงการ จำนวน 79 ชุด  
3. CD-ROM ของ 17 โครงการ จำนวน 79 ชุด

ตามที่ บริษัท ปตท.สผ. สยาม จำกัด ได้รับสัมปทานสำรวจและผลิตปิโตรเลียมเลขที่ 1/2522/16 หรือแปลงสำรวจบนบกหมายเลขเอส 1 ได้เสนอรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม ให้สำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม และคณะกรรมการผู้ชำนาญการด้านพัฒนาปิโตรเลียมพิจารณารายงานฯ ตามลำดับขั้นตอนการพิจารณาพิจารณา โดยคณะกรรมการผู้ชำนาญการฯ มีมติให้ความเห็นชอบรายงานการวิเคราะห์ผลกระทบสิ่งแวดล้อม และให้ปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม อย่างเคร่งครัด

ในระหว่างเดือนมกราคมถึงเดือนธันวาคม พ.ศ. 2565 บริษัทฯ ได้จัดให้มีการติดตามตรวจสอบการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม ตามเงื่อนไขของสำนักงานนโยบายและแผนทรัพยากรธรรมชาติและสิ่งแวดล้อม ทั้งนี้ บริษัทฯ ได้มอบหมายให้บริษัทที่ปรึกษา เป็นผู้ดำเนินการและจัดทำรายงานสรุปผลการปฏิบัติตามมาตรการฯ ดังกล่าว จำนวน 17 โครงการ รวมทั้งหมด 79 ชุด ดังสิ่งที่ส่งมาด้วย บัดนี้ บริษัทที่ปรึกษาได้จัดทำรายงานเสร็จเรียบร้อยแล้ว เพื่อเสนอรายงานผลการปฏิบัติตามมาตรการฯ ต่อหน่วยงานที่เกี่ยวข้องต่อไป บริษัทฯ จึงขอนำส่งรายงานดังกล่าวมาพร้อมกับหนังสือฉบับนี้

-2-/ จึงเรียนมา...

จึงเรียนมาเพื่อโปรดทราบและพิจารณา

ขอแสดงความนับถือ



รักษาการ ผู้ช่วยกรรมการผู้จัดการใหญ่ โครงการผลิตบนฝั่ง - ประเทศไทย

แผนกความปลอดภัย มั่นคง อาชีวอนามัย และสิ่งแวดล้อม ปตท.สผ. โครงการเอส 1

ผู้ประสานงาน [Redacted]

โทรศัพท์ [Redacted]

สำเนาเรียน : กองความปลอดภัยและสิ่งแวดล้อมในการประกอบกิจการปิโตรเลียม

PS1, PS1/S, PTN/P, CEN/O



สรุปรายชื่อโครงการที่ขอนำส่งรายงานสรุปผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม  
ระหว่างเดือนมกราคมถึงเดือนธันวาคม พ.ศ. 2565 ในแปลงสำรวจบนบกหมายเลขเอส 1 บริษัท ปตท.สผ. สยาม จำกัด จำนวน 17 โครงการ

ที่	ชื่อรายงานผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบ ผลกระทบสิ่งแวดล้อม โครงการ.....	เลขที่หนังสือเห็นชอบ	จำนวนรายงานที่นำส่ง (เอกสารและซีดีรอม (ชุด))
1	> การวางท่อขนส่งปิโตรเลียม ระหว่างหลุมผลิตวัดแตน-เอ วัดแตน-บี และแหล่งหนองอ้อ-เอ ของบริษัท ไทยเซลล์ เอ็กซ์พลอเรชั่นแอนด์โปรดักชั่น จำกัด อำเภอบางระกำ จังหวัดพิษณุโลก, > โครงการพัฒนาแหล่งน้ำมันประดู่เฒ่าตอนใต้ หมายเลขสัมปทาน S1 (ขอเปลี่ยนแปลงรายละเอียดแนววางท่อลำเลียง ปิโตรเลียม), > โครงการเจาะหลุมสำรวจและผลิตปิโตรเลียมแหล่งปรีอกระเทียม ของบริษัท ปตท.สผ.สยาม จำกัด แปลงเอส 1 อำเภอบางระกำ จังหวัดพิษณุโลก, > โครงการผลิตปิโตรเลียมแหล่งปรีอกระเทียม และแหล่งใกล้เคียง แปลงเอส 1 จังหวัดพิษณุโลก ของบริษัท ปตท.สผ. สยาม จำกัด (หมายเหตุ: รายงานผลการปฏิบัติตามมาตรการฯ 4 โครงการ รวมรายงานเป็น 1 เล่ม)	วว 0804/5584 ลงวันที่ 22 พฤษภาคม 2545, ทส. 1009/1922 ลงวันที่ 1 มีนาคม 2549,  พน 0308/4561 ลงวันที่ 3 พฤศจิกายน 2557, ทส 1009.2/14328 ลงวันที่ 25 พฤศจิกายน 2558	12
2	โครงการพัฒนาแหล่งน้ำมันสิริกิติ์ตะวันออก ของบริษัท ปตท.สผ.สยาม จำกัด แปลงเอส1 จังหวัดกำแพงเพชร และ จังหวัดพิษณุโลก	ทส 1009.2/5694 ลงวันที่ 29 กรกฎาคม 2552	5
3	โครงการพัฒนาแหล่งน้ำมันเสาเถียร-เอ แปลงเอส1 จังหวัดสุโขทัย ของบริษัท ปตท.สผ.สยาม จำกัด	ทส 1009.2/7076 ลงวันที่ 16 กันยายน 2552	3
4	โครงการพัฒนาแหล่งน้ำมันประดู่เฒ่าตอนเหนือและแม่น้ำน่าน แปลงเอส 1 จังหวัดพิษณุโลก สุโขทัย อุตรดิตถ์	ทส 1009.2/4272 ลงวันที่ 22 มิถุนายน 2553	7
5	โครงการผลิตปิโตรเลียมแหล่งประดู่เฒ่าและแหล่งเสาเถียรส่วนขยาย แปลงเอส 1 จังหวัดพิษณุโลกและสุโขทัย ของ บริษัท ปตท.สผ. สยาม จำกัด	ทส 1009.2/941 ลงวันที่ 26 มกราคม 2558	5
6	> โครงการผลิตปิโตรเลียมแหล่งโนนพลวงส่วนขยาย แปลงเอส 1 จังหวัดกำแพงเพชร ของบริษัท ปตท.สผ. สยาม จำกัด,	ทส 1009.2/8189 ลงวันที่ 15 กรกฎาคม 2559	6

