THIS IS AN AUDITABLE DOCUMENT FOR THE EXTERNAL/ THIRD PARTY HSE AUDITORS NOMINATED BY THE PREQUALIFIED CERTIFICATION BODY AND FOR THE OGDCL'S INTERNAL (QUALIFIED) HSE AUDITORS UNDER THE CODE OF CONDUCT DEFINED BY INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (ISO).

Oil & Gas Development Company Limited's

INTEGRATED HSESYSTEM MANUAL

A Manual Based on the Latest Revisions of ISO14001, ISO45001, ISO31000, ISO50001, Guidelines of The International Association of Oil & Gas Producers (now IOGP and formerly known as OGP) and Process Safety & Risk Management (PSRM) Model

ORIGINAL ISSUE JUNE 25,2007
THIS REVISION NOVEMBER 21,2025 (FINAL)





Distribution List

Preamble	
Terms & Definitions	(_
Context	(_
Leadership	(
Planning	(_
Support	
Operation	(
Performance Evaluation	
Improvement	

Board of Directors (BOD) □ Company Secretary ☐ GM/ Chief Internal Auditor Managing Director (MD)/ Chief Executive Officer (CEO) ☐ GM (HSEQ & RM) ☐ ED HR/Admin ☐ GM (HR) ☐ GM (Admin) ☐ GM (Security) □ InCharge (OGTI) □ ED CA/LS □ GM (LS) □ GM (CA) □ GM (CSR) ☐ GM (Commercial) ☐ Chief Operating Officer (COO) □ ED Exploration ☐ GM (Prospect Generation) ☐ GM (Geological Services) ☐ GM (Geophysical Services) ☐ ED Petroserv ☐ GM (Drilling Operations) ☐ GM (Drilling Services) □ GM (C&ESS) ☐ ED Production ☐ GM (Production) □ GM (P & P) GM (Projects) GM (PE&FD) □ ED Reservoir Management ☐ GM (Reservoir Management) ☐ GM (Geology & Geophysical) ☐ ED BD & JV □ GM (JV) □ GM (BD) □ Chief Financial Officer (CFO) ☐ Chief Information Officer (CIO) ☐ GM (Finance) ☐ GM (Accounts)

□ GM (Treasury)

■ Manager (Land)

☐ GM (Material Management)

■ ED Services
■ GM (SCM)

Preamble

Te	erms & Definitions	,,
	Context	,,
(Leadership	,,
(Planning	,,
(Support	()
(Operation	()
	Performance Evaluation	- \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
[Improvement	- \





1.1 Preamble

OGM/P-HSE-1.1(9) Revision Number 9

Original Issue: This Issue: June 25, 2007 November 21, 2025

> Updated By: Muhammad Mubashir Abbas Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By: Babar Iftikhar General Manager HSEQ-Security, OGDCL

> Approved By: Ahmed Hayat Lak Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1.	Modified: New Logo & Tag Line

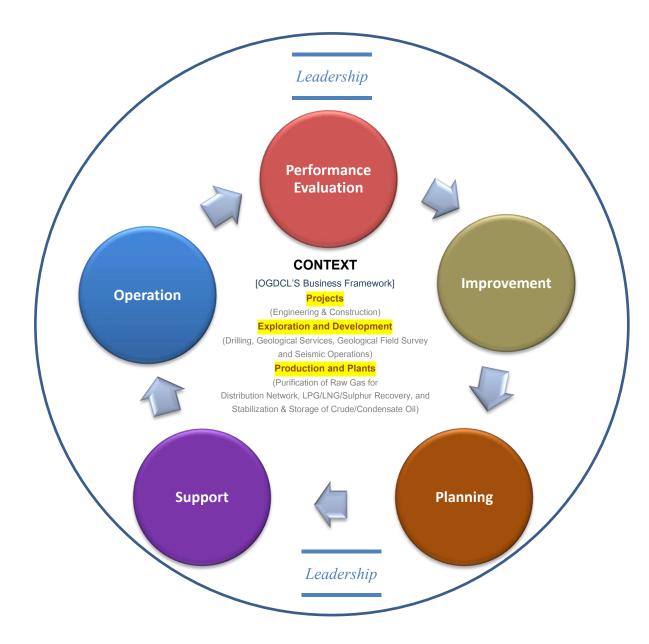
Associated Documents Approval & Issue

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







the energy Preamble: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

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, Chairman BOD and MD/ CEO has *delegated the power* to General Manager HSEQ as CUSTODIAN of HSE Policy Framework and System Manual –who, therefore, is responsible for updating these document as required on behalf of them and apprising the compliance thereof.

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, ISO31000, 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.







Preamble: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Outline of OGDCL's HSE Management System

					Plan		Do	Check	Act
					H	HSE Framework	's Core Elemen	t	
	Preamble OGM/P-HSE-1.1	Terms & Definitions OGM/P-HSE-2.1	Context OGM/P-HSE-3.1	^{First} Leadership	Second Planning	Third Support	Fourth Operation	Fifth Performance Evaluation	Sixth Improvement
				HSE & ERM Policy Statements OGM/P-HSE-4.1	Enterprise Risk Management OGM/P-HSE-5.1	Competence & Awareness OGM/P-HSE-6.1	Operational Planning and Control OGM/P-HSE-7.1	Hazards & UBsUCs Identification & Reporting OGM/P-HSE-8.1	Opportunities For Continual Improvement OGM/P-HSE-9.1
				OGDCL's Lifesaving Golden Rules OGM/P-HSE-4.2	Job Vulnerability /Hazard Analysis OGM/P-HSE-5.2	Communication & Consultation OGM/P-HSE-6.2	Permit to Work System OGM/P-HSE-7.2	Monitoring, Measurement & Compliance Evaluation OGM/P-HSE-8.2	Management of Change OGM/P-HSE-9.2
				OGDCL's Process Safety Fundamental (PSFs) OGM/P-HSE-4.3	Legal & Other Requirements OGM/P-HSE-5.3	Documented Information OGM/P-HSE-6.3	Handling, Segregation and Disposal of Waste OGM/P-HSE-7.3	Analysis of Data OGM/P-HSE-8.3	Incident Investigation OGM/P-HSE-9.3
				Roles, Responsibilities Accountabilities and Authorities OGM/P-HSE-4.4	Objectives & Management Program OGM/P-HSE-5.4	Control of Records OGM/P-HSE-6.4	Journey Management OGM/P-HSE-7.4	Reward, Recognition & Penalties OGM/P-HSE-8.4	
				Crisis Management OGM/P-HSE-4.5			Hydrogen Sulfide Management Framework OGM/P-HSE-7.5	Internal HSE Audits OGM/P-HSE-8.5	
				Structure OGM/P-HSE-4.6			Management of Project Contractors & Service Companies OGM/P-HSE-7.6	Management Reviews OGM/P-HSE-8.6	
							Use of Personal Protective Equipment OGM/P-HSE-7.7		
							Framework for Site Restoration OGM/P-HSE-7.8		





Preamble: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

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

-ırst -eadership

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.
- Lemergency Preparedness and Contingency Planning:
 The intent of this element is indepth 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.

econd Ianning

- ♣ 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.
- A 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.
- 4 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.

Third Support

- 4 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
- ♣ 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.

ourth Operation

- 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.

rinth Performanc Evaluation

- ♣ 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.
- 4 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.
- 4 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.
- 4 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 highlevel 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.

Sixth Improvement

- 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.
- 4 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.





Preamble

Terms & Definitions

Context Leadership **Planning** Support Operation Performance **Evaluation**

Improvement

2.1 Terms & Definitions

OGM/P-HSE-2.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iffikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo and Tag Line
2	Added: Sustainability Terms & Definitions

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by



Op) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Auditee	Location (field/ site) to be or being audited.
Auditor	Competent person who conducts an HSE audit.
Audit Conclusion	Outcome of an audit, after consideration of the audit objectives and all audit findings.
Audit Criteria	Set of policies, procedures or requirements used as a reference against which audit evidence is compared.
Audit Evidence	Records, statements of fact, or other documented information (qualitative or quantitative) which are relevant to the audit criteria and verifiable.
Audit Findings	Results of the evaluation of the collected audit evidence against audit criteria. The findings include good practices, nonconformities, observations or opportunities for improvement.
Audit Grade	Audit Grade for a specific location (attributed as Excellent, Good or Poor) is based upon percentage compliance level determined by Audit Team against the Standardized HSE Audit Checklist.
Audit Plan	Arrangements for an audit planned (as per audit planner/ schedule) for a specific time frame and directed towards a specific purpose.
Audit Planner (Schedule)	Audit program arrangements for a set of audits scheduled for a specific time period and directed towards specific purpose.
Audit Scope	Extent and boundaries of an audit; It generally includes a description of the physical locations, organizational units, activities and processes, as well as the time period covered.
Audit Team	One or more HSE Auditors conducting an audit, and supported by technical or subject matter experts, if needed.
Documented Information	Documented information, refers to any information required to be controlled & maintained. (It can be in any format/ media, and from any source.)
Lead Auditor	An experienced HSE Auditor of the Audit Team who is appointed as Team Leader for a specific audit.
Objective Evidence	Records, statements of fact, or other documented information (qualitative or quantitative) supporting the existence or verity of something obtained through observation, measurement, test, or other means.

EMERGENCY PREPAR	EMERGENCY PREPAREDNESS AND RESPONSE						
Active Fire Protection Systems	Active fire protection refers to systems that involve a triggered response to a fire. Active systems are initiated by the flame and the response may be manual (for example, a hand operated fire extinguisher qualifies as an active response) or programmed (for example, a sprinkler system). Essentially, active fire protection involves fighting a flame. These systems are considered to be a proactive approach to extinguishing fires and controlling the spread of smoke. The following list of examples are all a part of active fire protection: Fire extinguishers Fire hose reels Fire blankets Sprinkler systems Smoke alarms Firefighters/ emergency services Automated fire doors Thermal detectors Fire control systems						
Contingency Plan	A pre-established plan to mitigate an unusual situation which has potential for harm, which incorporates the best use of local as well as remote facilities and resources.						
Crisis Management Teams	 a. Emergency Management Team (EMT), Head Office b. Location Emergency Management Teams (LMTs) i. Rapid Response Team (RRT) ii. Emergency Response Team (ERT) iii. First Aid & Evacuation Team 						
Emergency Level-1	An emergency that can be controlled by the localized action at the affected area by the available personnel and resources. This level of emergency doesn't have immediate serious injuries, potential of fatality, major equipment loss, major loss of primary containment, large fire/explosion, major vehicular incident and/or major environment impact. • Emergency siren is NOT sounded at this stage. • Mustering is NOT required. • LMT is NOT activated; however, the situation is critically monitored by Location InCharge (Chairman LMT) for assessment of any further escalation potential.						



Controlled Copy Do Not Duplicate For Internal Use Only

	Work activities can be suspended temporarily in the localized area which is or likely to be affected.							
Emergency Level-2	An emergency situation which has potential to impact the affected site significantly and for which external support services may be required. It may result in serious injuries/ fatality, major equipment damage, major loss of primary containment, significant fire/ explosion, major vehicular incident, and/ or loss of controlled substance to the environment • Emergency siren is sounded with intermittent tones of 10 seconds each with 5 seconds pause, repeated 3 times. Where available, emergency announcement through Public Address system may also be made. Emergency termination would be managed through siren with continuous tone for 120 seconds. • Mustering is required. However, LMT Chairman may further decide to evacuate to the Assembly Points designated outside the main gate. Employees are to wait for further instructions there. • LMT is activated; however, EMT may be activated depending upon crisis level (severity) 3, 4, or 5 • All operations/ activities will be stopped.							
Emergency Response Post	An operational larger aspect may be a nullike any join response po	cts of the umber o t off-site ost, etc.	e emerg f respon regiona	ency. In se posts respons	a high-ir establish e post, p	mpact er ned to su provincia	mergenc pport the I governr	y there e response ment's
Emergency Planning Zone (EPZ)	An area surresidents or the early sto H2S or exploa specific e	other mages of consion or f	embers on the contract of the	of the pu ntrolled re he area	ublic ma elease c for whic	y be at h of toxic m	ighest risl aterials s	k during uch as
Emergency Response Plan (ERP)	a specific emergency response plan. A comprehensive plan to protect the personnel, public, including criteria for assessing an emergency situation and procedures for mobilizing response personnel and agencies and establishing communications and coordination, that is to be followed by all parties in the event of an incident.							
Fire Classes and		CLASS A	CLASS B	CLASS C	CLASS D	Electrical	CLASS F	13
Extinguisher Types	Type Extrapolation	Combustible materials (e.g. paper & wood)	Flammable liquids (e.g. paint & petrol)	Flammable gases (e.g. butane and methane)	Flammable metals (e.g. lithium & potassium)	Electrical equipment (e.g. computers & generators)	Deep fat fryers (e.g. chip pans)	Comments
	Water	\	×	×	×	×	×	Do not use on liquid or electric fires
	Foam	V	\	X	X	×	X	Not suited to domestic use
	Dry Powder CO2	>	Y	>	V	~	S	safely up to 1000 volts Safe on both high
	Wet Chemical		×	Ŷ	Ŷ	×		use on extremely
Muster Point	The assemb			-	yees ha	ve to be	gathere	temperatures d in d
Passive Fire Protection	case of any				ance me	aguras T	hasa syst	ams ara
Passive Fire Protection Systems	IntumesMortar of	eventing esistance on talize yes valuable of asset contains the of team live fire pers sers ancy exiters nields cent paid coating	g the sprice is generally	ead of floor and in the scanner of t	ame and actural a solate a afety of a effecting after a grity of a	d resisting nd design flame. Po occupan ve comp facility a	g ignition ned to assive fire ts and fo artment and ensur	in the first e r the alization, te the safe
	Intumescent paint							



Op) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	Spray fireproofing					
Retrieval System	System The equipment used for non-entry rescue of persons from confined spaces such as a safety harness and life line.					
Spill Volume (Reportable)	Quantity of spills equal to or more than one barrel i.e. 159 liter of crude, refined products, and chemicals both on land and aqueous environment.					
T-Card & Mustering System	Manual Card for the personnel to sign or swipe in and out of the plant areas used for tallying up all the personnel that have assembled at the different "Muster Points" during actual emergencies or mock drill sessions in order to check whether this equates to the total number of people on the entire plant.					
HSE PERFORMANCE KPIs						

	different "Muster Points" during actual emergencies or mock drill sessions in order to check whether this equates to the total number of people				
	on the entire plant.				
HSE PERFORMANCE K	Pls				
Fatal Accident Frequency Rate (FAFR) [Corporate]	(Number of Fatalities due to work related injuries in a year / Total man hours) x 1000,000				
Fatal Accident Frequency Rate (FAFR) [Unit Level]	(Number of Fatalities due to work related injuries in a year / Total man hours) x 2000,000				
First Aid Case (FAC)	An injury that requires simple treatment, such as cleaning and application of a small bandage, which does not require treatment by a medical professional.				
Heinrich (Safety Triangle) Ratio	29 Minor Injuries MEAR MISS WEAR MISS UNSAFE ACT				
Key Performance Indicator (KPI)	Performance indicator or key performance indicator (KPI) is a measure of performance commonly used to help an organization define and evaluate how successful it is, typically in terms of making progress towards its specific goals.				
Lagging Indicators	Lagging indicators are typically "output" oriented, easy to measure but hard to improve or influence e.g. incidents related statistics, pollution load, etc.				
Leading Indicators	Leading indicators are typically "input" oriented, hard to measure and easy to influence e.g. risk assessment reports, audit results, trainings outcome, etc.				
Lost Workday (Time) Injury Frequency (LWIF or LTIF) [Corporate]	(No. of Fatalities + No . of Lost Time Injuries in a year / Total Hours Worked) x 1,000,000				
Lost Workday (Time) Injury Frequency (LWIF or LTIF) [Unit Level]	(No. of Fatalities + No . of Lost Time Injuries in a year / Total Hours Worked) x 200,000				
Medical Treatment Case (MTC)	An injury severe enough to require treatment by a medical practitioner (a physician or nurse), but does not cause the worker to miss any work.				
Restricted Workday Injury (RWI)	An injury that restricts the worker from performing his normal duties but to continue within 24 hours of the injury.				
Safe Man Hours	Cumulative hours worked since the most recent Lost Workday (Time) Injury (LWI or LTI) took place in a certain site or location.				
Total Reportable (Injury) Cases	Restricted Workday Injuries + Lost Workday Injuries + Medical Treatment Cases				



