



Preamble

Terms & Definitions

Context

Leadership

Planning

Support

Operation

Performance Evaluation

Improvement



Preamble: OGDCL's Integrated HSE System Manual

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1.1 Preamble

OGM/P-HSE-1.1(08) Revision Number 8

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Change/ Revision Log

#	Description of Change
1.	Added: Mapping of PSM (22 Elements) Model with OGDCL's HSE Management System.
2.	Added: Procedure titled "OGDCL's Process Safety Fundamental (PSFs)"

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Approved by
HSE System Procedures	Manager HSEQ	GM HSEQ	MD / CEO



Latest Framework of OGDCL's HSE Management System





Preamble

OGDCL has established (developed and implemented) HSE Management System to improve its HSE performance and ultimately to reduce the adverse impact of its operations, activities, and services on 3Ps i.e. people, plant, and planet. The HSE System complies with the latest revisions of international standards ISO14001, ISO45001, ISO31001, ISO50001, Guidelines of The International Association of Oil & Gas Producers (now IOGP and formerly known as OGP) and Process Safety & Risk Management (PSRM) Model.

Effectively mapping and applying 22 PSM Risk-based and Cultural Elements with existing HSE System (*exhibited as Mapping Chart in the proceeding page*) clearly demonstrates an uplifting of HSE standards at OGDCL and also a morale-boost of employees with a reduced number of injuries & incidents. Our commitment is serving as the backbone of entire PSM & HSE drive for sure, and, combined with employee participation, is helping in pursuing the objective "To be Excellence in Process Safety".

Our HSE System's scope covers:

- ▣ Engineering / construction operations;
- ▣ Exploration, including seismic techniques and geological surveys;
- ▣ Drilling of exploratory wells and geological services;
- ▣ Drilling and development of production wells; and
- ▣ Treatment of oil and processing of natural gas to yield marketable products.

This document describes the way OGDCL is managed with respect to its stated HSE policies and strategic objectives. It ensures that the critical activities of the company are identified, controlled and that measurements are made and reported so as to enable monitoring of overall performance and identification of areas for improvement. This HSE System addresses the organizational structure and responsibilities of people, the management of resources and documentation required for sound HSE performance for all OGDCL activities. The document provides a framework for planning of work activities, which include existing operations, management of changes and developing hierarchy of procedures both for the normal as well as abnormal conditions.

This is a CONTROLLED document and is subject to continual review and update as required. Functional / Line Management is the PRIMARY IMPLEMENTER of HSE management system; However, the CUSTODIAN of HSE Policy Framework and System Manual is the General Manager HSE who is responsible for updating these document as required on behalf of the Chairman or Managing Director & CEO of the company and checking / reporting the compliance level.

OGDCL's HSE Policy Framework and Integrated HSE System Manual is divided into Six (06) Core Policy Framework Elements and Thirty Three (33) Procedures, corresponding to the Main Sections & Subsections of ISO14001, ISO45001, ISO31001, ISO50001 standards and PSM guidelines (*exhibited as Outline in the proceeding page*).

Instructions and directives for the implementation of HSE system would be issued from time to time. These instructions would be meant for strict compliance and adherence with no room for tolerance or departure. These instructions would be basically to avoid instances of deviation and non-adherence which can potentially cause irreparable damage or injury to the manpower or company assets besides financial and reputational implications.

It is, therefore, strongly advised that HSE system/ standards/ instructions be fully adhered to. Obligation of compliance rests with all employees whereas Head of Departments would be responsible for ensuring that Functions under their jurisdiction are adequately equipped in terms of awareness and availability of tools to meet the HSE system. It may also be underlined that strict disciplinary action may be taken in case of a laxity, omission or negligence in this regard.