ที่	ชื่อรายงานผลการปฏิบัติตามมาตรการป้องกันและแก้ไขผลกระทบสิ่งแวดล้อม และมาตรการติดตามตรวจสอบผลกระทบสิ่งแวดล้อม โครงการ.....	เลขที่หนังสือเห็นชอบ	จำนวนรายงานที่นำส่ง (เอกสารและซีดีรอม (ชุด))
	> โครงการผลิตปิโตรเลียมแหล่งลานกระบือ แปลงเอส 1 จังหวัดกำแพงเพชร (ฐานหลุมผลิตลานกระบือ-เอฟเอฟ (LKU-FF) ของบริษัท ปตท.สผ. สยาม จำกัด (หมายเหตุ: รายงานผลการปฏิบัติตามมาตรการฯ 2 โครงการ รวมรายงานเป็น 1 เล่ม)	ทส. 1010.2/9988 ลงวันที่ 22 กรกฎาคม 2562	
7	โครงการผลิตปิโตรเลียมแหล่งประดู่เฒ่า สามพญาและวัดแม่ แปลงเอส 1 จังหวัดพิษณุโลก และสุโขทัย ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1009.2/5590 ลงวันที่ 3 พฤษภาคม 2561	5
8	โครงการผลิตปิโตรเลียมแหล่งลานกระบือ หนองมะขาม และทับแรต แปลงเอส 1 จังหวัดกำแพงเพชร พิษณุโลก และสุโขทัย ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1009.2/6105 ลงวันที่ 16 พฤษภาคม 2561	7
9	โครงการผลิตปิโตรเลียมแหล่งลานกระบือ หนองจิก และโนนพลวง แปลงเอส 1 จังหวัดกำแพงเพชร และพิษณุโลก ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1010.2/6995 ลงวันที่ 5 มิถุนายน 2561	5
10	โครงการผลิตปิโตรเลียมแหล่งหนองแสง ประดา และปรือกระเทียม แปลงเอส 1 จังหวัดพิษณุโลกและจังหวัดพิจิตร ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1010.2/7912 ลงวันที่ 22 มิถุนายน 2561	5
11	โครงการผลิตปิโตรเลียมแหล่งสิริกิติ์ และแหล่งลานกระบือ แปลงเอส 1 จังหวัดกำแพงเพชร พิษณุโลก และสุโขทัย ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1009.2/15742 ลงวันที่ 29 ธันวาคม 2558	7
12	โครงการผลิตปิโตรเลียมแหล่งหนองตุมและคุยม่วง แปลงเอส 1 จังหวัดพิษณุโลก และจังหวัดสุโขทัย ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1009.2/7751 ลงวันที่ 6 กรกฎาคม 2559	5
13	โครงการผลิตปิโตรเลียมแหล่งจิกยาว บึงแวง และเสาเถียร แปลงเอส 1 จังหวัดพิษณุโลก สุโขทัย และอุดรดิตถ์ ของบริษัท ปตท.สผ. สยาม จำกัด	ทส. 1010.2/8259 ลงวันที่ 28 มิถุนายน 2561	7

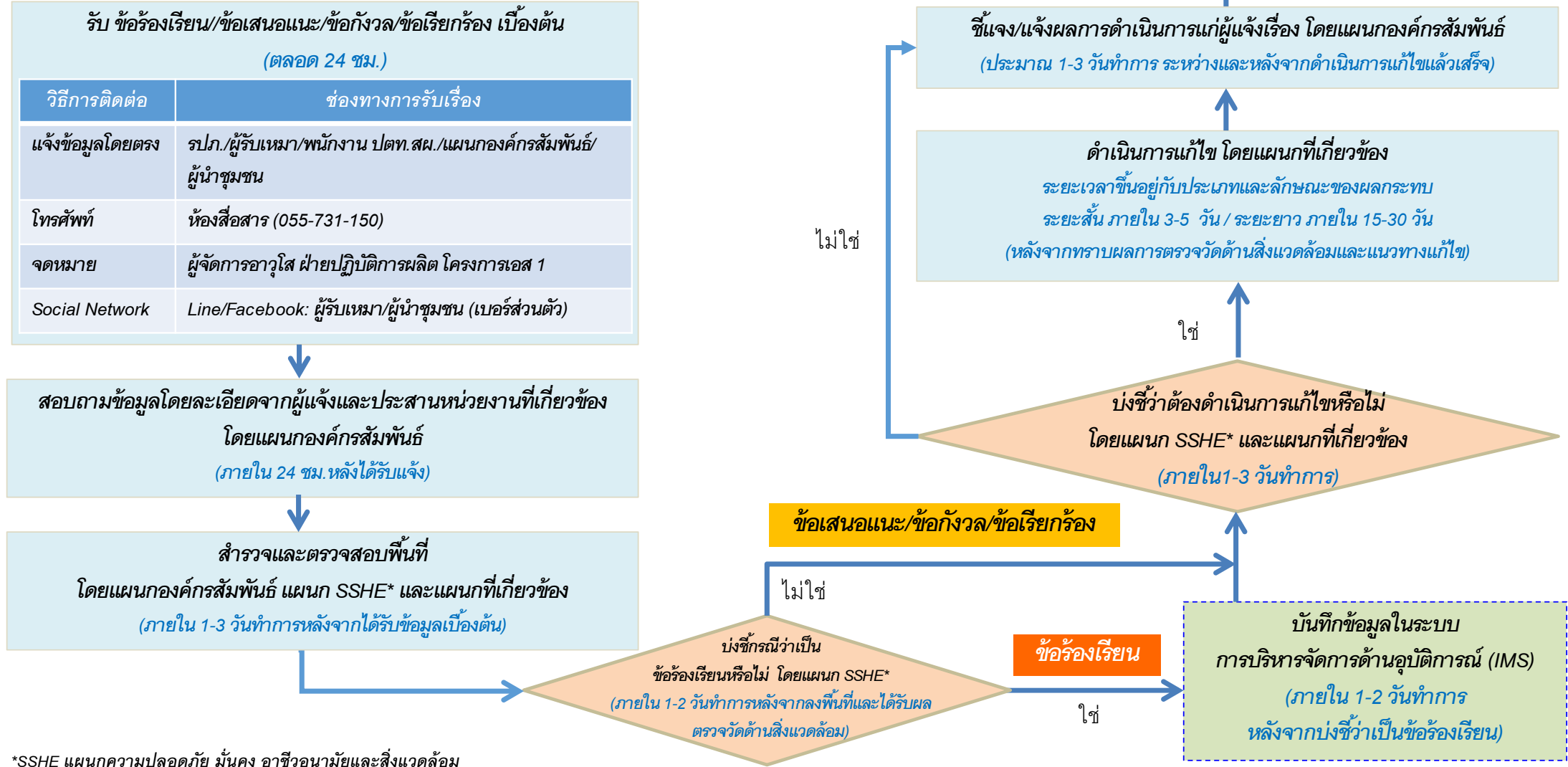
ภาคผนวกที่ 7

แผนผังการดำเนินการรับและดำเนินการซื้อร้องเรียน

---



# แผนผังการรับข้อเสนอแนะ/ข้อร้องเรียน



ภาคผนวกที่ 8

รายงานสรุปสถิติอุบัติเหตุและข้อร้องเรียน (SSHE Performance)

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## Appendix2 - HEALTH AND SAFETY STATISTICS - MONTHLY RETURN,

**CONTRACTOR shall prepare the Monthly Contract SSHE Performance Report which has to submit to the COMPANY Site Representative, Contract Holder (CH) and Department SSHE within first week of next month (Ex. SSHE performance report on June has to submit within 1<sup>st</sup> week of July).**

This report shall contain factual information on the SSHE performance of CONTRACTOR. The sequences of Monthly Contract SSHE Performance Report are:

Return for the month of: November 2022		
Monthly Contract SSHE Performance	Status As of January	Evidence
No. of Employees working on the month of report	3,844	
No. of Man-Hours worked (Including any overtime) in the month	30,816	
No. of Fatality / Permanent disabilities in the month	0	
No. of Lost Workday Cases in the month (LWDC)	0	
No. of Restricted Work Cases in the month (RWDC)	0	
No. of Medical Treatment Cases in the month (MTC)	0	
No. of First Aid Cases in the month (FAC)	0	
No. of Near Misses in the month	0	
No. of Occupational Illnesses in the month	0	
No. of Spill Cases in the month (Display spill volume)	0	
No. of SOC/ HRC card submission in the month	129	
% SSHE Monitoring Plan Completion	100%	
No. of Road Traffic Incident in the month (Display Mileage)	0	
No. of Labor Union / Labor Welfare Committee Meetings	0	