Og) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	Tier 3: Process Upsets, Reliability Events, Shutdowns and Challenges to Safety Systems [failures which could have led to an Ter 1 or 2 incident] Tier 4 Operating Discipline & Management System Heath Indicators [Code of Conduct Expectations – Design, Operations, Maintenance]
Total Reportable (Injury) Case Frequency (TRCF) [Corporate]	(Total Reportable Injury Cases in a year / Total Exposed Hours) x 1000,000
Total Reportable (Injury) Case Frequency (TRCF) [Unit Level]	(Total Reportable Injury Cases in a year / Total Exposed Hours) x 200,000
Total Reportable Occupational Illness Frequency (TROIF)	(Total Occupational Illnesses in a year / Total Hours Worked) x 1000,000
[Corporate] Total Reportable Occupational Illness Frequency (TROIF) [Unit Level]	(Total Occupational Illnesses in a year / Total Hours Worked) x 200,000
Total Vehicle Incident Rate (TVIR) [Corporate]	(Total Vehicular Incidents in a year / Business Use Driven KM) x 1000,000
Total Vehicle Incident Rate (TVIR) [Unit Level]	(Total Vehicular Incidents in a year / Business Use Driven KM) x 200,000
GENERAL	
Asphyxiant	A vapor or gas which can cause unconsciousness or death by
Balanced Scorecard (HSE)	suffocation (lack of oxygen). It is a 'basket' of measures providing information on a range of HSE activities; It defines who, what, when, where, why and how by using a) Results, b) Program and c) Culture derived from leading and lagging indicators to set benchmarks that align with the organizations vision and report progress at all organizational levels.
Boiling Liquid Expanding Vapor Explosion (BLEVE)	A boiling liquid expanding vapor explosion (BLEVE) is an explosion caused by the rupture of a vessel containing a pressurized liquid that has reached temperatures above its boiling point.
Brownfield	The projects which are modified or upgraded are called Brownfield projects or a brownfield is the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.
Carcinogen	A substance or agent capable of causing cancer or having the potential to cause cancer. Carcinogen (H) Known to cause cancer in humans. Carcinogen (A) Known to cause cancer in animals. Carcinogen (S) Suspected to cause cancer.
Cardio Pulmonary Resuscitation (CPR)	A combination of artificial respiration (mouth to mouth) and artificial circulation (external cardiac compression).
Change Management Committee	Committee to review the significance of requirement (concept/design) related to amendments/ modification in the production fields or plants in order to accord approvals and also commission the completed tasks.
CNS Depressant	A chemical that may cause loss of functioning and possible damage to Central Nervous System (CNS). Central Nervous System depressants may include a majority of hydrocarbons in the refinery. Symptoms from overexposure are headache, dizziness, nausea, unconsciousness and possibly, death.
Combustible Liquid	A liquid having a flash point at or above 100 °F (37.8 °C).
Competence	The ability to perform a particular job in compliance with performance standards. Being competent means having the knowledge and skill that you need and knowing how to apply it in a safe & environment
	conscious way. It means that you're qualified to do the job.



Controlled Copy Do Not Duplicate For Internal Use Only

regulation.
There are two kinds of compliance obligations: mandatory compliance obligations and voluntary compliance obligations. Mandatory compliance obligations include laws and regulations while voluntary compliance obligations include contractual commitments, community and industry standards, ethical codes of conduct, and good governance guidelines. A voluntary obligation becomes mandatory once you decide to comply with it.
An organization's context is its business environment. It includes all of the issues, factors, and conditions that could influence or be influenced by its HSE Management System.
A confined space is a place which is substantially enclosed (though not always entirely), and where serious injury can occur from hazardous substances or conditions prevailing within the space or nearby (e.g. lack of oxygen) i.e. exists with IDLH conditions.
A confined space which normally exists without IDLH conditions. Non-hazardous confined spaces are floating roof tank tops, tower skirts, sunken valve and pump manifold areas, cooling tower cells, and fin fans.
Seeking views for decision-making.
A chemical that causes visible destruction of, or irreversible alterations in, living tissue.
Mathematical computerized simulation of how air pollutants disperse in the ambient atmosphere. The dispersion models are used to estimate the downwind ambient concentration of air pollutants or toxins emitted from sources such as industrial plants, vehicular traffic or accidental chemical releases. They can also be used to predict future concentrations under specific scenarios (i.e. changes in emission sources).
A dead man's switch is a switch that is automatically operated if the human operator becomes incapacitated, such as through death, loss of consciousness or being bodily removed from control.
Information required to be controlled and maintained by an organization and the medium on which it is contained; Documented information can be in any format and media and from any source.
Due diligence means that employers shall take all reasonable precautions, under the particular circumstances, to prevent injuries or accidents in the workplace. Reasonable precautions are also referred to as reasonable care. It refers to the care, caution, or action a reasonable person is expected to take under similar circumstances. Also check ALARP.
Occurrence of a particular set of circumstances.
Surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelations.
Element of an organization's activities, products or services that can interact with the Environment; A significant environmental aspect has or can have a significant environmental impact.
Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's environmental aspects.
To accelerate the time to first oil and gas, production is started early while full field development is being planned and permanent facilities are being built. Early-production Facilities (EPF) help operators bring their new discoveries on-stream fast.
The science of studying people at work, and designing tasks, jobs, tools, equipment, facilities, and the work environment so that people can be safe, healthy, effective, efficient, productive and comfortable.
A chemical that causes a sudden, almost instantaneous release of pressure, gas or heat when subjected to sudden shock, pressure or high temperature.
The measurement of time during which the subject is at risk from vulnerability (hazard).
Front-End Engineering Design (FEED) is an engineering design approach used to control project expenses and thoroughly plan a project before a fix bid quote is submitted. It may also be referred to as Pre-project planning (PPP), front-end loading (FEL), feasibility analysis, or early project planning.
brolect blanning.





Op) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	and vo	ial ac	ctivitie	S.											y fro	m
Failure Mode and Effect Analysis (FMEA)	Failure product remed May be a subasser	ct or product	oroce ctions assembly	ss fo	ailures	, ev	aluate	es ri	isk p	orioriti ems.	es, a				ermiı	ne
	1	0000	Initial de	velop	ment of th	e FME	Α			Improv	rities	Pos	st-impro	wemen	t activi	ties
	Process step/ input	Potentia failure mode	Potentia failure effects	SEV	Potentia causes	осс	Current	DET	RPN	Actions recom- mended	Resp.	Action taken	NAME OF TAXABLE PARTY.	occ	DET	HEP
	DET = do		(3)	(4)	(5)	(6)			(o) consibi		(1)	(12)		(13)	
		courrence	de and effe	ects an	arysis			= fisk = seve		number						
Flammability Limits Flammable Liquid	• Clas	oport xture ng, an wer flo t mix n of a ction d with ler: ss IA f ing p	ion of is flam and ine ture the combo osive	conmodern graphe and the control of	mbust able. Cases of alimit s still floole go t) give gases i point b e liqui e liqui	ible Gas are (LFL am as, w s th n a pelo ds t f ds h	gase mixturonly floor (lower mable the rich mixture with mayer control of the mixture with mayer with mayer control of the mixture with mayer wi	s in res campa er e e, i.e est re re re ro s f la f la f la f la f la f la f la f	an corr mal explicate. the upp flar aise (37.	nixture nsisting ble ur osive ne miz er flan mak es the 8 °C) point	e, be g of c nder limit) xture mmc ble m LFL c . Furt belo	twee comb certo deso with able li iixture and c her c	en whoustild ain control of the the imit had been control of the c	hich ble, ond ss the sma (UFL) crea ease ficat	limi ition e llest sing es UF	ts is.
Flash Point	 Class Class 100 Class to 1 Class 	ss IC f F and ss II co °F an ss IIIA 40 °F ss IIIB 00 °F	lamm belog ombus d belog comb and b comb	abl w 1 stibl ow oust oelo	e liqui 20 °F e liqu 140 °F ible lic w 200 ble lic	ds h ids l quid of luid	nave o	a flo a flo e a e a	ash ash flas	point point h poi	grec nt gre	ater tl eater	han r tha · tha	or e	qua equ	l to val
ridsii r Oilii	sufficie surface	ent vo e of t	ipors t he liqu	o fo	orm ar	n igi nin t	nitable he co	e m into	ixtu iine	re wit	th the	e air r	near	the		
Fuel Load	The to	ncluc	ding in	teri	or finis	h a						0)
Globally Harmonized System (GHS)	System and pi labels	opos	es hai	rmo	nized	haz	zard c	om	mυ							
	Hazard and pl													n of	hea	ılth
	Labels a labe statem statem	I that nent f	includor ead	des ch h	a har nazara	moi d cla	nized ass an	sigr	nal v	word,	picto	ograi	m, a	nd h		
	Safety	Dato	Shee	ts: F	Have (a sp	ecifie	d 1	6-s∈	ection	form	nat.				
	Inform labels and ur	elem	ents o	ınd												
	GHS c	onsist	s of th	ree	majo	r hc	ızard (gro	ups	:						
	1. Phys	ses	nazaro te tox		/											



Controlled Copy Do Not Duplicate For Internal Use Only

	Skin corrosion/irritation. Serious eye damage/eye irritation. Respiratory or skin sensitization.	
	Germ cell mutagenicity. Carcinogenicity. Reproductive toxicity. Specific target organ toxicity - single ex Specific target organ toxicity - repeate Aspiration hazard.	•
	2. Health hazards. Classes	
	Explosives. Flammable gases.	
	Aerosols. Oxidizing gases.	
	Gases under pressure. Flammable liquids.	
	Flammable solids. Self-reactive substances and mixtures.	
	Pyrophoric liquids.	
	Pyrophoric solids. Self-heating substances and mixtures.	
	Substances/mixtures, in contact with wo Oxidizing liquids.	ater, emit flammable gases
	Oxidizing solids. Organic peroxides.	
	Corrosive to metals.	
	3. Environmental hazards. Classes	
	Hazardous to the aquatic environment Hazardous to the ozone layer.	(acute and chronic).
Global Warming (Greenhouse Effect)	Global warming is when the earth heats up (the happens when greenhouse gases (carbon dio	
(Greenhouse Ellect)	methane, etc.) trap heat and light from the sui	n in the earth's
	atmosphere, which increases the temperature get through the atmosphere, but it can't get o	_
Greenfield	protective layer i.e. ozone. The Greenfield project means that a work which	_ :
	work. In infrastructure the projects on the unuse need to remodel or demolish an existing structu	
Hazardous Atmosphere	Field Projects. An atmosphere that may expose entrants to the	ne risk of death,
·	impairment of ability to exit, injury or acute illne the following causes:	
	Flammable gas, vapor or mist in excess of 10 explosive limit (LEL)	percent of the lower
	Atmospheric oxygen concentrations below 1 Atmospheric concentration of any substance	
	employee exposure in excess of its permissible	exposure limits (PEL)
	Any other atmospheric condition that is Imme Life or Health (IDLH)	
Health Surveillance	The monitoring of workers for the purpose of ide health status due to occupational exposure to and includes biological monitoring.	
Hazardous Materials Identification System	A rating system developed by the American Coatings Association, which categorizes a	Chemical Name
(HMIS)	chemical from 0 (low or Insignificant hazard) to 4 (high hazard). Four areas are	HEALTH O
	categorized based on health, flammability and physical hazards, as well as personal	FLAMMABILITY O
	protection.	PHYSICAL HAZARD O
		PERSONAL PROTECTION O
Housekeeping	Maintaining the working environment in a tidy particular, access and movement is not hinder	



Controlled Copy Do Not Duplicate For Internal Use Only

HSE Management Review Committee	HSE Management Review Committee consists of Squarterly to seek & analyze Performance of HSE Sy	
(MRC) HSE Management System	Targets and plan ahead accordingly. The part of the overall management system that is structure, planning activities, responsibilities, pract	ices, procedures,
	processes, and resources for developing, implementations and maintaining the HSE policy.	
HSE Objective	Overall HSE goal, arising from the HSE policy, that itself to achieve, which is quantified where practic	cable.
HSE Performance	Measurable results of the HSE management system organization's control of its HSE aspects, based on objectives and targets.	
HSE Plan	A description of the means of achieving HSE objectincludes set of HSE Monitoring Plans; HIRA Plan; EmTraining Plan; Waste Disposal Plan; Emergency Res	nergency Drills Plan;
HSE Policy	Statement by the organization of its intentions and to its overall HSE performance which provides a fround for the setting of its HSE objectives and target	d principles in relation amework for action
HSE Target	Detailed performance requirement, applicable to parts thereof, that arises from the HSE objectives a set and met in.	the organization or
Immediately Dangerous to Life and Health (IDLH)	Any condition that (a) poses an immediate or deleter (b) would cause an irreversible adverse health effinterfere with an individual's ability to escape una space. The level of contaminant that would pose	ect; or (c) would ided from a confined
Inerting	is substance specific. The displacement of an atmosphere in a confined noncombustible gas such as nitrogen, to such an resulting atmosphere will not support combustion results in an IDLH (oxygen deficient) atmosphere. entries are not normally done by company persor	extent that the or life. This condition Inert confined space
In-Service Welding	The hazardous practice of welding on equipment vessel, exchanger, etc.) which has not been purginot been removed from service through conventincludes but is not limited to grinding, burning or w	(e.g., tank, pipe, ed (gas free) and has onal methods. This
Interested Party	Individual or group concerned with or affected by of an organization.	
Irritant	A chemical that causes reddening, swelling and parties tissue damage. Irritants are not corrosive. Their influences reversible.	
Job Vulnerabilities /	The process of carefully studying and recording ed	ach step of a job
Hazard Analysis (JVA / JHA)	identifying existing or potential job vulnerabilities / and health), and determining the control measure eliminate the impact.	hazards (both safety
Journey Management	The planned movement of people and equipmer another place including communications, route, swarnings, provisioning, breakdown and other con	schedule stops, hazard
Just Cause	Good or fair reason(s) for discipline.	
Lifecycle	It refers to the consecutive and interlinked stages from the acquisition of materials to end-of-life dispincludes all associated activities, products, and se include procured materials and services as well as decommissioning, and disposal.	oosal. The E&P lifecycle rvices and may
Line Break	The intentional opening of a process system that reflammable, corrosive, or toxic material or a material temperature such that an unplanned opening of in injury to workers. Examples include spreading flexchangers, pulling pumps, cold cutting pipe, etc depending on equipment used, could be cold workers.	ial under pressure or the system may result anges, opening . Line break,
Life Cycle Perspective	A life cycle perspective includes consideration of (threats & opportunities) of an organization's reser activities, products, and services that it can control in a life cycle include acquisition of raw materials, transportation/delivery, use, end of life treatment,	the HSE vulnerabilities voirs, materials, of or influence. Stages design, production,
Light Intensity	To assess whether lighting is sufficient in workplace intensity ranges are used. Employees should unde lighting on their health and safety. In particular, th understand visual fatigue: its causes, prevention, s recovery techniques.	e, following light rstand the effects of ey need to
	Task/ Area	Range of Luminance (Lux)