(Syed Khalid Siraj Subhani)
Managing Director/ CEO



Mapping of PSM (22 Elements) Model with OGDCL's HSE Management System

First Leadership	Second Planning	Third Support	Fourth Operation	Fifth Performance Evaluation	Sixth Improvement
<ul style="list-style-type: none"> • Management Commitment: Management is responsible for safety of personnel and protection of company property. Management will direct the establishment and implementation of safety programs through participation in various safety committees and conducting plant safety audits. Management should have specific, quantifiable, personal safety goals/targets and implementation plans, which must be stewarded regularly. • Line Management Accountability and Responsibility: The purpose of this element is to delegate HSE responsibility and accountability to each level of the organization. Line supervisors and managers are totally responsible and accountable for safety as well as cost, quality and productivity. • Policies and Principles: To improve safety, a deliberate safety policy must be established and applied daily by each member of the work force, whether manager, supervisor, or contractor employee. Top management must establish the policy that will spell out the principles that are to govern all decisions regarding safety. Without such a policy, safety tends to be pushed aside when other concerns become pressing. • Safety Personnel: This element highlights the main responsibilities of safety personnel so that all members of line organization understand the role and place of safety personnel in the organization. • Integrated Organization for Safety: The purpose of the overall safety organization is to mobilize all available talent in the interest of safety, health, and environmental protection. It does not, in any way, relieve individual members of the line organization of their safety responsibilities. Various committees are staffed principally by members of the line organization supplemented by safety staff members and other specialists. • Emergency Preparedness and Contingency Planning: The intent of this element is in-depth planning for potential emergencies ensuring effective response by site personnel. The outcome of these efforts is mitigation of the impact of incidents on personnel, environment / facilities and prompt control of emergency. 	<ul style="list-style-type: none"> • Process Safety Information: It provides a foundation for identifying and understanding the hazards involved in the process. It ensures that PSM goals of HSE are achieved by providing process safety documentation. A PSI package shall be prepared for each process unit. Documents of the PSI package should be maintained up to date for the life of each process unit. • Risk Assessment and Process Hazard Analysis: A systematic and comprehensive study to identify and evaluate the significant hazards of the process and the safeguards associated with Highly Hazardous Processes (HHP) and Lower Hazard Operations (LHO). Process Hazard Analysis systematically identifies the safety hazards such as potential for fires, explosions and / or release of toxic materials, and is a well-defined program to remove or lower these hazards. • Goals, Objectives and Plans: The purpose of this element is to provide guidelines for establishing realistic, achievable and quantifiable safety goals and objectives. Managing safety, like managing other aspects of a business, includes setting of performance goals and objectives which should be Specific, Measurable, Attainable, Result Oriented, Time Bound (SMART) and within the sphere of influence of the person and group who is to be held accountable for achievement. 	<ul style="list-style-type: none"> • Process Safety Information: It provides a foundation for identifying and understanding the hazards involved in the process. It ensures that PSM goals of HSE are achieved by providing process safety documentation. A PSI package shall be prepared for each process unit. Documents of the PSI package should be maintained up to date for the life of each process unit. • Effective Communication: The purpose of this element is to emphasize and elaborate the importance of effective two-way communication in prevention of occupational accidents/ illnesses and achieving safety goals and objectives. • Training and Development: This element signifies that all personnel whose work could affect the safety of the site must have, and maintain, the necessary knowledge and skills to execute their job functions in a manner consistent with the safe operation of the site. 	<ul style="list-style-type: none"> • Procedure and Performance Standards: This element provides standards of performance including such items as rules, procedures, and design criteria that specify how activities are to be done. They should be written, practical, and available at the point of action, reviewed regularly, followed, and enforced. Adherence to standards must be enforced, even to the point where adherence becomes a condition of employment. • Pre Startup Safety Review (PSSR): PSSR provides a final checkpoint for new and modified equipment and facilities to confirm that all appropriate elements of Process Safety Management have been addressed satisfactorily and the equipment / facility is safe to start-up. It is mainly intended to make sure that alterations / additions to the process or system do not create hazards to personnel at the site, surrounding facilities, community and environment by inadequate, incomplete, or unauthorized design or installation. • Contractor Safety Management: The intent of this element is to make contractors responsible for effectively meeting the safety, health and environmental requirements. It covers safety expectations of contractors with safety performance of the contractor as the top most priority. 	<ul style="list-style-type: none"> • Quality Assurance (QA): QA is important for new facilities and revisions or repairs to existing facilities to ensure that safety critical equipment which handles hazardous material (as it is fabricated) is suitable for the process application. It also ensures that safety critical equipment installed is consistent with design specifications and manufacturer's recommendations. • Mechanical Integrity: This element addresses equipment tests and inspections including predictive and preventive maintenance, reliability engineering, maintenance procedures, quality control procedures, training and performance of maintenance personnel. All of these mechanical integrity efforts ensure an incident free and reliable operation, and they help to pin point root causes and avoid incident recurrence and pre-mature failures. • Audits and Observations: This element covers the importance of effective auditing in site safety management and provides guidelines for conducting and evaluating safety audits. • Integrated Organization for Safety: The purpose of the overall safety organization is to mobilize all available talent in the interest of safety, health, and environmental protection. It does not, in any way, relieve individual members of the line organization of their safety responsibilities. Various committees are staffed principally by members of the line organization supplemented by safety staff members and other specialists. • Motivation and Awareness: The purpose of this element is to discuss and provide guidelines on different concepts and recommended practices on progressive motivation. Internal motivation is necessary to sustain high-level safety performance once that level of performance has been reached. External motivation is necessary to make the initial transition to high level safety performance because of established behavior patterns in the individual. • Integrated Organization for Safety: The purpose of the overall safety organization is to mobilize all available talent in the interest of safety, health, and environmental protection. It does not, in any way, relieve individual members of the line organization of their safety responsibilities. Various committees are staffed principally by members of the line organization supplemented by safety staff members and other specialists. 	<ul style="list-style-type: none"> • Incident Investigation and Communication: The purpose of this element is to document the process for investigating incidents that occur onsite or off-site in a way that promotes thorough and efficient investigation in a timely manner; uniform, accurate, clear, and concise documentation and reporting; identifies and implements recommendations to prevent incident recurrence; involves the right people to get the information; ensures a clear understanding of key factors and key learnings; participating personnel obtain a positive learning experience. • Management of Change - Facility and Technology: Processing plants are designed according to standard engineering practices. The changes to the documented process safety information (e.g. hazard of materials, equipment design basis and process design basis), even if subtle or temporary, can lead to catastrophic events. Therefore, these changes must be managed in such a manner that safety, the integrity of the plant and the environment are not compromised. All changes must receive appropriate review and authorization before being implemented. • Management of Change - Personnel: Safe operations of facilities require an effective personnel change management system as people are the essential ingredient in "Process Safety Management" and play the most important role in its implementation and day to day compliance. It is essential that personnel changes at all levels are controlled according to a pre-established criteria so that minimum levels of experience and knowledge are maintained at the site. • Pre Startup Safety Review (PSSR): PSSR provides a final checkpoint for new and modified equipment and facilities to confirm that all appropriate elements of Process Safety Management have been addressed satisfactorily and the equipment / facility is safe to start-up. It is mainly intended to make sure that alterations / additions to the process or system do not create hazards to personnel at the site, surrounding facilities, community and environment by inadequate, incomplete, or unauthorized design or installation.

IMPORTANT:- IT IS EVERYBODY'S RESPONSIBILITY TO ENSURE THAT THE OGDCL'S HSE MANAGEMENT SYSTEM IS IN PLACE.