SSHE Statistics	Unit	Target (Year)	Actual (As of October)
Lost Time Injury Frequency Rate (LTIF)	No./ MM man hours	0	0
Total Recordable Injury Rate (TRIR)	No./ MM man hours	0	0
Major Accident Rate (MAR)	No./ MM man hours	0	0


**Additional information for SSHE performance report:**

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Report prepares by:  Position: SSHE Officer

Date: 8 Feb 2023

Report reviewed by:  Position: Site SSHE Manager

Date: 4Feb 2023

ภาคผนวกที่ 9

เอกสารแสดงการขออนุญาตใช้ที่ดินที่มีผู้ถือครองหรือผู้รับผิดชอบ

---



## หนังสือสัญญาขายที่ดิน

ที่ดิน [REDACTED]  
โฉนดที่ [REDACTED] เลขที่ดิน [REDACTED] หน้าสำรวจ [REDACTED]  
ตำบล [REDACTED] ค่ายม่วง อำเภอ [REDACTED] บางระกำ จังหวัด พิษณุโลก  
หนังสือสัญญานี้ได้ทำเมื่อวันที่ [REDACTED] เดือน [REDACTED] พุทธศักราช [REDACTED]  
ณ สำนักงานที่ดิน [REDACTED] จังหวัดพิษณุโลกสาขาบางระกำ

ระหว่าง { [REDACTED] } ผู้ขาย อายุ { [REDACTED] } ปี

สัญชาติ [REDACTED] บิดา-มารดาชื่อ [REDACTED] อยู่ที่บ้าน/หมู่บ้าน [REDACTED]  
บ้านเลขที่ [REDACTED] หมู่ที่ [REDACTED] ถนน [REDACTED] ตรอก/ซอย [REDACTED] ตำบล [REDACTED]  
อำเภอ [REDACTED] บางระกำ จังหวัด พิษณุโลก โทร. [REDACTED]

กับ { [REDACTED] บริษัทปตท.สผ.สยาม จำกัด } ผู้ซื้อ อายุ { [REDACTED] } ปี

สัญชาติ [REDACTED] บิดา-มารดาชื่อ [REDACTED] อยู่ที่บ้าน/หมู่บ้าน [REDACTED]  
บ้านเลขที่ [REDACTED] หมู่ที่ [REDACTED] ถนน [REDACTED] ตรอก/ซอย [REDACTED] ตำบล [REDACTED]  
อำเภอ [REDACTED] จตุจักร จังหวัด กรุงเทพมหานคร โทร. [REDACTED]

ทั้งสองฝ่ายได้ตกลงทำสัญญากันดังต่อไปนี้  
ข้อ ๑. ผู้ขายยอมขายที่ดินแปลงที่กล่าวข้างบนนี้ทั้งแปลงแก่ผู้ซื้อเป็นราคาเงิน [REDACTED] บาท  
(เงิน [REDACTED])

ข้อ ๒. ผู้ซื้อยอมรับซื้อที่ดินตามที่กล่าวในข้อ ๑ นั้นจากผู้ขาย ผู้ซื้อได้ชำระและผู้ขายได้รับเงินค่าที่ดิน  
รายนี้ จ่ายเงินเป็นที่เรียบร้อยแล้ว

ข้อ ๓. ขายที่ดินไม่มีสิ่งปลูกสร้าง  
ข้อ ๔. ผู้ขายที่ดินได้มาโดยรับให้มากกว่าสิบปี ในรอบปีภานี้ยัง ไม่เคยได้รับยกเว้นภาษี 200.000 บาท  
ข้อ ๕. ไม่ค้างชำระภาษีบำรุงท้องที่  
ข้อ ๖. ผู้ซื้อซื้อเพื่อประกอบกิจการของบริษัท

หนังสือสัญญานี้ได้ทำเป็นสองฉบับ มีข้อความตรงกัน สำหรับสำนักงานที่ดินหนึ่งฉบับ ผู้ซื้อถือไว้หนึ่งฉบับ  
(ฉบับนี้สำหรับ ผู้ซื้อ)

ทั้งสองฝ่ายได้ตรวจดูหนังสือสัญญาซื้อขายและ เข้าใจข้อความตลอดแล้ว จึงได้ลงลายมือชื่อ หรือพิมพ์ลายนิ้วมือ  
ไว้เป็นสำคัญต่อหน้าพยาน และพนักงานเจ้าหน้าที่

(ลงลายมือชื่อผู้ขาย) [REDACTED]  
(ลงลายมือชื่อผู้ซื้อ) [REDACTED]  
(ลงลายมือชื่อพยาน) [REDACTED]  
(ลงลายมือชื่อพยาน) [REDACTED]

หนังสือสัญญาฉบับนี้ได้ทำต่อหน้า [REDACTED]  
[REDACTED] พนักงานเจ้าหน้าที่  
ประทับตราตำแหน่งเป็นสำคัญ [REDACTED]





ชำระอากรแล้ว

## หนังสือสัญญาเช่าที่ดิน มีกำหนด ๑๒ ปี ๕ เดือน ๑๓ วัน

ที่ดิน

โฉนดที่ดิน..... เลขที่ดิน..... หน้าสำรวจ.....

ตำบล..... อำเภอ..... บางระกำ..... จังหวัด..... พิษณุโลก.....

หนังสือสัญญานี้ได้ทำเมื่อวันที่..... เดือน..... ปี..... พุทธศักราช.....

ณ สำนักงานที่ดิน..... จังหวัดพิษณุโลกสาขาบางระกำ.....

ระหว่าง { ..... } ผู้ให้เช่า อายุ { ..... } ปี

สัญชาติ...ไทย... บิดา-มารดาชื่อ..... อยู่ที่บ้าน/หมู่บ้าน.....

บ้านเลขที่..... หมู่ที่..... ถนน..... ตรอก/ซอย..... ตำบล.....

อำเภอ..... กงไกรลาศ..... จังหวัด..... สุโขทัย..... โทร. 0853781421

กับ { ..... } ผู้เช่า อายุ { ..... } ปี

สัญชาติ...ไทย... บิดา-มารดาชื่อ..... อยู่ที่บ้าน/หมู่บ้าน.....

บ้านเลขที่..... หมู่ที่..... ถนน..... ตรอก/ซอย..... ตำบล.....

อำเภอ..... จตุจักร..... จังหวัด..... กรุงเทพมหานคร..... โทร.....

ทั้งสองฝ่ายได้ตกลงทำสัญญากันดังต่อไปนี้

ข้อ ๑. ผู้ให้เช่าให้ผู้เช่าเช่าที่ดินแปลงที่กล่าวข้างบนนี้ทั้งแปลงไว้.....

..... นับตั้งแต่วันที่..... เป็นต้นไป

ข้อ ๒. ผู้เช่ายอมเสียดำเช่าแก่ผู้ให้เช่าเป็นจำนวนเงิน..... บาท.....

ข้อ ๓. สิ่งปลูกสร้างในที่ดินแปลงนี้.....

ข้อ ๔. ....

ข้อ ๕. .... โดยผู้ให้เช่าได้รับชำระค่าเช่าครบถ้วนเรียบร้อยแล้ว

ข้อ ๖. ข้อตกลงและเงื่อนไขต่างๆ ให้เป็นไปตามสัญญาเช่าฉบับลง.....