2 OQ) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	Emergency lighting (at floor or tread levels) in exits, exit routes, stairs, and underground	At least 10
	walkways Simple visual tasks e.g. lobby area; washrooms;	(on average)
	loading into trucks Medium visual tasks e.g. bookkeeping; filing;	30 – 100
	material receiving and packing areas	300 – 1000
	More visually demanding tasks e.g. QC/ inspection; proofreading; workshops/ machine work	3000 – 10000
Mounted Enclosure	Small enough to prevent complete physical entry junction box, analyzer enclosure, etc.).	(e.g., cabinet,
Non-Pressurized Building Containing Enclosure(s)	Building containing purged or pressurized equipm building, blend building, etc.)	
Outsource	When an organization makes an arrangement with organization to perform part of a function or process outsourcing. To outsource means to ask an extern perform part of a function or process normally do	ess, it is referred to as al organization to ne in-house.
Oxidizer	A chemical that initiates or promotes combustion causing fire through the release of oxygen or other	
Participation	Involvement in decision-making.	
PDCA Cycle	PDCA (Plan–Do–Check–Act or Plan–Do–Check–A step management method used in business for th continuous improvement of processes and product the Deming Wheel, Shewhart Cycle, Control Circle Study–Act (PDSA).	e control and cts. It is also known as
Permit to Work (PTW) System	A permit-to-work system is a formal written system certain types of work that are potentially hazardo a document which specifies the work to be done to be taken. Permits-to-work form an essential par work for many maintenance activities. They allow safe procedures have been defined and they prothat all foreseeable vulnerabilities / hazards have	us. A permit-to-work is and the precautions t of safe systems of work to start only after ovide a clear record
Personal Protective Equipment (PPE)	Category A: Basic PPE i.e. a) Coverall / Dangri, b) Leather Jacket, c) Safety Shoes, d) Safety Glasses Muffs and g) Cotton Gloves. Category B: Specific PPE i.e. a) Gloves (Leather, C and Latex), b) Face Shields (Welding Shields and C Resistant Clothes, d) Long Safety Shoes, e) Gas Mand f) Safety Harness. Category C: Emergency PPE i.e. complete Turnou Suit), SCBA, Air Purifying Respirator (APR), and Safety with Reflective Material designed for high nighttim	Warm Jacket / , e) Hard Hat, f) Ear Chemical Resistant, Goggles), c) Flame ask, f) Chemical Apron at Gear/Fire Kit (Fire ety Vests/Clothing
Prevention of Incidents	Use of processes, practices, materials or products control incidents, which may include engineering reduction of hazards/ risks, isolation of hazards/ riscontrols and use of PPE.	(design) controls, ks, administrative
Prevention of Pollution	Use of processes, practices, materials or products control pollution, which may include recycling, tre changes, control mechanisms, efficient use of resusubstitution.	eatment, process
Pressurized Building Containing Pneumatic Controls	Pressurized building containing control equipment to release purged air (e.g., pressurized control roo	
Process Safety Information (PSI)	Physical, chemical, and toxicological information chemicals, process, and equipment. It is used to configuration of a process, its characteristics, its lir for process hazard analyses.	document the



Controlled Copy Do Not Duplicate For Internal Use Only

Process Safety & Risk	
Management (PSRM)	
Model	MANAGEMENT COMMITMENT
	45
	Party of the second of the sec
	Ene Ene
	Management of agement of tractor sales
	Management tochange technology RISK-BASED
	₹ RISK-BASED
	S S SAIGO QUALLE
	Oden Allona Pent Com organization who had a see
	Mir. San Andrews
	Motivation & CULTURAL accountability awareness
	awareness & responsibility
	OA.
	Effective and State of the Stat
	again recourses serformance standards standards
	8.
Process Hazard	A process bazard analysis (PHA) (or process bazard evaluation) is a set
Analysis (PHA)	A process hazard analysis (PHA) (or process hazard evaluation) is a set of organized and systematic assessments of the potential vulnerabilities
Allarysis (Fria)	(threats / hazards) associated with an industrial process. The techniques
	include Checklist; What-If; Hazld; HazOp; Process Hazards Review (PHR);
	Failure Modes Effects and Analysis (FMEA); Layers of Protection Analysis
Product Cataby Data	(LOPA).
Product Safety Data Sheet (PSDS)	SDS when prepared by the relevant team for our own products.
Pyrophoric	A chemical that will ignite spontaneously in or at a temperature of 103 F
, ,	(54.4 C or below).
Reproductive Hazards	Chemicals that affect the reproductive capabilities of males, females
	and a developing fetus. Reproductive (M) – for males
	Reproductive (F) – for females
	Reproductive (D) – developmental hazard for fetus
	Reproductive (S) – suspect, effects seen at levels not expected in
ene	industry
SDS	Safety Data Sheet which refers to the purchased material. (also called PSDS in case of selling of the material).
Sensitizer	A chemical that causes a substantial proportion of exposed people or
	animals to develop an allergic reaction in normal tissue after repeated
	exposure to the chemical.
Short Term Exposure	The maximum permissible concentration of a material, generally
Limit (STEL)	expressed in ppm in air, for a defined short period of time (typically 5 or 15 minutes, depending upon the country). This "concentration" is
	generally a time-weighted average over the period of exposure. These
	values, which may differ from country to country, are often backed up
	by regulation and therefore may be legally enforceable.
Simultaneous Operations (SIMOPS)	Simultaneous operations means different operations carried out by different teams or companies in same location with possibilities of
Operations (SIMOFS)	impacts or interferences between substances, material or personal
	which can cause undesirable circumstances.
Toolbox Talk Program	Toolbox talks are a program developed by OGDCL to bring a HSE
	culture into its working environment. Instead of lengthy, somewhat rigid
	formal training sessions, employees take part in a 10-15 minute relaxed
	safety briefing. These talks take place directly in the workplace, whether it be a manufacturing floor or at a construction site.
Unstable (Reactive)	A chemical that reacts with water to release a gas that is either
Chemical	flammable or presents a health hazard.
Vesicant	A chemical which, if it can escape from the vein, causes extensive
	tissue damage, with vesicle formation or blistering.



Op) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Walk-in Enclosure	Similar to mounted enclosure, but large enough to allow complete physical entry (e.g., walk-in compressor control equipment).
Workplace	A workplace is a place where an organization's work is performed. A place is an organization's workplace only if it is under its control, at least to some extent.
Worker	Person performing work or work-related activities that are under the control of the organization.
Xenobiotic	A chemical (or, more generally, a chemical mix) which is not a normal component of the organism which is exposed to it. Xenbiotics, therefore, include most drugs (other than those compounds which naturally occur in the organism), as well as other foreign substances.

INCIDENT INVESTIGAT	ION
Bowtie Diagram	A 'bowtie' is a diagram that visualizes the risks and multiple plausible scenarios in an easy to understand picture. The diagram is shaped like a bow-tie, creating a clear differentiation between proactive and reactive risk management.
	Threat Preventive Barrier Preventive Barrier Top Event Preventive Barrier Preventive Barrier Preventive Barrier Preventive Barrier Factor Escalation Factor EF Barrier Escalation Factor
Controlled Activity	This is an activity in a work environment (as a condition of employment i.e. physical location, equipment, material or vehicle) related to OGDCL workforce member where OGDCL can set HSE policies, standards and procedures (PSP) and directly supervise and enforce its application. Incidents arising from controlled activities are reported, investigated and tracked.
Continual improvement	Process of enhancing the HSE management system to achieve improvements in overall HSE performance in line with organization's HSE policy.
Contributing Surface Cause	Major but not the root level cause of an incident (implicating or has potential to implicate) an injury or illness e.g. in case of a fall from a ladder contributing surface causes may be a) slippery floor, chemical leak, broken valve and/or untrained worker indicating unsafe condition and b) person did not inspect, ignored the vulnerability (hazard), failed to report the vulnerability (hazard) and/or himself created the vulnerability (hazard) indicating unsafe behavior.
Corrective & Preventive Action Request (CPR)	An HSE System Tool/Form for continuous improvement to timely document an issue or an emerging issue to enable focus on systematic investigation of discrepancies (violation, failures and/or deviations) in an attempt to prevent their recurrence (for corrective action) or to prevent occurrence (for preventive action).
Design Root Cause	Root level cause of an incident (implicating or has potential to implicate) an injury or illness e.g. in case of a fall from a ladder primary surface causes may be a) nonexistence of maintenance plan, flawed inspection plan and/or nonexistence of implementation strategy indicating unsafe condition and b) failing to provide tools, inadequate supervision, non-enforcement of rules and/or inconsistent training of the person indicating unsafe behavior.
Dangerous Occurrence	Readily identifiable event with potential to cause an accident or disease to persons at work and the public or of significant actual or potential material damage. (Also see Near Hit.)
Fatality	Death of workforce member caused by a work related incident, regardless of the time intervening between injury and death.
First Aid Case	Work related injuries or illnesses that involve a single treatment of minor bruises, cuts, burns, scratches etc. and not requiring medical care of the level to take the patient to the Hospital. This includes injuries / illnesses that require minor treatment, e.g. any one-time treatment, cleansing, application of bandages / band-aids, treatment of minor scratches, cuts, burns, splinters, etc.
Line Of Fire Injuries	Line of fire injuries occur when the path of a moving object or the release of hazardous energy (to be taken as a harms-way) intersects





Controlled Copy Do Not Duplicate For Internal Use Only

	with an individual's body.
Layers of Protection Analysis (LOPA)	A method used to evaluate high-consequence scenarios determining if the combination of probability of occurrence and severity of
	consequences meets a company's risk tolerance.
	i de la companya della companya della companya de la companya della companya dell
	Community Emergency Response
	Plant Emergency Response
	Mitigation Loss of Passive Protection
	Containment
	Active Protection
	Safety Instrumented System
	Trip Salety Instrumented System
	Prevention Operator Intervention
	Loop Process Control
	Process Value Process Design
Loss of Primary	An unplanned or uncontrolled release of any material from primary
Containment (LOPC)	containment, including non-toxic and non-flammable materials (e.g.
	steam, hot condensate, nitrogen, compressed CO2 or compressed air).
Lost Workday (Time)	A work related injury or illness which results in the OGDCL's or
Injury (LWI o LTI)	contractor's workforce member declared medically unfit to attend duty on the next calendar day (24 hrs) after the day of injury. The
	criteria "24 hours" include rest days, weekend days, scheduled holidays,
	public holidays or subsequent days after ceasing employment;
	However, if medical practitioner declares that the injured person is fit to
	attend office within 24 hours, then the injury shall <u>not</u> be LWI or LTI.
Monitored Activity	This is an activity where OGDCL can influence but cannot set HSE
	policies, standards and procedures (PSP) and cannot directly supervise and enforce its application. Incidents arising from monitored activities
	are reported, investigated (where possible) and tracked.
Near Hit/ Near Miss	An unplanned event that do not result in injury, illness, or damage – but
,	has the potential to do so. Only a fortunate break in the chain of events
	prevents an injury, fatality or damage. Human error is commonly an
	initiating event, a faulty process or system invariably permits or
	compounds the harm, and is the focus of improvement. Other familiar terms for these events is a "close call", "dangerous occurrence", or in
	the case of moving objects, "near collision".
Occupational Health	Any illness suffered due to occupational matter like Noise Induced
Illness	Hearing Loss, Food Poisoning, Musculoskeletal Disorder, etc.
Opportunity	A circumstance or a set of circumstances that could lead to the
	improvement of HSE performance.
Medical Treatment Case (MTC)	An injury severe enough to require treatment by a medical practitioner (a physician or nurse), but does not cause the worker to miss any work.
Permanent Partial	Any work related injury or illness which results in complete loss, or
Disability (PPD)	permanent loss of use, of any part(s) of the body or any permanent
, , ,	impairment of function or parts of body, regardless of any pre-existing
	disability of the injured member of impaired body function. A PPD is not
	related to the ability of the injured person to do is normal work, e.g. it is
	classified as a PPD if he has lost a finger, toe, arm, limb, etc. but (upon recovery) is still able to do his normal work or any other work that
	permits for the partial disability.
Permanent Total	Any work-related injury or illness, which permanently incapacitates an
Disability (PTD)	employee from doing any work and results in termination of employmen
Primary Containment	A tank, vessel, pipe, transport vessel or equipment intended to serve as
	the primary container for, or used for the transfer of, a material. Primary
	containers may be designed with secondary containment systems to
Primary Surface Cause	contain or control a release from the primary containment. Most superficial level of cause of an incident (implicating or has potential)
Primary Surface Cause	to implicate) an injury or illness e.g. in case of a fall from a ladder primar
	surface causes may be defective ladder indicating unsafe condition
	and hurriedness of the person indicating unsafe behavior.
Process Safety Incident	An undesirable event / condition, generally traceable through a trip or
-	alarm via the instrumentation circuit e.g. an unplanned or uncontrolled
	Loss of Primary Containment (LOPC) from a process, or an undesired
	event or condition that, under slightly different circumstances, could
	have resulted in a LOPC.





Og) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Restricted Workday Case (RWC): Root Cause Analysis (RCA) STOP Card Swim Lane Diagram or STEP (Sequential Timed Event Plot) Diagram	A RWC is a work related injury or illness which results in the OGDCL's or contractor's workforce member being unable; (1) to perform one or more routine duties, or (2) to work the full day on, or the next calendar day after the day of injury/illness. A RWC occurs when the injured person is temporarily assigned to do other, less strenuous work (than the normal job) e.g. an injured maintenance technician doing light office work. This also includes situations where the worker does perform his routine duties but for less period of time than normal shift timings because of restriction of work. A structured process that uncovers the physical, human, and latent causes of any undesirable event in the workplace. Influenced by STOP (Safety, Training, Observation and Program) Card, an HSE management tool proposed by DuPont and adopted by OGDCL. By encouraging all the employees to observe, identify and intervene the unsafe acts or accident symptom at workplace, it aims at "instantly" eliminating the hidden dangers and reducing occurrence of accident through small behavior based "on-spot talks" so that job/ work can resume safely. Tool used to analyze an accident by connecting events to indicate how they prompted a final result. It enables the investigator to build a graphical timeline and utilize it for further accident assessments techniques.
	^ ^
	Agents
	Agent A Event 1 Accident
	Agent B Event 2 Event 3
	Agent C Event 4
	Accident Description
Swigs Chaosa Madal	endergen in the state of the content and the state of th
Swiss Cheese Model	A simplified model used to illustrate analyses of major accidents and catastrophic systems failures by exhibiting multiple, smaller failures leading up to the actual hazard. Each slice of cheese represents a safety barrier or precaution relevant to a particular hazard.
	Latent / active Latent failures Latent / active Latent failures Organizational Organizational Active Latent failures
	Active failures Preconditions Later Late
	Active failures Unsafe acts Unsafe acts Unsafe acts Unsafe acts
	ant
	ERROR Failed or absent defences
	ERROR Failed defences
UBUC	Unsafe Behavior Unsafe Condition.
Uncontrolled Activity	If an activity is not controlled or monitored, it is an uncontrolled activity. This is an activity where OGDCL does not set or influence HSE policies,
	standards and procedures (PSP) and does not supervise HSE performance. Incidents arising from uncontrolled activities are neither
	reported, investigated or tracked; although these incidents should be
DICK AAANA CEAENT	assessed for potential learning that could be applied within OGDCL.
RISK MANAGEMENT	Principle is that the residual risk be reduced as far as reasonably
(As Low As Reasonably	practicable as any additional cost involved in reducing the risk further
Practicable)	would not be proportionate to the benefit gained.
Barrier	Functional grouping of safeguards or hazards or threats control hierarchy selected to prevent or limit the consequences.
Due Diligence	Process to identify, prevent, mitigate, and account for how the actual
	and potential negative risks are addressed.