หนังสือสัญญานี้ได้ทำเป็นสามฉบับมีข้อความตรงกัน สำหรับสำนักงานที่ดินหนึ่งฉบับ ผู้ให้เช่าและผู้เช่า ถือไว้ฝ่ายละหนึ่งฉบับ

(ฉบับนี้สำหรับ.....)

ทั้งสองฝ่ายได้ตรวจดูหนังสือสัญญานี้และ เข้าใจข้อความตลอด  
ไว้เป็นสำคัญต่อหน้าพยาน และพนักงานเจ้าหน้าที่

(ลงลายมือชื่อผู้ให้เช่า).....

(ลงลายมือชื่อผู้เช่า).....

(ลงลายมือชื่อพยาน).....

(ลงลายมือชื่อพยาน).....

หนังสือสัญญานี้ได้ทำต่อหน้า

พนักงานเจ้าหน้าที่

ภาคผนวกที่ 10

## S1 General SSHE Rules and Requirements Procedure



**PTTEP**

PTT Exploration and Production Public Company Limited

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## **S1 General SSHE Rules and Requirements Procedure**

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**Document Code: 13247-PDR-SSHE-505/08-R04**

**September 2021**

**Approval Register**

<b>Document Subject</b>	S1 General SSHE Rules and Requirements Procedure
<b>Document Code</b>	13247-PDR-SSHE-505/08-R04
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	[REDACTED] (PS1/S)
	[REDACTED] (PS1/S)
<b>Effective Date</b>	September 2021

### Review and Approve

	Name	Signature	Date
<b>Document Custodian</b>	[REDACTED] (PS1/S)	[REDACTED]	17 Sep. 2021
<b>Technical Reviewer</b>	LKU Production Superintendent (PS1/P)	[REDACTED]	20 Sep 2021
	[REDACTED] (PS1/M)	[REDACTED]	20 Sep 2021
	[REDACTED] (PS1/O)	[REDACTED]	22 Sep 2021
	[REDACTED] (PS1/L)	[REDACTED]	22 Sep 2021.
	[REDACTED] (ECM/N)	[REDACTED]	24 Sep, 2021
	[REDACTED] (OTN/W)	[REDACTED]	28 Sep 2021
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<b>Document Owner</b>	[REDACTED] (PS1)	[REDACTED]	
<b>Approval Authority</b>	[REDACTED] (PS1)	[REDACTED]	

THIS DOCUMENT WILL BE REVIEWED EVERY **5 YEARS** FROM DATE OF APPROVAL OR  
REVISED EARLIER IF NECESSARY.



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## INTRODUCTION

### 1. PURPOSE

This S1 General SSHE Rules and Requirements demonstrate minimum SSHE requirements that all staff and contractors shall comply with to ensure that the activities are executed safely and cause no harm to personnel, asset environment and reputation.

### 2. SCOPE

The S1 general SSHE rules and requirements is applicable for all staff and contractors working in S1 operation areas.

## REQUIREMENTS

### 3. S1 GENERAL SSHE RULES AND REQUIREMENTS

#### 3.1 SSHE TARGET ZERO INCIDENT

Arise from SSHE management system set the specific number in strategic objective called “**SSHE Target Zero Incident**” which means;

- No personal injury
- No security concern
- No environmental impact such as spill
- No major accident
- No public complaint impact to reputation/image

#### 3.2 ADOPTING THE LIFE-SAVING AND PROCESS SAFETY RULES

The Life-Saving and Process Safety Rules aim at preventing fatalities and process safety incidents. The rules' primary objective is to achieve the Company's aspiration of “Target Zero” and “Nobody gets hurt in our operations”.

Each rule consists of an icon and simple actions that individuals can take to prevent fatalities and loss. The rules are separated into two sets as listed in Figure 1 and Figure 2 below.

Personnel working under S1 operations facilities shall be trained or received appropriate briefing of Life-Saving and Process Safety Rules and shall follow and comply with Life-Saving and Process Safety Rules and other SSHE requirements. Violation of Life-Saving and Process Safety shall be reported to a supervisor or other provided channels such as SOC, HRC, Incident Management System (IMS) etc.

Life-Saving and Process Safety Rules shall be applied in risk assessment activities such as the JSA and Permit to Work meetings.

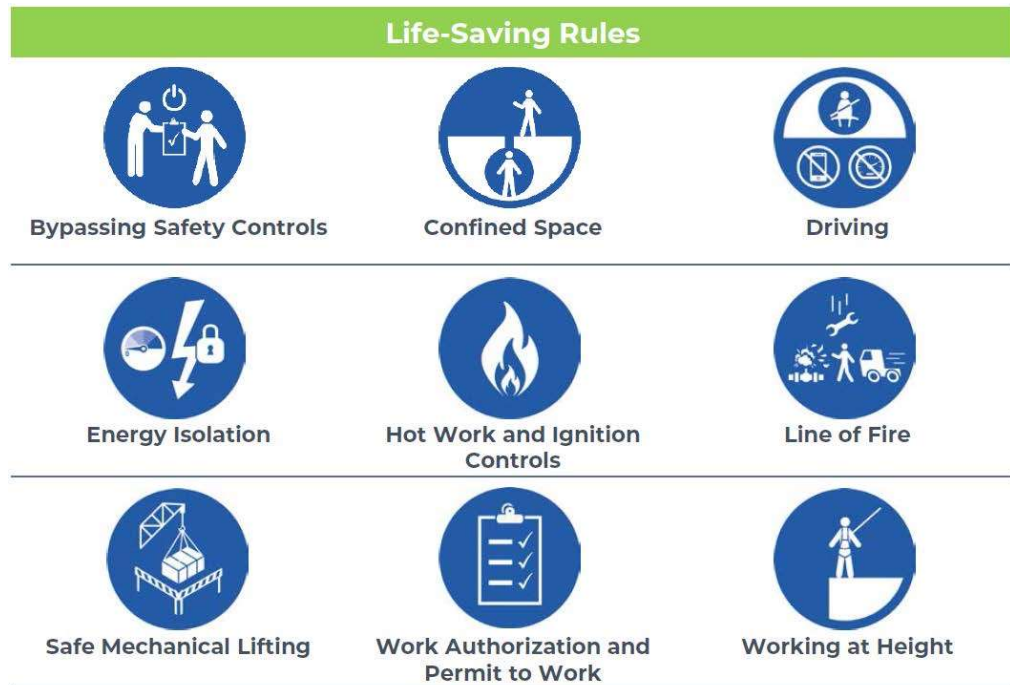


Figure 1: PTTEP Live Saving Rules



Figure 2: PTTEP Process Safety Rules

### 3.3 ACCESS CONTROL AND PERSONAL IDENTIFICATION

Security is a part of SSHE management system that maintain the integrity of people and assets away from crime, robbery and sabotages among social situation. PTTEP staffs, contractors, visitors and concerned person shall follow access control instruction and coordinate with security guard at all entrance gates. Citizen ID card and passport are the primary evident to express themselves and change to the specific ID cards as below pictures.



Figure 3: Type of Identification Card (Staff & Contractor)

### 3.4 SSHE INDUCTION

S1 has established an induction program to welcome every new, newly transferred, and promoted employee to the S1 Asset. SSHE induction program is intended to familiarize these employees with the S1 Organization and to introduce them to the PTTEP Vision and Missions, SSHE Policy and strategic objectives for the development of safe, secured, healthy, and environmentally responsible workforces.

SSHE induction is mandatory for all personnel as describe below and shall take place as soon as is practicably possible after arrival.

- New staffs/contractors who is first time and/or transferring to work at S1 Asset;
- The person who has not been in S1 asset more than 6 months;
- Visitors or business partner who is working within one day.

Once employees have gone through the induction program, they shall receive more in-depth job-related training to prepare them for the work that they will be expected to do. This training shall depend on the duties assigned and the prior education and experience background of each individual.

Apart from the SSHE Induction program, all PTTEP newcomer and contractor personnel who working as organic staff in S1 operations are required to attend the S1 SSHE familiarization Program as specified in S1 SSHE Familiarization Program Procedure.

### 3.5 DRUGS, ALCOHOL AND KRATOM LEAF

It is the employee's responsibility to be fit for work. Employees shall be prohibited from being on company business or locations while impaired by drugs, alcohol or Kratom leaf. Using illegal drugs, alcohol or Kratom leaf, or misusing legal drugs or other substances, will be influenced and reduce their ability to perform their job safely.

Department of Mineral Fuels (DMF) defines drugs, Kratom leaf and alcohol regulation to ensure the person who is performing at concession area must have 0.00 % BAC. If the second test is positive, do not enter to the company's premise for 72 hours and consequentially report to DMF. Disciplinary action in accordance with HR Policy. Such action is also subject to the related local laws.

There are various kinds of alcohol testing are as follows;

- **Pre-employment Testing.**
- **Testing before placement in sensitive position and sensitive areas.**
- **Random and periodic (screening) testing** which is without cause.
- **Testing with cause** after incident taken place if positive result, employee is recommend to leave without pay and may be requested by police authority or under the court-of-law.

### 3.6 INCIDENT REPORTING

PTTEP support and admires the staffs, contractors and involved person to inform near miss, accident and public or environmental complain to the LKU telecommunication room for further notifying to concerned parties and relevant person. All incidents shall be recorded in computerized PTTEP Incident Management System (IMS).

Incident reporting and investigation process shall be followed and compliance with PTTEP Incident Management Standard.

### 3.7 GREEN OFFICE & 5S PROGRAM

S1 receives 'Gold Level' Green Office Award 2020 from the Department of Environmental Quality Promotion. Green Office Award is given to leading organizations that have made efforts to reduce energy consumption, minimize carbon footprint and implement green practices in their offices/operations and sustain a healthy workplace.

5S (Sorting, Setting in Order, Systematic Cleaning, Standardizing, Sustaining) Program is a structured program to systematically achieve well organization, cleanliness and standardization which result in a safer, more efficient and more productive operation. 5S Program is considered as a component of the green office. It is recommended that all personnel adopt the concept of 5S program and integrate it as part of their daily work routine.



Figure 4: 5S during cleaning & completed cleaning

### 3.8 STOP WORK AUTHORITY (SWA)

Stop Work Authority (SWA) is the prevention campaign when unsafe act and unsafe condition are found in workplace.

Stop Work Authority exercise is a tool to monitor SSHE awareness and leadership of staffs and contractor for proactive cultures and dare to stop any non-conformances of safe practice. Example of Stop Work Authority Exercise is illustrated in Appendix A. Stop Work Authority (SWA) Forms, both in Thai & English, are available on S1 Document Database [> SSHE > 10: SSHE Forms](#).

Four factors that can be stopped in personal, tools, equipment and undesirable SSHE practices are as the following diagram.



Figure 5: Stop for Safety (4-STOP)



### 3.9 ROAD SAFETY

Most numbers of S1 asset activities concern to road, traffic hazards which causes the high severity to drivers and passengers. Defensive driving, the foreseen awareness to identify and rapid assess the front sight and decide to control the vehicle safely. Drivers shall adhere as the followings:

- Evaluate yourself and ensure fit to drive in any traffic condition.
- Use BEWAGON technic to check readiness of vehicles.
- Fasten seat belt and do not sit on the undersigned seat from manufacturers.
- Keep baggage in place at provided area to obstruct another vehicles on traffic lane.
- Do not use mobile phone or simultaneous act while driving.
- Keep velocity under that traffic condition and also being compliance to laws, rules and regulations.
- Journey management plan (JMP) shall be done in case the long journey, night driving and heavy load transportation.

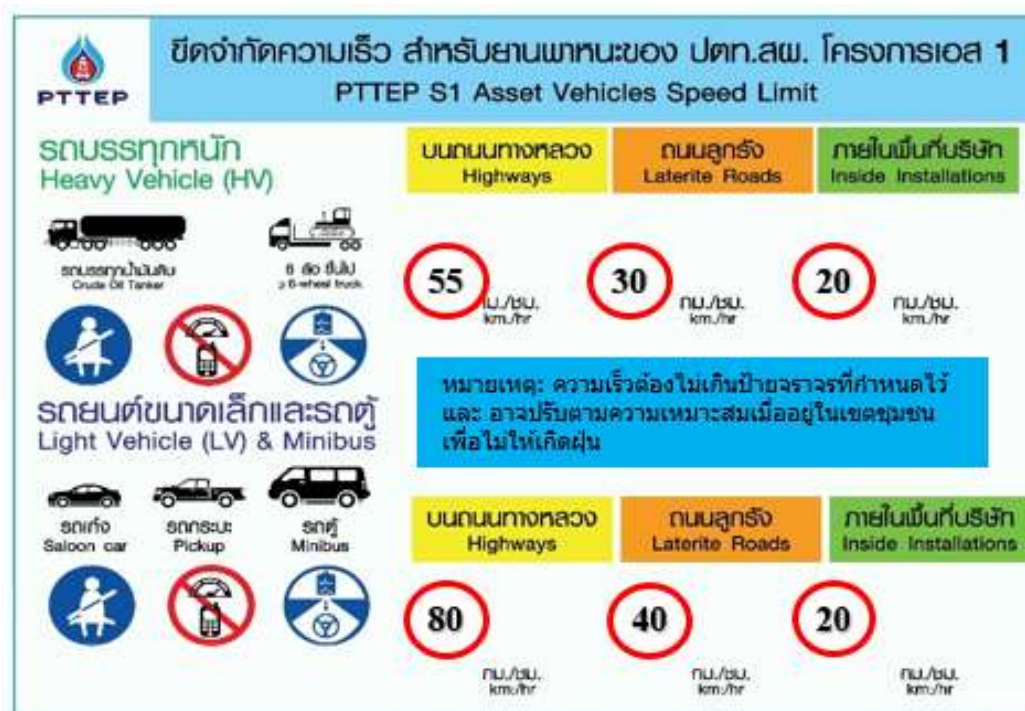


Figure 6: PTTEP S1 Asset Vehicles Speed Limit

### 3.10 WASTE MANAGEMENT

Waste management system which is aligned with Corporate Waste Management Procedure and Notification of Department of Mineral Fuel on Waste Management Standard for Petroleum Facility B.E. 2556.

The hierarchy of waste management is expressed in terms of reduction, reuse, recycling, recovery and finally residue treatment and disposal.



Figure 7: Waste Management Hierarchy

The waste generator shall classify waste into two main categories which are HAZARDOUS WASTE and NON-HAZARDOUS WASTE. Classification of waste process shall begin with identification of waste characteristic and its original source.

Waste management life cycle starts from waste identification from operations, segregation, packaging, labeling, transportation, disposal providers and reporting the inventories.

S1 asset provides containers (bin) of specific type of waste at every part of workplace to meet the proper cleanliness and hygiene.