Op) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	Process effected by an entity's Board of Directors, Management and key personnel, applied in business planning, strategy setting, and designed to identify potential events that may affect entity, and manage risks to be within the Risk Appetite, in order to provide reasonable assurance regarding the achievement of organization's objectives. ERM charter is a formal document that outlines Board-Risk Management Committee's structure, responsibilities, authorities and functions. Risk associated with uncontrollable sources. Any process/operation/activity/ object/ substance/ body related event or gap in the protection efforts or source that could potentially trigger damage/ loss and/ or give opportunity for improvement. Disseminating safety information about hazards in a workplace. Limination is removal of hazard by eliminating a requirement to carry out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering controls also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Administrative controls Elimination Physically remove the hazard Least Elimination Replace the hazard Least Erginteering controls Replace the way people work Change the way
External Risk Hazard (Threat/ Cause) Hazard Communication (HAZCOM) Hazards Control Hierarchy (Barriers) (Addendum-D) Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	ERM charter is a formal document that outlines Board-Risk Management Committee's structure, responsibilities, authorities and functions. Risk associated with uncontrollable sources. Any process/operation/activity/ object/ substance/ body related event or gap in the protection efforts or source that could potentially trigger damage/ loss and/ or give opportunity for improvement. Disseminating safety information about hazards in a workplace. Elimination is removal of hazard by eliminating a requirement to carry out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering controls also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Mast Elimination Physically remove the hazard Change the way people work Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	Risk associated with uncontrollable sources. Any process/operation/activity/ object/ substance/ body related event or gap in the protection efforts or source that could potentially trigger damage/ loss and/ or give opportunity for improvement. Disseminating safety information about hazards in a workplace. Elimination is removal of hazard by eliminating a requirement to carry out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering control also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Mast Elimination Physically remove the hazard Change the way people work Change the way people work Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Hazard (Threat/ Cause) Hazard Communication (HAZCOM) Hazards Control Hierarchy (Barriers) (Addendum-D) Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	Any process/operation/activity/ object/ substance/ body related event or gap in the protection efforts or source that could potentially trigger damage/ loss and/ or give opportunity for improvement. Disseminating safety information about hazards in a workplace. Elimination is removal of hazard by eliminating a requirement to carry out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering controls also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Most Elimination Physically remove the hazard Least Elimination Physically remove the hazard Change the way people work Change the way people work Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Communication (HAZCOM) Hazards Control Hierarchy (Barriers) (Addendum-D) Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	Elimination is removal of hazard by eliminating a requirement to carry out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering controls also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Most Elimination Physically remove the hazard Change the way people work Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering controls also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Most Elimination Physically remove the hazard Least effective Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Risk Assessment Matrix (RAM) Response Owner Risk Management Team Key Risk Indicators (KRIs)	out a task, use of a particular equipment or use of a chemical. Substitution is replacement of the material; plant; equipment; process; or work practice with a less hazardous one. Engineering controls reduce the reliance of human factors; engineering controls can be redesign of equipment, redesign of process or increase of automation. Engineering controls also include change in layout, ventilation, guards, enclosures, firewalls etc. Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc. Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior. Most Elimination Physically remove the hazard Least effective Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Response Owner Risk Management Team Key Risk Indicators (KRIs)	Substitution Replace the hazard Substitution Replace the hazard Isolate people from the hazard Administrative controls Least effective Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Response Owner Risk Management Team Key Risk Indicators (KRIs)	Least effective Protect the worker with personal protective equipment Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Response Owner Risk Management Team Key Risk Indicators (KRIS)	Visualization tool for the graphical presentation of the risks. Also known as Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Response Owner Risk Management Team Key Risk Indicators (KRIS)	Risk Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on
Response Owner Risk Management Team f Key Risk Indicators (KRIs)	the horizontal axis (X) and consequence on the vertical axis (Y).
Risk Management Team f Key Risk Indicators (KRIs)	An individual or entity who facilitates the Risk Owner in managing a risk.
Key Risk Indicators (KRIs)	Team of domain professionals (subject matter experts) trained on Hazard/ Threat Identification & Risk Assessment methodologies/ ESG framework.
	A Key Risk Indicator (KRI) is a measurable metric used to monitor the potential risks, essentially acting as an early warning system to identify potential issues before they become major problems.
(Residual risk is the amount of risk that remains after controls are in place or accounted for.
ı,	The mitigation of an "actual" negative risk refers to actions taken to reduce the severity of the negative impact that has occurred, with any residual impact needing remediation. Whereas the mitigation of a "potential" negative risk refers to actions taken to reduce the likelihood of the negative impact occurring.
	The effect of uncertainty on objectives.
	Numerical value of a risk as combination of an incident-likelihood and
Positive Risk	consequence-severity within a 5x5 risk assessment matrix. An "opportunity" is considered a positive risk – an event which makes
Negative Risk 1	objectives easier than expected. Negative risk is that event which stops or hinders the achievement of objectives. These types of events are considered as "risks".
Risk Appetite	Level of risk an organization is prepared to accept or tolerate in pursuit of its objectives, before action is deemed necessary to reduce the risk. In a risk appetite scale, these include as Risk seeking, Risk tolerant, risk neutral and risk averse.



Op) (the energy Terms & Definitions: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	controls/ barriers.			
	Risk neutral: Risking taking is more balanced.			
	Risk averse : Risk must be avoided.			
Risk Assessment	Overall process of estimating the magnitude of risk and deciding whether it is significant.			
Risk Charter	It is a committee charter in a formal written document form outlining			
(Addendum-A)	the intentions of the risk management committee, its authoritative powers, and its overall operating structure.			
Risk Card	Document to describe elements of a significant risk (as recorded in the			
(Addendum-F)	Risk Register) for the sake of mitigation.			
Risk Criteria	Terms of reference which evaluates the significance of a risk as Low = 1-6; Medium = 7-12; High = 13-20; Intolerable = 21-25.			
Risk Management	System to eliminate or mitigate the risks.			
Risk Owner	An individual or entity accountable as well as authoritative to assess and manage a risk.			
Risk Register	A comprehensive document used to scribe and rate potential risks			
(Addendum-B)	along with existing and future controls.			
Risk Source	Element which has potential to give rise to a risk.			
Risk Treatment	Controlling, avoiding or transferring the risk.			
Significant Risk	Intolerable or high risk.			
Threat Control (Addendum-E)	Methods used to reduce the overall impact of a threat. For example, hazards control hierarchy			
(Addition L)	(barriers), training & induction, local development investments & stakeholder initiatives, customer management, recruitment retention & skilled labor, R&D projects, recovery/ emergency plan, automation/digitalization, contract risk management (pre/post award), surveillance & intelligence (security), technological & operational improvements, asset integrity management, strengthening resources & tools, legal defense activities, portfolio management, partnerships for risk management, hedging & factoring, insurance & guarantees, transfer of risk liability contract, sale/ closure of assets, carbon offset, etc.			

SUSTAINABLE DEVELOPMENT

sustainability

sustainability: the state of the global system where the needs of the present are met without compromising the ability of future generations to meet their own needs

greenhouse gas (GHG): both naturally occurring gases like carbon dioxide (CO2), methane (CH4), and water vapor (H2O), and human-made synthetic gases such as hydrofluorocarbons (HFCs)

Note 1: Scope 1 GHG emissions are the direct greenhouse gas (GHG) emissions from a company's own sources, which company owns and has full control over

Note 2: Scope 2 GHG emissions are the indirect emissions from purchased energy for meeting power, cooling, heating requirements, which company has less control over Note 3: Scope 3 GHG emissions are all other indirect emissions from the company's value chain including supply chain, outsourced travel/ transportation, products' use, disposal, etc., which company has almost no control over

greenhouse gas effect: a natural process where the greenhouse gases (GHG) in Earth's atmosphere trap heat from the sun, keeping the planet warm enough to support life.

global warming potential (GWP): a measure of a greenhouse gas's heat-trapping effect compared to carbon dioxide (CO2) over a specific time-period. It is a relative scale where CO2 has a GWP of 1, and gases with higher GWPs, like methane or nitrous oxide, contribute more to global warming per unit of mass emitted than CO2; GWP values are influenced by a gas's ability to absorb infrared radiation and its atmospheric lifetime

scenario analysis: a strategic process where a company assesses how different plausible climate futures could impact its business, and it then discloses its strategy's resilience under these scenarios. It helps businesses identify and manage both physical and transition-related climate risks, test the robustness of different business strategies, and inform stakeholders about the potential financial implications of climate change

natural capital

natural capital: stock of renewable and non-renewable natural resources (e.g. plants, animals, air, water, soils, minerals) of a given quality existing at a point in time that separately or in combination yield a flow of benefits to people

Note 1 to entry: Natural capital includes both living and non-living aspects. It includes biotopes, mountains, fields, forests, meadows, unimproved land, minerals, oceans, glaciers, ice sheets, freshwater, microorganisms, wild fauna and flora, electromagnetic spectrum, and geospatial orbit.

Note 2 to entry: Natural capital underpins all the other forms of capital (social, human, intellectual, financial and manufactured). Natural capital, often in combination with other forms of capital, provides natural capital benefits over time.

Note 3 to entry: Natural capital includes assets owned by an organization, by others, or by no one. Natural capital accounting considers all natural capital assets regardless of ownership.

ecosystem: dynamic complex of communities of plants, animals and micro-organisms and their non-living environment interacting as a functional entity

Note 1 to entry: Examples of ecosystems include deserts, coral reefs, oceans, glaciers, ice sheets, freshwater rivers, lakes, wetlands, rainforests, boreal forests, grasslands, urban parks, and cultivated farmlands. See the Convention on Biological Diversity, Article 2[6], for more examples. Ecosystems can be influenced by human activity.

Note 2 to entry: There are numerous ecosystem classification systems. For example, the International Union for Conservation of Nature Global Ecosystem Typology (IUCN GET)[7] accommodates unique local ecosystem types and integrates all ecosystem types globally into a single structure. Most countries, and often subnational regions, have ecosystem classifications.

Note 3 to entry: People are part of ecosystems and, like all other living organisms, affect the processes taking place, as well as deriving benefits from them.

ecological service: benefit people obtain from one or several ecosystems

Note 1 to entry: Ecosystem services classification systems help collate data that can be used across natural capital accounts. There are currently several prominent ecosystem services classifications: the Common International Classification of Ecosystem Services (CICES) (version 5.1 or higher)[8], the United States Environmental Protection Agency (USEPA) National Ecosystem Services Classification System (NESCS)[9], Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)[10] and the United Nations System of Environmental-Economic Accounting (UN SEEA), Chapter 6[11].

natural capital benefit: good or service derived from natural capital that are used and appreciated by people and which contribute to individual and societal well-being (human welfare)

Note 1 to entry: Natural capital benefits can result from current or future use or appreciation of natural capital and the knowledge that it exists, i.e. use and non-use motivations.

Note 2 to entry: Natural capital benefits include ecosystem services and benefits from abiotic elements of nature.

Note 3 to entry: It is acknowledged that natural capital can also provide disservices or disutilities such as pests (e.g. vector-borne disease, mosquitos, ticks) and pollution (e.g. natural arsenic in groundwater, areas with naturally higher ionizing radiation).

biodiversity: variability among living organisms on the earth, including the variability within and between species, and within and between ecosystems

natural capital account

natural capital account: statement relating to natural capital benefits and natural capital values showing the impacts and dependencies of an organization or its value chain on natural capital and costs

Note 1 to entry: The natural capital account is prepared according to the procedure specified in this document.

Note 2 to entry: Natural capital accounts comprise either a natural capital income statement or a natural capital balance sheet, or both, each with supporting schedules.

natural capital income statement: statement showing the increases and decreases in natural capital benefits related to the activities within the chosen natural capital account scope during the natural capital accounting period

natural capital balance sheet: statement showing natural capital values and costs related to the activities within the chosen natural capital account scope during the natural capital accounting period

natural capital accounting: process of creating a natural capital account

natural capital accounting period: time period during which the activities of an organization occur or are projected to occur for which impacts and dependencies on natural capital are quantified

Note 1 to entry: The natural capital accounting period for the natural capital income statement is the organization's financial reporting period. The natural capital income statement includes impacts in the impact horizon and dependencies in the dependency horizon. The same reporting date is applied to increases and decreases in natural capital benefits.

Note 2 to entry: The natural capital accounting period for the natural capital balance sheet is determined by the lifetime of the natural capital, changes in natural capital and the planning horizon of the organization. The natural capital balance sheet includes impacts in the impact horizon and dependencies in the dependency horizon.

Note 3 to entry: The reporting date for both the natural capital income statement and natural capital balance sheet is the end date of the organization's financial reporting period. The same reporting date is applied to natural capital values and costs.

organization: person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives

Note 1 to entry: The concept of an organization includes, but is not limited to sole-trader, company, corporation, firm, enterprise, authority, partnership, charity or institution, or part or combination thereof, whether incorporated or not, public or private.

Note 2 to entry: Organization in this document can refer to the organization commissioning the natural capital account or the organization whose impacts and dependencies on natural capital are assessed, i.e. the organization that is the subject of the natural capital

account. The two can be the same.

organizational scope: impacts and dependencies of an organization's activities on natural capital

Note 1 to entry: Any operation that the organization owns, controls or for which it has legal or voluntary responsibility are included in the organizational scope.

value chain: entire sequence of activities or parties that create or receive value through the provision of a good or service

Note 1 to entry: Value includes both market and non-market values.

Note 2 to entry: Value chain includes the activities of suppliers (raw and produced inputs and services), activities over which the organization has direct operational control and activities linked to the purchase, use, reuse, recovery, recycling and final disposal of the organization's goods and services.

value chain scope: impacts and dependencies of an organization's value chain on natural capital regardless of ownership

Note 1 to entry: The impacts and dependencies included are directly associated with an organization's activities, including material upstream or downstream impacts and dependencies. For example, water abstraction by the organization can rely on a water catchment that the organization does not have responsibility for or own. Even then, the impacts of abstraction on natural capital and other water users are included in the natural capital account.

extended value chain scope: impacts and dependencies on natural capital (regardless of ownership) due to activities inside or outside the value chain that are affected by an organization's activities

Note 1 to entry: The impacts and dependencies included in a natural capital account can be directly associated with the organization's activities, induced by them or market driven. For example, the impacts of sourcing water can be limited to the process through which an organization sources the water or can be extended to assess implications in the market such as the use of a marginal unconstrained technology (e.g. a desalination plant).

interested party

stakeholder: person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity

Note 1 to entry: An organization can undertake a distributional analysis to see which interested parties benefit or lose as a result of the activities within the chosen scope.

release: emission to air or discharge to water or soil

impact: change to natural capital, whether adverse or beneficial, wholly or partially resulting from the activities, goods or services of an organization, its value chain or its extended value chain

Note 1 to entry: Change in natural capital due to the impacts of an organization affects the organization and others who depend on that natural capital.

impact pathway: series of consecutive, causal relationships, starting at an activity and ending at an impact

Note 1 to entry: For example, an impact pathway can link the emission of pollutants to air to resulting changes in concentrations in the atmosphere, concentrations to depositions, and to impacts on health, materials, vegetation, and other receptors as relevant.

impact horizon: time period over which the impacts are considered

Note 1 to entry: The activities of an organization are those that fall within the natural capital accounting period.

Note 2 to entry: The impact horizon can span multiple years and varies by activity, and the specific releases and resource uses associated with a given activity. For example, combustion of fossil fuels and also of biomass can lead to emissions in terms of heavy metals and particulate matter. Heavy metals can stay in the biosphere for decades to centuries during which they can impact living organisms, while particulate matter stays in the atmosphere for hours to days. Therefore, an upper limit for the impact horizon is considered to be in the order of decades, centuries or millennia.

dependency: reliance on, or use of, natural capital by an organization, its value chain or its extended value chain

Note 1 to entry: Reliance means different things to different organizations and can include revenue generation, operational continuity, cost management, reputation, delivering non-financial objectives and responsibilities.

dependency pathway: causal relationship starting at an environmental condition and ending at an effect on an organization

Note 1 to entry: Natural capital provides multiple benefits including ecosystem services. There is not a single linear relationship between quality and quantity of natural capital and natural capital benefits. There can be many possible and nonlinear combinations.

dependency horizon: time period over which dependencies are considered

Note 1 to entry: The dependency horizon is determined by the lifetime of the natural capital, changes in natural capital and the planning horizon of the organization. It is the same as the natural capital accounting period for both the natural capital income statement and natural capital balance sheet noting that the organization that is the subject of the natural capital account is dependent on natural capital only when it is active.

Note 2 to entry: Costs in both the natural capital income statement and natural capital balance sheet are also quantified over the same dependency horizon.

Note 3 to entry: The dependency horizon can span multiple years. The natural capital the organization, its value chain or its extended value chain depends on can change over the dependency horizon. For example, the energy transition from fossil fuels to renewable energy sources means that the dependency on the former reduces over time and can even stop at one point, while the dependency on the latter increases or can potentially only start at some point in the future (i.e. the related dependency does not exist yet). Therefore, a dependency on a given natural capital can be shorter than the natural capital accounting period.

natural capital value: present value of annual monetary values, incorporating natural capital benefits over the dependency horizon and impacts over the impact horizon related to the activities within the chosen scope during the natural capital accounting period of the natural capital balance sheet

Note 1 to entry: Natural capital values are shown in the upper part of the natural capital balance sheet.

cost schedule: schedule showing maintenance or production costs

Note 1 to entry: To avoid double counting, activities that can both restore, maintain or enhance natural capital and produce market and non-market goods and services are costed only once.

Note 2 to entry: Cost schedules input into the lower part of the natural capital balance sheet.

maintenance cost schedule: schedule of costs for activities that are undertaken, committed or projected to restore, maintain or enhance the quality or quantity of natural capital

production cost schedule: schedule of costs for activities that are undertaken, committed or projected to produce market and non-market goods and services

natural capital accounting

base case scenario: projection of future flows of natural capital benefits and production and maintenance costs across the natural capital accounting period of a natural capital balance sheet based on the best information available to the organization

Note 1 to entry: As much as possible, the definition of base case scenario captures the changes in the quality or quantity of natural capital, including cumulative impacts of the organization's activities and the resulting changes in natural capital benefits. The changes can reflect past performance and known or expected trends. Trends can be influenced by, among other factors, pending regulations, organizational commitments, changes to the organization's activities, the activities of its value chain and wider environmental and social influences such as climate change or demographic change.

Note 2 to entry: The user of this document can compare different future scenarios to see the implications of actions that the organization considers taking or to test key assumptions.

discount rate: percentage rate at which monetary values at different future times are converted to

the present value

materiality: relevance and significance with respect to the decision context

Note 1 to entry: Both financial and impact and dependency information can be material when assessing relevance and significance.

impact materiality (the "inside-out" view): This perspective considers the positive and negative effects of a company's activities on society and the environment. This includes issues like carbon emissions, labor practices, biodiversity loss, and human rights across its entire value chain.

financial materiality (the "outside-in" view): This perspective focuses on how sustainability issues create financial risks and opportunities that affect the company's development, financial performance, and long-term value. Examples include the financial risks of new carbon taxes, supply chain disruptions from extreme weather, or opportunities for new sustainable products.

present value: sum of expected positive or negative flows of future monetary values that have been discounted to bring them to today's value using a discount rate

price year: year for which monetary data are valid

Note 1 to entry: The price year is usually the year for which present value is calculated.



Preamble

Terms & Definitions

Context

Leadership

Planning

Support

Operation

Performance Evaluation

Improvement

Reference Standards

ISO14001:2015 & ISO45001:2018

Clause 4.1: Understanding the organization and its context

Clause 4.2: Understanding the needs & expectations of interested parties

Clause 4.3: Determining the scope of the EMS & H&SMS

Clause 4.4: HSE management system PSM (22 Elements) Model

-Context (before assessing risks)

This Section's Objectives

- Help understand OGDCL's particular context/ infrastructure.
- Clarify the needs and expectations of interested parties.
- Determine the scope of HSE System in OGDCL.
- Provides a concise portal to establish and maintain HSE System.

• • •



3.1 Context: Understanding OGDCL's Core Activities

OGM/P-HSE-3.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo and Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by



Context: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

3.1.1 General

- In order to establish, implement, maintain and continue to improve OGDCL's HSE Management System, this Manual shall act as the core document. This Manual covers the management of HSE affairs of the current and planned activities at its operational (field) locations and office buildings, which are:
 - ▶ Projects activities (engineering, procurement, construction & commissioning)
 - Exploration and Development activities (drilling, geological services, geological field survey and seismic operations)
 - Production and Plant operations
 - Office building administration
- **External context** is the external environment (issues) in which OGDCL seeks to achieve its objectives. This includes the cultural, social, political, legal, regulatory, financial, technological, economic, natural and competitive environment whether international, national, regional or local; key drivers and trends that will have an impact upon objectives and the relationships with and perceptions and values of external stakeholders.
- Internal context is the internal environment (issues) in which OGDCL seeks to achieve its objectives. This includes governance, organizational structure, roles and accountabilities, policies, objectives, strategies, capabilities, resources, standards, the perceptions and values of internal stakeholders, information systems, the organization's culture and contractual relationships.
- The context (framework) of OGDCL activities is given as below as internal and external issues:

3.1.2 Internal and External Issues

z internal ana external issues					
	Internal Issues (Environmental Conditions)	External Issues (Environmental Conditions)			
 Projects activities (Engineering, procurement, construction & commissioning) Exploration and Development activities (Drilling, geological services, geological field survey and 	 (Environmental Conditions) Occupational Health of Employees Compensation to the injured or to the family of deceased Employee Effluents/ Produced Water Management Solid Waste Management Camp Wastewater Management Hazardous Waste 	 (Environmental Conditions) Contracts Licenses; Government/ Regulatory Approvals RoW Management Water Management Flora and Fauna Management Solid Waste / Debris Management Site Restoration Land Disputes 			
seismic operations) • Production and Plant Operations	 Management Air (Stack) Emissions	 Social complaints & compensations Overflow/ Seepage from pits Impact of Flare/ Venting 			
Office Building Administration (Maintenance, IT/ communication, security, catering, medical and transportation service)	 Oil/ Chemicals Spillage Management Noise Control Energy Conservation Natural Resources Management 	Disposal of Drill cuttingsWell Site Restoration			

3.1.3 Needs and Expectations of OGDCL's Interested Parties

	Interested Party	Requirement	Compliance Obligation
Projects activities	Ministry of	Lease/ NOC	Lease/ NOC
(Engineering, procurement, construction & commissioning)	Petroleum & Natural Resources	Produced Water Management Flare/Vent Management	Compliance of DGPC Guidelines for Operational SHE Management 1996



Context: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

•	Exploration and Development activities (Drilling, geological services, geological field survey and seismic	Central Inspectorate of Mines (CIM) Ministry of Labor and Manpower	Consolidated Mines Rules 1952, and Oil & Gas (Safety in Drilling & Production) 1974 Regulations of Mines Act 1923		Regulatory Compliance	
op	operations) Production and Plant	Oil and Gas Regulatory Authority (OGRA)	License for LPG Extraction and Storage		NOC/ Approval/ Fitness	
• () () () () () () () () () (Operations Office Building	CBA/ National Industrial Relations Commission	Industrial Relations Act 2012 (Optional)		Memorandum of Settlement (MoS)	
	Administration (Maintenance, IT/communication, security, catering, medical and transportation service)	(Optional) Essential S Maintena 1952 (Opt		nce Act	Order workforce in to remain in specified areas	
		PNRA	PNA Guidelines		Certified Radiography Tests; Compliance dose limits	
		Contractors	PPRA Rules		Compliance of TORs and OGDCLs HSE System	
		Environment Protection Agencies (EPAs)	PEPA/ Provincial Env. Act		NOC/Environment al Approval/ NEQS Compliance	
		Provincial Explosive Department	Storage of Oil/ Explosives Inspection/ Boiler Inspection		Fitness Certificate	
		Landowners/Local community/NGOs	Land Management/ Compensation as per contract		Compliance of Land Management/ CSR Policy	
		JV Partners	DGPC Petroleum Concession Agreement (PCA) COSA/ GSA/ LSA		Compliance of Terms & Conditions of PCA	
		Oil Refineries/ Gas Transmitting Companies/ OGRA Licensed LPG Marketing Companies			Compliance of Terms & Conditions of COSA/ GSA/ LSA	
		Insurance Companies Predicts Predi		as per inst w.r.t. the s reserve for rigs, buildi pipelines, compens	and service charges surance coverage specific capital or "self-insurance" of dings, wells, plants, workmen sation, vehicle repair es for our products.	
				Necessary Permits/ NOCs/ Licenses under the prevailing laws related to land, building, water, electricity, gas, IT/ network/ communication, etc.		
				meetings,	der dividends, reports, and requirements under	

Note:-

Each Location must develop its own Context and maintain this documented information for the sake of achieving clarity of the audit scope during the certificate/ compliance/surveillance audits.



Preamble

Terms & Definitions

Context

Leadership

Planning

Support

Operation

Performance Evaluation

Improvement

Reference Standards

ISO14001:2015 & ISO45001:2018

Clause 5.1 Leadership and Commitment Clause 5.2 HSE & ERM Policy

Clause 5.3: Organizational Roles, Responsibilities and Authorities

PSM (22 Elements) Model

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.

This Section's Objectives

- Bestow OGDCL's leadership by accepting responsibility and showing commitment for the HSE and Enterprise Risk Management System.
- Letting leadership to establish and communicate an HSE and Risk Management policies.
- Facilitate leadership by assigning and delegating HSE roles, responsibilities and authorities.
- Crisis Management.
- Defining HSE Structure & Authorities.

Associated Documents

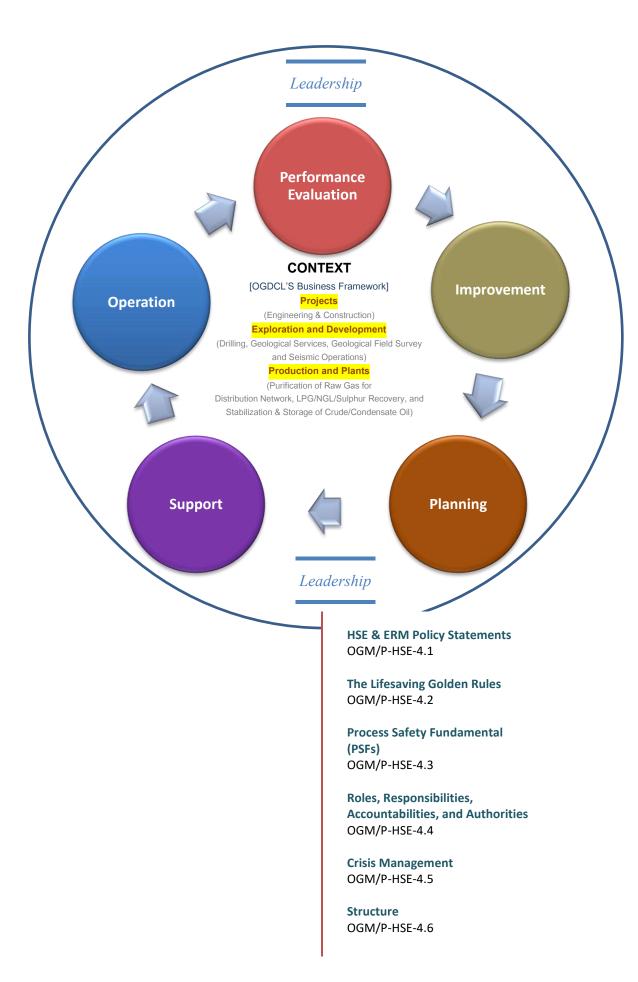
- □ OGDCL's HSE Policy Statement & Commitment
- © OGDCL's Enterprise Risk Management (ERM) Policy
- © OGDCL's Life Saving Golden Rules

Applicable Documents

- © OGDCL Safety Handbook For Oil & Gas Exploration Leases (Seismic Surveys)
- © OGDCL Safety Handbook For Oil & Gas Well Drilling and Servicing Operations
- © OGDCL Safety Handbook For Oil & Gas Development and Production Leases
- EMT Duty Roster
- LMT Duty Roster
- □ Location's Emergency Drill Report











4.1 HSE & ERM Policy Statements

OGM/P-HSE-4.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Modified: OGDCL's Enterprise Risk Management (ERM) Policy

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Approved by
OGDCL's HSE Policy	Manager HSEQ	GM HSEQ	CEO/ MD
OGDCL's Enterprise Risk Management (ERM) Policy	Manager HSEQ	GM HSEQ	CEO/ MD



4.1.1 General

- This procedure presents general framework related to OGDCL's Health, Safety, and Environmental (HSE) and Enterprise Risk Management (ERM) Policies (given at the end of this Section). This framework needs to be adapted to consider all the state of affairs of OGDCL collectively so as to produce unique policies to be equally applicable in:
 - Engineering/project 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.

4.1.2 Policy Protocol

4.1.2.1 Purpose and Scope

The purpose of this policy protocol is to instill the management to establish HSE and Enterprise Risk Management (ERM) Statements & Commitments that are appropriate to its core activities i.e. oil and gas exploration and production and to be appropriate to the nature, scale and occupational health, safety, and environmental Impact (Risk)s of its primary activities, products and services involving all strategic (business) units.

4.1.2.2 Role of the Executive Committee/ MD

- OGDCL's HSE and Enterprise Risk Management (ERM) Policy Statements and Commitments shall be taken as a pledge by MD & CEO on behalf of BOD that the company is willing to integrate occupational health, safety, and environment factors into its business decisions wherever the company would operate by:
 - a) making investments which continue to improve its occupational health, safety, and environment performance and
 - b) by assessing, managing and controlling occupational health, safety, and environment Impact (Risk)s associated with its current and planned activities.
- Management (Executive Committee Members) should be involved during the development, reviewing and updating these policy statements and commitments.
- While MD & CEO shall be involved during the approving the contents and signing these policy statements and commitments
- Details of the involvement of management may be documented on the reverse or transpose of the policy page to signify that they concur and are committed to the policy statement.

4.1.2.3 Salient Features of Policies

- Policy statements shall include commitment to manage all applicable risks essential for business continuity directly resulting in the continual improvement in the management and performance of all strategic (business) units.
- Policy statements shall also include commitment to comply with relevant legislation and regulations, and with other requirements to which OGDCL subscribes.

4.1.2.4 Implementation of Policy

- The implementation of these policies shall be consistent across all operating departments. The communication of these policies to all employees shall be taken as an essential stage of implementation. BOD recommends a common approach through the use of policy leaflets, posters and internal meetings.
- BOD also empowers MD & CEO to establish, update and endorse the cascaded documents like HSE System Manual and Guidelines.



4.1.2.5 Responsibility for Implementation and Compliance Monitoring

Respective functional EDs shall be responsible that workforce members under their jurisdiction follow HSE & ERM Policies; GM HSEQ shall impart awareness & monitor compliance.