Figure 8: Examples of Garbage containers (bin) in S1 operations



### 3.11 SMOKING AREA PROVISION

Passive smoking, also known as second-hand smoke or environmental tobacco smoke, is when a person breathes in toxic fumes. The person who never smoked, shall aware the health effects when nearby smoker(s).

Smoking is only allowed in designated smoking areas where is provided for fulltime (24 hours) and specific office hours (07:30 - 16:30 hrs.) as Appendix B. Smoker shall be responsible for cleanliness by throwing away cigarette butts into provided sand bin and also correct type of garbage containers.

In addition, they are not allowed while in Company/Contractor vehicle.

### 3.12 PERSONAL HEALTH AND HYGIENE

Staffs, contractors and concerned parties usually use company's provision of facilities which has personal distancing less than 1 - 2 meters. There may be enormous contamination and epidemiology of virus to harm human's health in workplaces.

S1 SSHE Asset and Corporate Doctors recommend to all facility users shall protect themselves by wearing specific protective equipment, i.e., natural rubber gloves, surgical mask (if preferable) whenever sharing these common facilities.

**Safety boots and safety shoes are not allowed to inside the office, canteen and accommodation** this may be contamination to common facilities or personal illness.







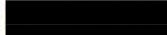
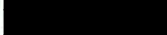
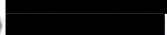




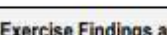
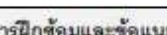
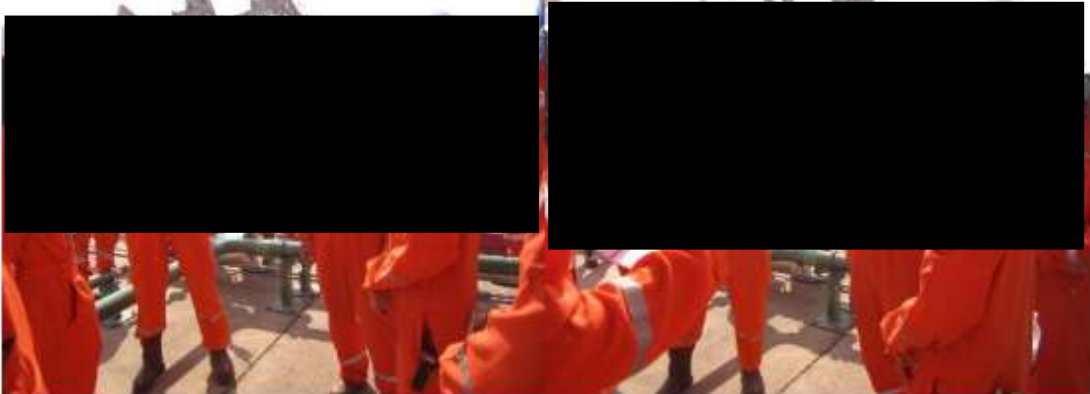
Figure 9: Personal Health Hygiene




Figure 10: Safety boots and shoes prohibited to inside building

## APPENDICES

### APPENDIX A: STOP WORK AUTHORITY (SWA) EXERCISE

	<b>STOP WORK AUTHORITY (SWA) EXERCISE REPORT FORM</b>	Form No.: 10015-SUP-SSHE-FRM-002-R00		
<b>S1</b>				
<b>Part 1: Exercise Planning (แผนการซ้อมการหยุดงาน)</b>				
<b>Subject (เรื่อง):</b>	Pretend to use mobile phone in hazardous area			
<b>Location (สถานที่):</b>	NPG-A			
<b>Activity (กิจกรรม):</b>	SSHE Committee Walkabout Audit at NPG-A	<b>Date (วันที่):</b> 11 Feb 2021		
		<b>Issued by (รายงานโดย):</b>		
<b>Scenario (สถานการณ์การฝึกซ้อม):</b>				
PS1 conducts the SSHE Committee Walkabout Audit at NPG-A with S1 SSHE Committee Members. He brings the mobile phone along to the process area and use it to take a photo while conducting the audit.				
<b>Objective (วัตถุประสงค์):</b>				
<ul style="list-style-type: none"> <li>➢ To observe that worker will apply the stop work authority.</li> <li>➢ To encourage all worker to response the stop work authority for roles and regulations information stop work policy must be held when found any violation.</li> </ul>				
<b>Observer (ผู้สังเกตการณ์):</b>				
1)  (PS1/O)	7)  (OTN/W)			
2)  (PS1/T)	8)  (OTN)			
3)  (PS1/M)	9)  (PS1/P)			
4)  (PS1/P)	10)  (PS1/P)			
5)  (OTN)	11)  (PS1/P)			
6)  (PS1/S)	12)  (CMN)			
<b>Part 2: Exercise Findings and Recommendations (ประเด็นการฝึกซ้อมและข้อแนะนำ):</b>				
<b>Item No. (ข้อ)</b>	<b>Finding Descriptions and Figures (รายละเอียดและรูปภาพ)</b>	<b>Recommendations (ข้อแนะนำ)</b>	<b>Action Party (ผู้ดำเนินการแก้ไข)</b>	<b>Target Date (วันที่กำหนดเสร็จ)</b>
1.	Operator who was the area owner did not apply Stop Work Authority immediately while observing PS1 pretend to use the mobile phone in process area.	PS1 recommended all to stop work immediately when found any violation rule and regulation.	All	-
<b>Exercise pictorial (รูปภาพการซ้อม):</b>				
				

 <b>PTTEP</b>	<b>STOP WORK AUTHORITY (SWA) EXERCISE REPORT FORM</b>	Form No.: 10015-SUP-SSHE-FRM-002-R00
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<b>Summary of Exercise (บทสรุปของการซ้อม):</b> Does the exercise meet the objective? (การซ้อมกฏตามบรรทัดฐานปฏิบัติงานที่วางไว้หรือไม่?) <input checked="" type="checkbox"/> Yes (ใช่) <input type="checkbox"/> No (ไม่ใช่)			
<b>Part 3: Review and Approve (ทบทวนและอนุมัติ)</b>			
Any additional comments and recommendations (ข้อเสนอแนะและข้อแนะนำอื่น ๆ):			
<b>SWA Role Player</b> (บทบาทสมมติ)  <div style="background-color: black; width: 100px; height: 40px; margin: 10px auto;"></div> (VP,S1 Production Operation) <b>Date: 11 Feb 21</b>	<b>Prepared and reviewed by:</b> (เตรียมและทบทวนโดย) 1) <div style="background-color: black; width: 60px; height: 20px; display: inline-block;"></div> 2) <div style="background-color: black; width: 60px; height: 20px; display: inline-block;"></div> 3) <div style="background-color: black; width: 60px; height: 20px; display: inline-block;"></div> <b>Date: 11 Feb 21</b>	<b>Approved by:</b> (อนุมัติโดย)  <div style="background-color: black; width: 100px; height: 40px; margin: 10px auto;"></div> (VP,S1 Production Operation) <b>Date: 11 Feb 21</b>	<b>Distributed to (ส่งข้อมูลถึง):</b>  PS1 Staff, PTN SSHE

Note: SWA Role Player/Supervisor or SSHE personnel shall assess and ensure of safety during the SWA exercise.