4.1.2.6 Revision of Policy Statement and Commitment

- Top management shall delegate responsibility for the periodic review and updation of the policy to HSEQ Department. During the review, management shall ensure that these policies remain aligned with the Code of Corporate Governance.
- The policy statements and commitments shall be reviewed on annual basis and approved/signed if any improvement(s) are recommended. In addition, on change of top management, the development, review, updation, approval and re-signing of the policy statements and commitments shall be made without any delay.

4.1.2.7 Distribution of Policy

- The policy statements and commitments shall be written in such a manner so that it can be informative to a wide audience. BOD recommends that these policies statements and commitments along with a personally signed letter from MD & CEO explaining the top management's intention and commitment with respect to occupational health, safety & environment and enterprise risk management be distributed to the following stakeholders:
 - a) DGPC
 - b) Management of the operating fields;
 - c) Heads of relevant statuary bodies;
 - d) Major customers;
 - e) JV Partners;
 - f) PPEPCA members;
 - g) Stock exchanges where OGDCL is listed; and
 - h) Other interested parties.
- Distribution of these policy statements and commitments shall be documented in addition to its availability on OGDCL's official website. Distribution of the policy to other interested parties who may request a copy shall also be monitored.

4.1.3 Document Controller

HSE Policy documentation shall be controlled by HSEQ Department.



Oil & Gas Development Company Limited

Occupational Health, Safety and Environment **Policy Statement and Commitment**

As a responsible Oil and Gas E&P company, we are committed to embrace Health, Safety and Environment (HSE) in all our activities. The emphasis on HSE management is crucial to our operational requirement and to maintain market repute. In carrying out our multidimensional activities, we also ensure welfare of indigenous communities, protection of ecosystems and environment. As we continue to avail exploration and production opportunities on a sound foundation of technical and financial prudence, we intend to:

- Exhibit visible leadership at each level and ensure necessary resources, trainings and infrastructure are in place for aiming HSE excellence.
- Identify hazards and ensure effective controls to manage operational risks.
- Ensure that our entities meet or exceed applicable HSE laws, regulations, standards and other requirements.
- Set objectives and targets to safeguard humans & assets, protect environment and conserve energy & natural resources.
- Ensure that Contingency Plans are in place for business continuity.
- Provide employees with self-assured methods & practices, authority to stop unsafe work & motivation through rewards and recognition.
- Employ contractors and service companies who aspire to the high HSE standards at all times, and recognize that HSE is everyone's responsibility.
- Improve HSE system by continually focusing on Leading Indicators and disseminating lessons learned from Lagging Indicators.
- Assess HSE KPIs regularly & share performance accordingly.

Through observance of this policy, we aim to assist in protecting the environment and the overall wellbeing of our stakeholders, specifically our employees, clients, shareholders, partners, contractors, subcontractors, service companies and communities.

Managing Director/ CEO



Oil & Gas Development Company Limited

OGDCL's Enterprise Risk Management (ERM) Policy

OGDCL recognizes that an effective system of risk management and internal control is critical for its success. Company is committed to managing risks, in a manner consistent with its businesses, so as to:

- Protect its people, communities, environment, its assets and reputation;
- Ensure good governance and legal compliance; &
- Enable it to realize opportunities and create long-term shareholder value.

OGDCL's Board of Directors oversee the risk management and control framework of the Company to ensure an appropriate control environment is established and maintained, spanning OGDCL's significant operations, financial reporting and compliance activities. The Audit and Risk Management Committees assist the Board in fulfilling its responsibilities in this regard by reviewing and monitoring financial and reporting matters, and the Company's risk management and internal control processes.

Management will be responsible for implementation of this policy through the following phases:

- Formulation of Risk Management Framework/ SOP and Risk Management Teams;
- Identification, analysis (quantification) and evaluation of risks using audit criteria;
- Compiling the enterprise-wide risks on pertinent risk registers;
- Treatment of the risks through action plans for the significant risks using risk cards; &
- Communication and review of the risks and controls (risk registers and risk cards).

Whereas the Risk Management Committee of the Board will be responsible for the following:

- Assessment of the significant risks using a risk dashboard; &
- Allocation of necessary and appropriate resources in support of risk management.

Identification and communication of vulnerabilities and changes to OGDCL's risk profile are an integral part of day-to-day management - all risk owners and response owners are encouraged to identify and manage risks in their areas of operation on a continual basis so as to develop a "risk aware" culture and an environment of continuous improvement.







4.2 OGDCL's Lifesaving Golden Rules

OGM/P-HSE-4.2(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change	
1	Modified: New Logo & Tag Line	

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Approved by
OGDCL's Life Saving Golden Rules	Manger HSEQ	GM HSEQ	MD/ CEO





Oil & Gas Development Company Limited Occupational Health, Safety, and Environment

Lifesaving Golden Rules

Lifesaving Golden Rules are used as policy guidelines provide practical support in the application of OGDCL's HSE Management System (HSE-MS). They are aimed at personnel, both employees and contractors, working at field locations/ sites who carry out, or are responsible for, activities with particular potential to cause serious injuries or incidents, especially fatalities.

Criterion for the selection of **Lifesaving Golden Rules** is based on critical operational areas and incidents trend over the past ten years in OGDCL.

Lifesaving Golden Rules, therefore, are for use at all worksites to remind everyone to keep people safe at field locations/ sites. They must be followed and can help field personnel to:

- Formulate standardized operating procedures and work instructions
- Perform risk assessment
- Check barriers and controls are in place before work starts
- Make part of toolbox talks and pre-work planning
- Facilitate inspections and walkthroughs

If these **Lifesaving Golden Rules** are NOT followed in letter & spirit, all unsafe work (behaviors and conditions) must be STOPPED! With the **Stop Work Authority**, anyone working within the OGDCL sites, as either an employee or contractor, is empowered to interrupt an activity whenever he observes an unsafe behavior or an unsafe condition.

Lifesaving Golden Rules must become part of our way of approaching and conducting any working activity in each tier as follows:-

Top and Middle Management

- Provide adequate resources to support the continued implementation of Lifesaving
 Golden Rules.
- Demonstrate their personal commitment, leadership and accountability.
- Empower all employees to intervene and to stop activities anywhere or at any time when **Lifesaving Golden Rules** are not correctly applied.

Area and Location Management

- Ensure all job activities are adequately planned, assessed and executed in terms of risk assessment.
- Ensure all personnel are adequately informed, trained and have all the necessary equipment to perform the work in a safe manner.

Supervisors

- Ensure that work conditions are safe.
- Ensure, leading by example, that their teams know, and
- Observe the rules and that they comply with them before starting, during and at the end of a working activity.

Workers

- Be responsible for the safety of themselves and that of their co-workers.
- Be aware that compliance is mandatory.
- Immediately report to their supervisor/person in charge, about any unsafe event (i.e. accident, near hit/ miss, unsafe act, unsafe condition) that occurs at the work site.





Lifesaving Golden Rule 1 – Hydrocarbon safety

Disciplined framework for managing the integrity of operating systems and processes that handle hydrocarbons and other hazardous substances to prevent unplanned releases which could result in incidents.



PLAN

- The basis of design of a facility or process, permanent or temporary, which transports, produces, stores, uses or disposes of hydrocarbon must be reviewed at least every five years utilizing a process risk assessment methodology such as HazOp Hazards Operability (but cannot be limited to) or on as & when required basis within this period.
- Take into account the actual changes (or the changes that can reasonably be expected during the operations lifetime) in a workshop format led by an experienced Chairperson from independent party, Custodian from process/ project team, Secretary from HSEQ domain and concerned Discipline Engineers/ Sector Experts.

READY?

- Have you performed basis of design of a facility or process employing risk assessment?
- Is effectiveness/ suitability of existing and potential barriers or internal controls considered?
- Are drawings/ as-built drawings (e.g. process and instrumentation diagrams, process flow diagrams, layout drawings, isometrics, etc.) prepared/updated?

GO!

- Check, verify and validate the efficacy of process controls and barriers/internal controls.
- Up to date documentation/ arrangements for achieving safe operating limits and ensure availability to O&M personnel.
- Ensure placement of conscious labeling on equipment, storage vessels, containers, tanks
 and pipelines carrying or containing hydrocarbons or other hazardous material as per
 appropriate international standards.
- Ensure provision of an emergency response plan which includes means of escape; emergency response teams; appropriate safe refuge and assembly areas; and emergency response equipment for spillage containment, fires, explosions, burns, etc.

Lifesaving Golden Rule 2 – Explosives safety

Controls and monitoring of the reliability of explosives' storage, handling, transportation and usage ensure the seismic and wireline crew safety.



PLAN

- Every consignment containing explosives must include original Safety Data Sheet (SDS); If SDS of any explosive is not included, the Location InCharge should immediately contact the Rep. of supplier, manufacturer or importer to get the SDS (before final payments) and maintain record.
- SDS of explosives must be readily accessible to all concerned workforce members in their work areas.
- Storage of explosives must comply with local government regulations. Storage sites must be located at safe distances from public buildings, factories & houses. The site to have a good road access.
- The explosives must be kept/stored in the magazine. Dynamite and detonators must always be stored in a separate magazine.





READY?

- Is an up-to-date inventory of the quantities and types of explosives maintained on site?
- Are all explosive operations being conducted under a Hot Work Permit?
- Are all personnel involved in explosives operation certified and trained for explosive handling by third party and understand SDS?
- Are the explosive storage containers:
 - Designed and constructed specifically for the purpose of storing explosives?
 - Kept locked at all times, without the possibility of unauthorized access to keys?
 - Have proper ventilation?
 - Have proper external warning labels and markings attached?
 - Provided with no electrical wiring or else explosion proof electrical (EXP) wiring?

GO!

- Inside the containers, separate explosives by type, size etc. and stack so that the oldest stock is used first.
- Install a suitable Lightening Arrestor on each magazine before storing the explosives.
- Smoking, matches, lights and spark producing devices such as sulfuric acids, petroleum to be not be allowed at any distance where explosives are stored and handled.
- Following rules to be followed during explosives transportation:
 - Must not be conducted in any vehicle that is carrying passengers.
 - Must only be transported as per approved procedure and as packaged by the supplier or service contractor.
 - All such vehicles, containers and boxes to display proper warning labels.
- Following controls to be ensured during drilling operations:
 - For wireline operations, the wireline cable must be rigged such that it does not contact any facility wiring.
 - For drilling rig operations, checks must be made and continuously verified to ensure that no voltage exists between the facility, casing or wellhead, wireline cable armor and the logging unit.
 - Prior to explosive operations, the logging unit must be prepared by isolating electrical circuits and removing the electrical isolation/safety key.
- Maintain a current inventory record of explosives on daily basis with issue & return of explosives signed for by each individual.

Lifesaving Golden Rule 3 – Working at height

Controls and monitoring of the reliability of equipment and protection systems during work at height activities ensure the workers safety.



PLAN

- Avoid physically working at height i.e. 06 feet (02 meters) or higher above the ground and consider a safe feasible alternative.
- Consider fall prevention systems rather than fall protection systems.
- Ensure that fall protection systems (e.g., full body safety harness, shock absorbing lanyards) are periodically inspected and maintained by an Authorized Person.
- Ensure that arrangements for emergency rescue at height are in place.

READY?

- Is the PTW in place, completed with the risk assessment for each work at height activity?
- Are the work surfaces and holes adequately protected from fall of personnel and objects?
- Are the scaffolds built according to the vendor manual/specifications or a specific project done by an Authorized Engineer?
- Are scaffolds, portable ladders, portable and mobile platforms inspected by an Authorized Person prior to use and equipped with a valid tag/panel certifying the inspection?
- Are personnel working at height provided awareness on safety?
- Are the PPE for the required task, in good condition and worn by all people?

GO!

- Only Authorized Workers to access the scaffolds, portable ladders, portable and mobile platforms.
- No permission to erect or carry scaffolds, portable ladders, portable and mobile platforms near live overhead electrical cables, or equipment.



Lifesaving Golden Rule 4 – Dropped object

Controls and monitoring of the reliability of equipment and protection systems involving height/ high overhead structures.



PLAN

- Risk assessment of a drilling rig to consider all objects that have the potential to drop.
- All permanently installed equipment suspended more than 2 meters (6 feet) above ground be reviewed for applicability of proper securing mechanism.

READY?

- Do the high-level workspaces have no loose or redundant equipment or material?
- Is a Drop Object Register developed and periodic inspection of all items recorded?
- Are personnel working on or under high-level workspaces provided awareness on safety?
- Are the securing mechanisms for the suspended equipment/tools in good conditions?

GO!

- Only Authorized Workers to access the areas where objects have potential to drop.
- Ensure equipment/tools be carried aloft and returned to ground level using an effective means of preventing them from falling.

Lifesaving Golden Rule 5 – Energized systems

Implementation of procedures, controls and specialized personnel guarantee safety during activities where energized systems are present.



PLAN

- Verify that a specific isolation procedure is in place for process fluids, hydraulic, pneumatic, thermal, chemical, electrical, mechanical systems and/or radiation.
- Each job shall be risk assessed and performed accordingly.
- Ensure that the permit to work refers the specific equipment.

READY?

- Are isolation checks completed in the PTW?
- Have you verified that no stored energy or other hazards remain prior to start your job, and that the energy isolation is properly done?
- Are the PPE for the required task, in good condition and worn by all people?

GO!

- Do not carry out unauthorized activities. Follow the provisions of the permit to work.
- Use lockout and tagout (LOTO) devices to communicate isolation and to prevent nonauthorized operations.
- Ensure periodic monitoring is carried out.
- Ensure that the job specific area is barricaded, safety signs posted and emergency rescue in place.



Lifesaving Golden Rule 6 – Fire safety

Fire risk must be assessed and control measures such as procedures and active/passive fire protection systems implemented.



PLAN

- Ensure that a risk assessment is performed considering fire hazards.
- Ensure the use of a relevant PTW.
- Ensure that a Fire Emergency Response Plan is developed and all personnel are aware.
- Plan firefighting awareness of the workers.
- Periodically inspect and maintain the fire prevention and protection measures.

READY?

- Are workplaces equipped with fire & gas detection system and firefighting arrangements?
- Are sources of ignition under control or isolated/ removed?
- Are escape routes and muster points clearly marked and kept easily accessible at all time?

GO!

- Handle and store flammable materials and products properly.
- Ensure that workers do not smoke.
- Ensure that workers do not perform horseplay with any naked flames/ non-explosion proof equipment.
- Keep all areas clean and tidy.

Lifesaving Golden Rule 7 – Toxic gases

Procedures, staff training, specific collective and personal protective equipment are required to work in the presence of toxic gases.



PLAN

- Ensure that the operating procedures, work instructions and Emergency Response Plan (ERP) have been developed considering the risks related to toxic gas release.
- Ensure that everybody is informed on toxic gas risk and properly trained on their specific role during emergencies, and on collective/personal protective equipment.
- Ensure that each worker has both a personal toxic gas detector and a proper breathing escaping apparatus (full face mask / hood with specific filter / air bottle).
- Post safety signs and any other means, warning of the potential presence of toxic gas.

READY?

- Are you authorized to enter a toxic gas classified area?
- Is the Emergency Response Team (ERT) present on site and alerted?

GO!

Always wear personal detection devices when working in an area where there is or could
be the presence of toxic gas and ensure breathing escaping apparatus arrangement as
a support exclusively during emergency.





Lifesaving Golden Rule 8 – Lifting operation

Lifting operations properly planned, implemented and monitored, prevent the workers risk of falling or being crushed or struck.