## APPENDIX B: S1 DESIGNATED SMOKING AREAS

### พื้นที่สูบบุหรี่นอกพื้นที่การผลิตและนอก อาคาร (24 ชั่วโมง)



ด้านข้างตึก 30 ปี



ด้านข้างอาคารที่พักลานกระบือ



ด้านหน้าประตู 2



ด้านข้างอาคารแผนกซ่อมบำรุงลานกระบือ



ด้านข้างอาคารจอดรถดับเพลิงลานกระบือ

### พื้นที่สูบบุหรี่นอกพื้นที่การผลิตและนอก อาคาร (เฉพาะเวลาทำการ 07:30-16:30 น.)



ด้านหน้าอาคารศูนย์ฝึกอบรมและ  
อาคารนิทรรศการลานกระบือ

## ROLES AND RESPONSIBILITIES

Roles	Responsibilities
Document Owner	<p>The owner of the VP, Superintendent, SSHE section with responsibilities for:</p> <ul style="list-style-type: none"> <li>■ Issuing S1 SSHE Rules and Regulations and its revisions.</li> <li>■ Ensuring effective implementation of S1 SSHE Rules and Regulations.</li> </ul>
Document Custodian	<p>The custodian of the Standard is the VP, Superintendent, SSHE section, with responsibilities for:</p> <ul style="list-style-type: none"> <li>■ Identifying deficiencies and opportunities for improvements;</li> <li>■ Administrating &amp; analyzing the implementation of S1 SSHE Rules and Regulations Procedure for continual improvements;</li> <li>■ Initiating periodic revisions;</li> <li>■ Maintaining revision history and document status register; and</li> <li>■ Collecting and publishing all approved S1 SSHE Rules and Regulations;</li> </ul>
Document Reviewers	<ul style="list-style-type: none"> <li>■ Document Reviewers shall be relevant Subject Matter Experts (SMEs) or Technical Authorities (TAs), who are nominated by the document owner, based on qualifications, suitability of expertise and work experience.</li> <li>■ Nominated document reviewers shall scrutinize and comment on documents issued during the comment round.</li> <li>■ If there are a number of Departments or Divisions within the Company whereby the same disciplines apply, then reviewers shall be selected from those Departments or Divisions, so that there will be a cross-section of input.</li> </ul>
Document Controller	<ul style="list-style-type: none"> <li>■ Maintains document records, monitors/ reports on document development progress, and manages the approval development process. This will include issuance of document coding when proposals for new documents are issued by Document Custodians.</li> <li>■ Provides the Document Custodian with a unique document code, after a document request has been received, and registered by the administrator.</li> <li>■ Collaborates with the Document Custodian, document author during document development, and with concerned Management to provide document review and update</li> </ul>

Roles	Responsibilities
	<p>information regarding the documentation activities on the Function Group / Division / Department yearly plan</p> <ul style="list-style-type: none"><li>■ Notifies the Document Custodian at least 30 days prior to the scheduled document review date.</li><li>■ Ensures that the currency of SSHE documentation is maintained and accessible on the SSHE Intranet</li></ul>

## DEFINITIONS AND ACRONYMS

Set out below are common specific terms presented in alphabetical order:

Term	Definition
Accident	Accident is an incident which has caused in actual injury or harm to people, damage to property, environmental impact, or negative impact to company reputation. Accidents involving injury to personnel may be further classified into: First Aid Cases (FAC), Medical Treatment Cases (MTC), Restricted Work Day Cases (RWDC), Lost time injury (LTI), Fatalities (FAT).
Asset	Refers to an operating Asset, site, or location within a respective Function Group.
Company	PTT Exploration and Production (Public) Co., Ltd. and PTTEP Siam Ltd.
Contractor	Contractor is a person employed by a Contractor or Contractor's Sub-Contractor(s) who is directly involved in execution of prescribed work under a contract with the reporting company.
Corporate	Refers to the PTTEP business groups hierarchically above Asset level, and located in the PTTEP headquarters, Bangkok.
Department	A subgroup within a Function Group, Division or Asset.
Division	A business group may have one or more distinct groups within its hierarchy. These are referred to as Divisions.
Function Group	Refers to a corporate level business group. These may have associated Divisions, Departments, or operational Assets within their hierarchy.
Guidelines	Refers to a corporate level business group. These may have associated Divisions, Departments, or operational Assets within their hierarchy.
Incident	An unplanned event or chain of events, which has resulted in injury or illness, damage to property, environmental impact, or negative impact on company reputation.
Legal professional privilege	A privilege that applies to communications, oral or in writing, made or brought into existence for the dominant purpose of obtaining or giving legal advice or assistance, or for use in existing or anticipated legal proceedings.



Term	Definition
Loss of Primary Containment	<p>An unplanned or uncontrollable release of any material from containment, including non-toxic and non-flammable materials (e.g. steam, hot condensate, nitrogen, compressed CO2 or compressed air).</p> <p>Primary containment refers to pipes, vessels, tanks etc ) see 7.3 for details of Tier 1 and Tier 2 in SSHE- 106-STD-600 SSHE Incident Management Standard(.</p>
Near Miss	<p>Near Miss is an Incident which potentially could have resulted in actual injury or illness, damage to property, environmental impact or negative impact to company reputation.</p> <p>Note: As a professional judgment and general rule of thumb when determining if an incident is a Near Miss or Property damage, the criteria that Near Miss is an incident where no loss has occurred, should be used.</p>
Non- Conformance	A failure to comply with a requirement of company SSHE Management System (SSHE MS) and/or national and international laws and regulations.
Occupational Illness	<p>Any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. Occupational illness may be caused by inhalation, absorption, ingestion of, or direct contact with the hazard, as well as exposure to physical and psychological hazards. It will generally result from prolonged or repeated exposure. Examples: back problems/ lower limb disorders, cancer and malignant blood disease, infectious disease (food poisoning, malaria etc.) , mental ill health; noise induced hearing loss, silicosis, asbestosis, allergic bronchitis, asthma, synovitis, tenosynovitis, heat exhaustion, radiation exposure.</p>
Occupational Injury	Any injury such as a cut, fracture, sprain, amputation etc. which results from a work-related activity or from an exposure involving a single incident in the work environment, such as deafness from explosion, one- time chemical exposure, back disorder from a slip/trip, insect or snake bite.
Performing Authority (PA)	The person who applies for a Work Permit, usually the foreman or supervisor responsible for the planning and execution of the work. The Applicant may be the person who will carry out the work.
Permit to Work System (PTW)	The Company's formal documented system by which safe working limits are set for authorized work.

Term	Definition
Procedures	Procedures define steps in identifying SSHE practices within PTTEP. They are specific, actions-orientated and describe processes, in compliance with SSHE Standards. Implementation of Procedure is mandatory.
Road Traffic Accident	An Incident which has involved a vehicle and which has resulted in Injury, illness and/ or damage ( loss) to people, assets, the environment or the Company's reputation.
SHE MS Standards	Mandatory requirements to ensure SSHE Policy compliance. Implementation of SSHE MS/Standards is mandatory throughout PTTEP.
Specifications	Specifications refer to PTTEP Internal Engineering Standards, which are incorporated into the PTTEP Engineering and General Specification (PEGS) System.
Spill	<p>Spill is any loss of containment that reaches the environment, irrespective volume of quantity recovered. Examples include but not limited to condensate spill, diesel fuel or oil spill; aviation fuel spill, process chemical spill, and etc. Spill of produced water are excluded.</p> <p>Intentional discharges of drilling cutting and fluids during drilling activities are not considered as pollution/ spill but an accidental release of drilling fluids to the sea must be reported as a spill.</p>
SSHE Policy	The highest level document containing a formal statement of principles that identifies expectations of PTTEP in managing SSHE.
Staff	Staff is a person employed by and on the payroll of the reporting company, including corporate and management personnel specifically involved in E&P industry. Persons employed under short-service contracts are included as Company employees provided they are paid directly by the company.
Supporting documents	Associated documents supporting the implementation of SSHE MS. These documents shall be consistent with SSHE Policy, Standards and Procedures. Example of Supporting Documents includes: SSHE plans, regulations, International and national technical references, minutes of meetings, SSHE risk assessment and monitoring records, etc.
Unsafe Act	An act by personnel or an unsafe condition which violates either written or unwritten common sense safety rules or procedures.
Work Related Activity	A work-related activity is an activity in a work environment, which is or ought to be subject to management controls.
Work Site	Any Company managed construction, maintenance or operating site outside the boundaries of a Production Site. (Includes road tanker operations and Contractors' yards, where such yards have been established specifically to serve the Company.)

Acronyms	Description
5S	Sorting, Setting in Order, Systematic Cleaning, Standardizing, Sustaining
ALARP	As Low As Reasonably Practicable
ECM/N	Engineering
IMS	Incident Management System
JSA	Job Safety Analysis
OLG/M	Material Yard
OTN/W	Well Services
PS1	VP, S1 Production Operations
PS1/L	Manager, Land Acquisition, Permits, and Operations Services Section
PS1/M	Superintendent, Maintenance
PS1/O	Manager, Oil Movement and Transportation
PS1/P	Superintendent, Production
PS1/S	Superintendent, SSHE
PS1/T	Manager, Production Operations Support
PTW	Permit To Work
SSHE	Safety, Security, Health and Environment
SSHE MS	Safety, Security, Health and Environment Management System

## REFERENCES

Document Code	Document Title
<b>PTTEP SSHE Controlling Documents</b>	
1038-STD-SSHE-000-R05	SSHE Management System
11038-STD-SSHE-301-R02	Corporate Oversight of SSHE MS Standard
11038-STD-SSHE-401-R06	SSHE Risk Management Standard
11038-STD-SSHE-601-R07	Incident Management Standard
11038-STD-SSHE-501-R05	Emergency and Crisis Management Standard
SSHE-106-PDR-521	Waste Management Procedure
2148-GDL-SSHE-603/00/01-R01	5S ( Sorting, Setting in Order, Systematic Cleaning, Standardizing, Sustaining) Guideline
11038-GDL-SSHE-507/00/06-R01	Drugs and Alcohol Guideline
11038-STD-SSHE-508-R06	Management of Change Standard
11038-STD-SSHE-510-R02	Life-Saving and Process Safety Rules Standard
12148-PDR-SSHE-505/42-R00	Permit to Work Procedure
10015-SUP-SSHE-FRM-002-R00	Stop Work Authority (SWA) Exercise
<b>Other Reference Documents</b>	
<a href="https://europeanlung.org/">https://europeanlung.org/</a>	Passive Smoking

## REVISION HISTORY

Rev.	Description of Revision
0	<b>Authorized by: DSO, Date: September 2010</b> <ul style="list-style-type: none"> <li>New document</li> </ul>
1	<b>Authorized by: DSO, Date: May 2014</b> <ul style="list-style-type: none"> <li>Revised document</li> </ul>
2	<b>Authorized by: DSO, Date: September 2014</b> <ul style="list-style-type: none"> <li>Revised document</li> </ul>
3	<b>Authorized by: PNO, Date: December 2016</b> <ul style="list-style-type: none"> <li>Revised document</li> </ul>
4	<b>Authorized by: PS1, Date: September 2021</b> <ul style="list-style-type: none"> <li>Revised the current S1 Quality and SSHE Standards.</li> <li>Added the meaning of "SSHE Zero Target Incident".</li> <li>Canceled SSHE work category such as PTW, JSA, Working in Confined Space, Working at High, Security Management which can be easily seen in Corporate and Site SSHE OP, Standard and Guideline.</li> <li>Updated the new SSHE Campaigns and Practices for users such as Life-Saving Rules, Process Safety Rules, Green Office, 5S, SWA Exercise.</li> <li>Added the new topic of Personal Health and Hygiene to prevent the enormous contamination and dangerous virus epidemiology.</li> <li>Added S1 House's Rule such as safety shoes prohibited inside buildings and smoking at company's designated areas.</li> <li>Updated Roles, Responsibilities, Definitions, Acronyms, Abbreviated Departments/Sections and References which are appropriated to current status.</li> </ul>

ภาคผนวกที่ 11

เอกสารแสดงการตรวจสอบและบำรุงรักษาเครื่องจักร/เครื่องยนต์

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F/L\* ใ้จัดทำรายการเครื่องมือให้พร้อมใช้งานสำหรับงานเชื่อมท่อ Flow line วันที่ ๐๖ / ๐๑ / ๒๕๖๖

ลำดับ	รายการ	ขนาด	จำนวน	สภาพการใช้งาน		หมายเหตุ
				ดี	ไม่ดี	
1	แคลมป์ ประกอบท่อ	6"	8 อัน	/		
2	อุปกรณ์ไฮดรอลิก	จาก 13 ไม่พบ 1 ชุด				
3	แคลมป์ สายกราวด์	3"				
4	แคลมป์ สายกราวด์	6"				
5	แผ่นไม้กระดานรอง					
5	โครงล้อมกันลม	250x250 มม. 2 ชุด		/		ไม่พบ
6	ผ้าใบกันลม	4x3 เมตร 2 ผืน		/		ไม่พบ
7	ผ้ากันไฟ	2x2 เมตร 2 ผืน			/	ไม่พบ
8	ถังดับเพลิง	6kg 20B	6 ถัง	/		
9	ถังฉีดน้ำดับไฟ	16 ลิตร	3 ถัง	/		
10	ปลอกแขนเฝ้าระวังไฟ					
11	ตู้เชื่อม + Certificate	500x	4 ชุด	/		
12	ตะแกรงกันสะเก็ดไฟท่อไอเสีย	2 ผืน	1 อัน	/		
13	ถาดรองน้ำมันเครื่อง	A	1 ถาด	/		
14	หมอนรองล้อตู้เชื่อม					
15	สายเชื่อม	90 SQMM 8 เส้น				
16	สายกราวด์ตู้เชื่อม					
17	สายไฟ	20.1 มม. 4 เส้น				
18	ปลั๊กไฟ		2 ตัว			ไม่พบ
19	หินเจียร์		3 ตัว	/		
20	ลวดเชื่อม (GTAW)		3-5	X		
21	ลวดเชื่อม ไฟฟ้า (SMAW)					
22	บันไดปีนท่อ	1.501	2 อัน	/		
23	A - Flame (ผ่านการ Load test)		1 ชุด			รอ Load test
24	สลิงผ้าใบ					
25	ก้ามชะลอ	1.6 t	6 ตัว			

บริษัท PR construction  
 ผู้ให้ตรวจสอบ 1. [REDACTED]  
 ตำแหน่ง SUP

บริษัท Best Performance Engineering  
 ผู้ตรวจสอบ 1. [REDACTED]  
 ตำแหน่ง Safety

ภาคผนวกที่ 12  
การสำรวจพื้นที่ก่อสร้างแนวท่อลำเลียงปิโตรเลียม

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NOTE :

NTM-A TO NTM-H  
FLOWLINE  
SECTION A1-A3  
PIPE JACKING  
15.00 m.

NOTE :

ถนนลูกรังกว้าง 4 เมตร  
เขตทาง 8 เมตร  
เขตรับผิดชอบ : อบต.หนองตูม

## Site Check before construction