PLAN

- Plan the lift with a specific risk assessment to avoid crane overturning, load falling from the crane and load or machine striking someone or any other identified hazard especially related to wind speed and elevated structures.
- Always inspect and maintain lifting & hoisting equipment/ machines and accessories as per manufacturer's instructions and site procedure requirement: check and record damages, color code, Safe Working Load (SWL) and certificate.
- Lifting authority be involved in all activities.
- Personnel lifts shall be done only with man-rated equipment and under a PTW.
- Plan to ensure that the minimum clearance distance from the energized power lines is 10 feet for up to 50 KV load and 15 feet for over 50 to 200 KV load.
- When the carriage of personnel by crane is required, the man riding basket must be suitably tested and have a valid third party test certificate and clearly marked "Man Riding Only" and "Load-bearing Capacity" on it. All wire ropes and other attached lifting equipment must also have a valid certificate. Crane hooks must be fitted with safety latches or equivalent. Man riding basket shall be used for carrying single person only who must be properly secured by a safety harness.

READY?

- Is lifting equipment certified by a Third Party in accordance with relevant local legislation or international standards and regularly maintained according to the planned schedule?
- Are all persons engaged in lifting and hoisting operations competent for that role and supervised at all times?
- Are lifting and hoisting equipment, machines and accessories (cranes, forklifts, slings, handles, hooks, baskets, etc.) in good condition according to national legislation and international best practices?
- Have you verified that the lifting area is marked out to prohibit unauthorized access?
- Are the PPE identified in the specific risk assessment for the required task, in good condition and worn by all people?

GO!

- Always ensure the presence of a banksman during the entire lifting operation and avoid unplanned blind lifts.
- Never allow personnel to be under or close to suspended loads for any reason.
- Ensure that the lifting operator keeps the machine/equipment under control at all time.
- No crane to travel with a suspended load.

Lifesaving Golden Rule 9 – Confined space

Atmospheric testing, specific training on confined space activities, implementation of dedicated emergency procedures, are mandatory to work safely in a confined space.



PLAN

- Each job shall be risk assessed and all hazards and controls shall be identified and
- Plan specific training for all persons engaged in confined spaces activities.

READY?

• Are Confined Space checks completed in conjunction with and referred to in the PTW?







Commons Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- Did you verify that the confined space is positively isolated from all possible sources of hazards?
- Have Qualified and Authorized Personnel tested and recorded the atmosphere inside the confined space as designated in the permit?
- Is the Emergency Response and Rescue Plan prepared and tested? Is the ERT ready in location and communication means ready and tested?
- Are the PPE identified in the specific risk assessment for the required task, in good condition and worn by all people?

GO!

- Ensure testing of atmospheres inside confined space is conducted, verified and repeated.
- Suspend the work if Emergency Response Team (ERT) and/or means of communications are unavailable on site.
- Suspend the work if a Dedicated Qualified Attendant (Watcher) is not present close to the confined space.
- Suspend the work if there is no specific PTW for the activity.
- Suspend the work if Rescue Equipment are not in place.
- Ensure electrical lighting for use in confined spaces not to exceed 24 volts. Powered hand tools used in confined spaces shall, be air operated. Where this is not possible, all such tools shall be equipped with a deadman's switch.

Lifesaving Golden Rule 10 – Management of change

Any plant/organizational change must be identified, assessed and authorized by the responsible of the work place.



PLAN

- Identify, analyze and assess any change or deviation to plant or facility's design, work procedures/practices and organization.
- Support any change, in particular overriding/disabling/change of a safety critical element, with a specific risk assessment.

READY?

- Is the change, in particular deviations from mandatory requirements, duly structured, documented and approved by an Authorized Person?
- Is the change properly recorded and tracked?

GO!

• Communicate any change to all concerned personnel and keep track of the identified and implemented actions.

Lifesaving Golden Rule 11 – Driving safety

Driving behavior and recommendations for proper vehicle management reduce the risk of accidents.



PLAN

- Always ensure that the driver is in good physical condition.
- Drivers shall be Certified and Authorized for driving the allocated vehicle.
- For all routine journeys, Journey Management Plan shall be readily available in vehicles with predetermined risks especially considering hazardous situations;
 - where paved roads are not available/ off road driving conditions.
 - routes with security threats, dangerous intersections, sharp turns, landslide areas, slippery conditions, and/ or blind-spots.





Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- areas with potentially limited cellular phone coverage.
- indistinct stopovers.
- environmentally protected areas, wildlife sanctuaries, etc.
- transportation of heavy/ fragile/ hazardous material or equipment.
- night travel or any other high rated risk aspect.
- However for the non-routine journeys, Journey Management Plan shall be chalked out on situational basis, accordingly.

READY?

- Is your vehicle in good condition and regularly maintained?
- Are seat belts fastened and appropriate shoes worn?
- Are you free from the influence of any drugs, etc.?
- Are loads properly secured and within the capacity of the vehicle?
- Are you sufficiently rested to drive a vehicle?

GO!

- Adopt defensive behavior in respect of other road users.
- Respect speed limits, adjusting your speed according to road and weather conditions, local legislation and Company rules.
- When you drive, do not use any mobile phone and respect the daily maximum driving hours and rest period.

Lifesaving Golden Rule 12 – Permit to work

Work permit is an essential and mandatory management tool to be adopted for non-routine or dangerous activities.



PLAN

- A PTW system must be in place with the relevant supporting procedures and systematically implemented.
- Simultaneous/concurrent activities shall be planned and subjected to risk assessment and PTW in order to eliminate/reduce interferential risks.
- Non-routine and high-risk activities shall be planned and subjected to risk assessment and PTW
- Ensure that all personnel receive proper training on using the PTW system.

READY?

- Is the PTW discussed in dedicated safety/ pre-job meetings?
- Have all personnel working under a PTW received the necessary information about its contents?
- Have you verified that all requirements specified in the PTW are implemented on site before commencement of job?

GO!

- Post copy of PTW in the job area.
- Suspend and re-assess your work if a change occurs in the scope of the work, tools, equipment, personnel, shift change or any other condition of the PTW.
- Conduct special safety audits of PTW system.





Control Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

Lifesaving Golden Rule 13 – Excavation safety

Soil characterization, protected excavation areas and correct use of machinery, guarantee the workers safety.



PLAN

- A soil survey shall be carried out and all the risks shall be identified and assessed.
- Always consider underground services in the area, those shall be identified, marked and isolated (if necessary).
- Plan specific training for all personnel involved in excavation works.

READY?

- Do you have a valid excavation related PTW?
- Has the site been inspected by an Authorized Person?
- Are the PPE identified in the specific risk assessment for the required task, in good condition and worn by all people?

GO!

- Effectively shore, slope, bench, barricade and sign all excavations.
- Provide suitable entry and exit point when working in trenches, considering any possible emergency and weather condition.
- Excavated material must be kept at least 3 feet (1 meter) away from the edge of the excavation.
- Personnel to keep clear of machinery whilst it is in operation, minimum distance of 5 meters.
- Ground and environmental conditions to be continuously monitored for change.

Managing Director/CEO



4.3 OGDCL's Process Safety Fundamental (PSFs)

OGM/P-HSE-4.3(1) Revision Number 1

Original Issue: March 14, 2022 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iffikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

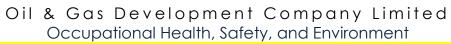
#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by







Process Safety Fundamentals (PSFs)

OGDCL's Process Safety Fundamentals (PSFs) are derived from IOGP as a set of basic principles for front-line workers, supervisors, and managers that emphasize existing good practices to prevent fatalities from Process Safety Events. Preventing Process Safety Events is important because they can escalate into catastrophic events.

Data reported by IOGP Members over a period of last ten years shows that +125 people lost their lives in +50 Process Safety Events (PSEs).

Analysis of the process safety related fatal incidents was conducted by the team with the aim of determining what types of potential PSFs were a factor in the incidents and how, if they had been implemented effectively, they might have prevented or mitigated the fatal consequences of these incidents.

The analysis considered a broad range of potential PSFs influenced by both the information on the fatal incidents provided by IOGP members and members experience. Each fatal PSE was reviewed against the list of potential PSFs and linked to one or more of the PSFs. By determining which of the PSFs could be linked to either the highest number of fatal incidents or number of fatalities allowed a shortlist of PSFs to be identified which eventually became the 10 IOGP PSFs.

Therefore the following PSFs should be launched in OGDCL in a way that enables and empowers the frontline workers to openly voice and report these dilemmas without fear of criticism or reprisal. Only by bringing these issues into the HSE meetings, the PSM issues can be addressed. PSFs are not intended to be seen as 'another set of rules', and it is strongly advised that they are not associated with disciplinary measures for non-conformance.



We respect hazards

- We improve our understanding of process safety hazards at our location and our roles in controlling them.
- We are vigilant about the potential impacts of uncontrolled process safety hazards.
- We discuss process safety hazards before starting a task.
- We bring forward process safety hazards to be included in activity risk assessments.



We apply procedures

- We use operating and maintenance procedures, even if we are familiar with the task.
- We discuss the key steps within a critical procedure before starting it.
- We pause before key steps and check readiness to progress.
- We stop, inform supervision and avoid workarounds if procedures are missing, unclear, unsafe, or cannot be followed.
- We take time to become familiar with, and practice, emergency procedures.







Controlled Copy Do Not Duplicate For Internal Use Only



We sustain barriers

- We discuss the purpose of hardware and human barriers
- We evaluate how our tasks could impact process safety barriers.
- We speak up when barriers don't feel adequate.
- We perform our roles in maintaining barrier health and alert supervision to our concerns.
- We use an approval process for operations with degraded barriers.



We stay within operating limits

- We discuss and use the approved operating limits for our location.
- We escalate where we cannot work within operating limits.
- We alert supervision if an alarm response action is unclear or the time to respond is inadequate.
- We obtain formal approval before changing operating limits.
- We confirm that potential for overpressure from temporary pressure sources has been addressed.



We maintain safe isolation

- We use isolation plans for the specific task, based on upto-date information.
- We raise isolation concerns before the task starts and challenge when isolation plans cannot be executed.
- We check for residual pressure or process material before breaking containment.
- We monitor the integrity of isolations regularly and stop to reassess when change could affect an isolation integrity.
- · We confirm leak-tightness before, during, and after reinstating equipment.



We walk the line

- We use up-to-date documentation (e.g., Piping and Instrumentation Diagrams) that accurately reflect installed systems and equipment.
- We physically confirm the system is ready for the intended activity (e.g., valve positions, line up of relief devices, etc.).
- We alert supervision to identified documentation and readiness issues before operation.







Leadership: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only



We control ignition sources

- We identify, eliminate, or control the full range of potential ignition sources during task risk assessments and during job preparation and execution.
- We minimise and challenge ignition sources even in "non-hazardous" areas.
- We eliminate ignition sources during breaking containment and start-up and shutdown operations.



We recognise change

- We look for and speak up about change.
- · We discuss changes and involve others to identify the need for management of change (MOC).
- We review the MOC process for guidance on what triggers an MOC.
- We discuss and seek advice on change that occurs gradually over time.



We stop if the unexpected occurs

- We discuss the work plan and what signals would tell us it is proceeding as expected.
- We pause and ask questions when signals and conditions are not as expected.
- We stop and alert supervision if the activity is not proceeding as expected.



We watch for weak signals

- We proactively look for indicators or signals that suggest future problems.
- We speak up about potential issues even if we are not sure they are important.
- We persistently explore the causes of changing indicators or unusual situations.





4.4 HSE Roles, Responsibilities, Accountabilities, and Authorities

OGM/P-HSE-4.4(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo and Tag Line
2	Added: Responsibility related to ESG

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Approved by
HSE Job Descriptions	Manager HSEQ	GM HSE	ED HR → MD / CEO





Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

Top Management:

- Top management demonstrates leadership and commitment to the HSE and risk management system by ensuring active participation of workers (and where workers' representatives exist) using consultation and the identification and removal of obstacles or barriers to participation
- Top management promulgates HSE and risk management policies after exhibiting & fulfilling its commitment to participation, i.e. the involvement of workers (and where workers' representatives exist) in the decision-making processes

Line Management:

- Successful handling of HSE and risk management matters are Line Responsibility requiring the active participation of all levels of management and supervision. Line management is to ensure that the workforce is competent and has necessary authority and resources to perform their duties safely and environment consciously; Location management and all Sectional ICs are to ensure the implementation and compliance of HSE and risk management system at their respective locations in a diligent manner through positive participation and conceding to the HSE and risk related directives.

 Line management is responsible for **establishing**, **implementing and maintaining processes for participation** [including
- consultation] in the developing, planning, implementation, evaluation and actions for improvement of the HSE & enterprise risk management systems at all applicable levels and functions (and where workers' representatives exist).

 Line management shall take into account the outputs of consultation with workers (and where workers' representatives exist)
- to finalize the HSE Objectives.
- Line management shall provide, as applicable, access by workers (and where workers' representatives exist) to relevant documented information.
- Line management is required to ensure that relevant audit findings are reported to relevant workers (and where workers' representatives exist) and relevant interested parties.
- Line management is required to communicate its management review results to relevant workers (and where workers' representatives exist) and relevant interested parties.

 Line management is required to communicate the **results of continual improvement** to its *relevant* workers (and where workers'
- representatives exist).

HSE:

Role of HSE Representatives is to ADVISE & TRAIN the line management and MONITOR & AUDIT the compliance levels of HSE management system.

Workforce Members:

- Participate in the formulation of HSE and Risk Management policies & HSE objectives.
- Get involved in HSE initiatives and training sessions, actively
- Be mindful and responsible for their own safety and that of their colleagues and protection of the environment.
- Be sincerely accountable to line management for complying with relevant requirements of OGDCL's Integrated HSE and risk management systems.
- Deal with HSE consequences [Impact (Risk)s] according to their specific job situation.
- Enforce HSE requirements in their routine & non-routine activities on preemptive basis
- Report & analyze non-compliance, incidents and implement recommendations to prevent reoccurrence.
- Participate positively during assessments, reviews and audits to analyze gaps.
- Provide feedback, identify gaps and contribute to the continuous improvement of HSE management system.

4.4.1 Corporate Level

Detailed HSE related roles and responsibilities in perspective of PDCA cycle are given below:

PDCA Cycle	MD & CEO/ COO	Executive Directors
LEADERSHIP HSE Policy Statement, Objectives and Goals; Role, Responsibilities & Authorities and Crisis Management	 Endorsing corporate level ESG, HSE and ERM Policy Statements, Lifesaving Golden Rules, Objectives and Goals in the light of OGDCL's context and ensuring their communication and implementation at all levels of the organization. Endorsing a corporate level framework like HSE Management System and Process Safety & Risk Management (PSRM) Model by which HSE roles, responsibilities & authorities can be cascaded. Nominating EMT Chairman, liaise with Chairman BOD/ Risk Management Committee (RMC/) Ministry of Energy (Petroleum Division) to share incident update, take decisions after assessing the overall implications of crisis situation & ordering the deactivation of EMT after receiving necessary information. 	 Ensuring ESG, HSE and ERM Policies are communicated and implemented at relevant Directorate down the stream. Provide adequate resources at Department level to support the continued implementation of Lifesaving Golden Rules. Demonstrate their personal commitment, leadership and accountability. Ensuring corporate goals related to ESG & HSE are translated into Directorate level targets. Ensuring roles, responsibilities & authorities related to HSE System are known to the personnel concerned for implementation. Provide adequate resources at Directorate level to support the continued implementation of Lifesaving Golden Rules. Demonstrate their personal commitment, leadership and accountability. Performing EMT Chairman Role and coordinate any post-incident recovery planning necessary.
PLANNING Health, Safety Environment Vulnerabilities identification & Impact (Risk) assessment; Legal & Other Requirements; HSE Objectives & Management Program	 To act as Chairman Level-I Risk Management Team. Ensuring HSE Management System caters vulnerabilities (threats & opportunities) identification & Impact (Risk) assessment process. Ensuring Corporate level has risk mitigation process to address the significant Impact (Risk)s. Ensure legal & other requirements are determined for each Function. 	 To act as Member Level-I Risk Management Team; to act as Chairman Level-II Risk Management Team. Ensuring relevant Directorate participates in the vulnerabilities (threats & opportunities) identification & Impact (Risk) assessment process. Ensuring Directorate has risk mitigation process to address the significant Impact (Risk)s. Ensure Directorate is in compliance with the applicable legal & other requirements.
SUPPORT Training, Awareness & Competence Communication & Consultation ISE System Documentation & Data Control; Control of	 Ensuring HSE plan is formulated for achieving HSE objectives and is communicated. Ensuring necessary resources (financial or otherwise) are available with all Directorates to achieve corporate and local HSE goals. Ensuring training and development system is in place to inculcate safe and environment friendly behaviors among the workforce. 	 Ensuring Directorate's HSE plan for achieving HSE objectives is communicated. Ensuring necessary resources (financial or otherwise) are available with concerned HODs to achieve corporate & local HSE goals and compliance obligations. Ensuring training and development system is in place to inculcate safe and environment friendly behaviors among the Directorate's workforce.





Leadership: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

OPERATION Operational Controls	 Ensuring accident and pollution prevention technologies are opted at the decision making levels. Ensuring accidents and pollution prevention measures are taken on preemptive basis by the concerned line/ functional management. Ensuring that emergency preparedness and response arrangements are effective across the organization. 	 Ensuring accident and pollution prevention technologies are opted at the decision making levels in the Directorate. Ensuring accidents and pollution prevention measures are taken on preemptive basis by the concerned line/ functional management. Ensuring suppliers' selection criterion strictly calls for ESG & HSE compliance standards. Ensuring that emergency preparedness and response arrangements are effective in the Directorate.
PERFORMANCE EVALUATION HSE Monitoring, Measurement & Compliance Evaluation Internal HSE Audit, Management Review	 Ensuring appraisal and disciplinary codes are monitored against the requirements of HSE and risk management system. Ensuring internal HSE audit function conducts result oriented effective audits. Motivating line management and workforce by owning direct commitment to ESG, HSE & ERM Policies, encouraging HSEQ Awareness Events, Reward & Recognition Programs and Management Walk Around (MWA). In case of any incident / near hit/ miss where willful violation of OGDCL HSE policies, standards, protocols and procedures is considered to have taken place MD / CEO in consultation with HOD HSE and HOD Discipline shall constitute, where deem necessary, a Fair Treatment Assessment Committee for taking up necessary corrective, preventive and punitive actions. Call an Annual Corporate HSE Management Review (Meeting) during the end of each Year to be attended by all Functional Heads (EDs and HODs) as a minimum; or, to conduct formal HSE Performance Reviews by any other suitable means. Ensuring HSE-related decisions from the corporate level management review 	 Motivating workforce by owning direct commitment to ESG, HSE & ERM policies and procedures. Participating in Corporate Annual Management Walk Arounds (MWAs) For Hazards Hunting & Reporting emphasizing HSE commitment and visibility by Leadership. Ensuring appraisal and disciplinary codes are monitored in the Directorate against the requirements of HSE and risk management system. Ensuring internal HSE audit function conducts result oriented effective audits of the various function of the Directorate. Ensuring that active participation and involvement in HSE is there at all levels through the unit level HSE Monitoring Plans. Approving HSEQ Awareness Events and Reward & Recognition Programs. Participate in Corporate/ Directorate's HSE Management Review (Meeting). Ensuring HSE-related decisions from the unit level management review meetings are implemented.
IMPROVEMENT Opportunities For Continual Improvement; Formal Incident Investigation; Management (Control) of Change	meetings are implemented. Ensuring necessary resources and decision space is there to avail opportunities for improvement especially from near hit/ miss, formal incident investigations and MoC process.	 Investigate incidents where assigned by MD/CEO. Providing all necessary resources to avail opportunities for improvement especially from near hit/miss, by conducting formal incident investigations and timely enabling MoC process.

4.4.2 Directorate/ Department Level

PDCA Cycle	General Managers/ Head of Departments	Area Managers
LEADERSHIP HSE Policy Statement, Objectives and Goals; Role, Responsibilities & Authorities and Crisis Management	 Ensuring ESG, HSE & ERM Policies are communicated and implemented at all levels within the concerned Department and Locations. Ensuring roles, responsibilities & authorities related to HSE System are communicated to the concerned personnel for implementation. Ensuring emergency and evacuation procedures are defined, rehearsed, followed and updated. Ensure that incident is timely reported to EMT Chairman and regulatory authorities. Giving professional input to the EMT Members in finalizing the overall strategy for dealing with the incident, conducting deliberations on resumption of operational activities or otherwise and after deactivation of EMT, taking over the charge for controlling of recovery and/ or normal operations. 	 Ensuring ESG, HSE & ERM Policies are communicated and implemented at all levels within the concerned Locations. Ensuring roles, responsibilities & authorities related to HSE System are communicated to the concerned personnel for implementation. Following up that emergency and evacuation procedures are defined, rehearsed, followed and updated. Ensure that incident is timely reported to GM / HOD and regulatory authorities. Giving professional input to GM / HOD in finalizing the overall strategy for dealing with the incident, conducting deliberations on resumption of operational activities or otherwise and after deactivation of EMT, taking over the charge for controlling of recovery and/ or normal operations.
PLANNING Health, Safety Environment Vulnerabilities identification & Impact (Risk) assessment; Legal & Other Requirements; HSE Objectives & Management Program	 To act as Member Level-II Risk Management Team. Ensure vulnerabilities (threats & opportunities) identification & Impact (Risk) assessment are timely conducted and reviewed. Ensure HSE Objectives and Risk Cards to address the significant Impact (Risk)s/ opportunities are formulated and timely reviewed / followed-up. Ensure every unit / sub-unit is in compliance with applicable legal & other requirements. 	 Participate in the process hazard analysis of respective units/ sub-units. Review Risk Registers of respective units/ sub-units. Reviewing performance update/ status of HSE Objectives and Risk Cards to address the significant Impact (Risk)s of respective units/ sub-units. Ensure unit / sub-unit is in compliance with applicable legal & other requirements.





Commons Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

SUPPORT Training, Awareness & Competence Communication & Consultation HSE System Documentation & Data Control; Control of Records	 Ensuring that HSE related communication & consultation process is effective. Ensuring distribution of HSE resources to the sites on behalf of top management. Ensuring HSE Training Need Assessment (TNA) is timely conducted. Ensuring adequate resources are in place and workforce trained for accidents & pollution prevention and emergency response. Coordinating regulatory issues and/ or community concerns related to site occupation/ de-hiring/ restoration matters. 	 Ensuring adequacy of HazCom in order to keep workforce members safe by providing information about potential sources of injury, specifically, hazardous chemicals and emergency handling in the workplace. Check gaps regarding adequacy of resources and trained manpower for accidents & pollution prevention and emergency response through TNA. Coordinating regulatory issues and/ or community concerns related to site occupation/ de-hiring/ restoration matters.
OPERATION Operational Controls	 Approving relevant SOPs, Work Instructions, and Maintenance & Calibration Programs. Ensuring no travel starts without Journey Management Plan (JMP). Ensuring waste management protocols are updated and followed. Reviewing Contractor's and Service Company's HSE performance and coordinate for improvement or otherwise. 	 Reviewing SOPs, Work Instructions, and Maintenance & Calibration Programs for compliance. Ensuring implementation of HSE procedures, permits, JHAs/ JVAs, etc. in the E&P lifecycle. Ensuring compliance of waste management protocols. Ensuring Journey Management Plans (JMPs) are timey developed and updated. Following-up Contractor's and Service Company's HSE performance and coordinate for improvement.
PERFORMANCE EVALUATION HSE Monitoring, Measurement & Compliance Evaluation Internal HSE Audit, Management Review	 Participating in Annual Management Walk Arounds (MWAs) For Hazards Hunting & Reporting emphasizing HSE commitment and visibility by Leadership. Ensuring HSE Monitoring Plans are developed. Ensuring compliance against applicable laws and regulations at all levels is timely checked. Reviewing and monitoring cost and effort related to HSE matters on various projects, and take appropriate actions on serious resource concerns. Conducting, facilitating and reviewing HSE audits of critical nature. Ensuring database of key performance indicators is maintained: Key statistics are reported, reviewed and followed up on time. Harnessing efficacy of STOP Cards, HSEQ Awareness Events and Reward & Recognition Programs. Participate in Corporate HSE Management Review Committee (HSE MRC). 	 Participating in Annual Management Walk Arounds (MWAs) For Hazards Hunting & Reporting emphasizing HSE commitment and visibility by Leadership. Ensuring HSE Monitoring Plans are followed & implemented in letter and spirit. Ensuring compliance to applicable laws and regulations at all levels working under administrative control. Coordinate HSE audits and follow-up Action Plans. Ensuring timely reporting of key performance indicators. Act as an impetus to STOP Intervention Program, HSEQ Awareness Events and Reward & Recognition Programs. Establishing Location HSE Management Review Committee (HSE MRC) to coordinate and control the activities of the HSE System being carried out by different functions and to periodically review and evaluate the performance of the HSE system.
IMPROVEMENT Opportunities For Continual Improvement; Formal Incident Investigation; Management (Control) of Change	 Investigate incidents where assigned and/ or formulate team to investigate an incident. Prudently applying pertinent resources to avail opportunities for improvement especially from near hit/ miss, formal incident investigation and by actuating MoC process for all feasible projects and modification jobs. 	 Investigate incidents where assigned. Avail opportunities for improvement especially from near hit/ miss, formal incident investigation and by actuating MoC process for all feasible projects and modification jobs.

4.4.3.1 Location IC (Party Chief, Operation Manager, Field Manager)/Relievers Responsibilities **Authorities**

١.	Understand and implement the				
	company's ESG, HSE & ERM				
	Policies and promote a positive				
	culture based on improved HSE				
	performance				

- Set a personal example with respect to HSE matters esp. through housekeeping.
- Ensure that all new employees are provided with a copy of the policy statement, receive such induction training as may be laid down in procedures, are issued with personal protective equipment as required.
- Ensure that he has received appropriate trainings on a) HSE b) regulatory requirements and c) operational controls for their level of management according to the competency guidelines.
- Supervise hazards identification 5. and Impact (Risk) assessments.
- Integrate HSE Management System with the overall . Management and appreciate the responsibilities of personnel under their authority and ensure that each employee knows his/ her responsibility and are equipped to play their part.
- Ensure all employees and contractors/ sub-contractors /

- To act Chairman E-LMT
- To act as Chairman Level-III RMT.
- To investigate incidents where assigned. To review and approve following:
- a) Annual Onsite Vulnerabilities (Threats & Opportunities) Identification and Impact (Risk) Assessment Plan
 - Annual Onsite HSE Awareness Plan based on TNA
- Onsite HSE Monitoring Plans
- d) Annual Onsite Waste Disposal Plan
- Annual Onsite Scenario-based Emergency Drill Plan Annual Internal HSF Audit Plan
- Annual OH Assessment /Fitness g) Tests (Trade-wise)Plan
- Ensure compliance of above Plans, PTW, ERP, and Sectional
- SOPs. Convene quarterly HSE MRC meetings and review progress of
- each Section/ Department. Ensure compliance obligations are met as per HSE regulatory requirement matrix.
- Can stop unsafe work and reprimand any employee for failing to discharge their HSE responsibilities.

Accountable to their direct line

- management through:
- a) Regular reporting to his Area Manager and HSE Department in H.O.

Accountabilities

- b) Participation in the workplace inspections as per HSE Monitoring
- c) Review, approval and dissemination of vulnerabilities identified and Impact (Risk)s assessed.
- d) Setting and reporting on HSE objectives and Key Performance Indicators
- e) Reviewing of CPR Log and CPR system for effective implementation
- f) Reviewing the effectiveness of HSE Trainings and ER Drills.
- g) Reviewing the fitness of workforce through Trade Tests.
- h) Ensure TNA of personnel is performed on annual basis.
- Review progress on HSE MRC meetings and own HSE performance of the unit.
- j) Endorse compliance obligations are met as applicable.





Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- service companies are suitably trained/ competent to carry o the prescribed task and that the necessary licenses/ certificates of competence are in force and appropriate.
- Ensure safe storage, handling, usage and disposal of material/ substances/ asset items.
- Ensure PPE compliance by workforce and by contractors/ sub-contractors / service companies.
- Provide written instructions for development of SOPs/ work methods outlining potential vulnerabilities (hazards) and precautions, and ensure they are complied with.
- Ensure the compliance of HSE Monitoring Plans.
- Formulate ERTs and ensure provision of adequate resources to them.
- Ensure Journey Management procedure is followed.
- Ensure Safety Training Observation Program (STOP) and implement the Hazard Hunt Program (HHP) as tool to highlight UBUC. (Each fortnight, Location IC shall pay Observation Tour along with Location HSE Rep./ Sectional IC and fill-in the STOP Cards.)
- Ensure the Statutory Notices, hazardous cautions, HSE Policy, ERP and Appointed First Aiders are displayed and maintained in prominent/ conspicuous places.
- Ensure accident and near-hits reporting procedures are understood and complied with. and assist accident investigations where appropriate.
- 17. Ensure MoC procedure is followed.

- Evaluate the HSE performance of each Section / Department
- Check and determine with Location HSE IC that each Contractor / Service Company is providing adequate training and supervision of its workforce.
- Review of CPR Log and ensure CPR system is effectively mplemented and followed.
- To take disciplinary actions against HSE Management System

4.4.3.2 Location's Departmental/ Sectional ICs/ Relievers

Responsibilities

- Understand and implement the company's ESG, HSE & ERM policies and promote a positive culture based on improved HSE performance.
- Set a personal example with respect to HSE matters esp. through housekeeping and participation in trainings & drills.
- Ensure TNA is timely carried out.
- Ensure that he has received appropriate trainings on a) HSE b) regulatory requirements and c) operational controls for their level of management according to the competency guidelines
- Supervise hazards identification
- and Impact (Risk) assessments. Integrate HSE Management System with the overall Management and appreciate the responsibilities of personnel under their authority and ensure that each employee knows his/ her responsibility and are equipped to play their part.
- Ensure all employees and contractors/sub-contractors/ service companies are suitably trained/ competent to carry out the prescribed task and that the necessary licenses/ certificates of competence are in force and appropriate.
- Ensure safe storage, handling, usage and disposal of material.
- Implementation of Journey Management procedure through nominated/designated In-charge Transport.
- Ensure PPE compliance by 10. workforce and by contractors/ sub-contractors / service companies.
- Develop SOPs/ work methods outlining potential vulnerabilities

Authorities

- To review following as Member of Location Management Review Committee (MRC) and Level-III
 - a) Annual Onsite Vulnerabilities (Threats & Opportunities) Identification and Impact (Risk) Assessment Plan
 - b) Annual Onsite HSE Awareness Plan based on TNA
 - c) Onsite HSE Monitoring Plans
 - d) Annual Onsite Waste Disposal Plan
 - e) Annual Onsite Scenario-based Emergency Drill Plan
 - Annual Internal HSE Audit Plan
 - Annual OH Assessment /Fitness Tests (Trade-wise)Plan
- Act as Approving Authority for the PTW (as representative of location management) for carrying out iobs in their operating areas
- Can stop unsafe work and reprimand his subordinate for failing to discharge HSE responsibilities.
- Evaluate HSE performance of their subordinates.
- To investigate incidents where assigned.
- Ensure compliance obligations are met as per HSE regulatory requirement matrix.

Accountabilities Accountable to their direct line

- management through: a) Nominate suitable personnel for various roles within ERTs and ensure
- they have been properly trained. b) Regular reporting to Location IC and
- Department in H.O.
- Participation in their workplace inspections as per HSE Monitoring Plans.
- d) Submission of vulnerabilities identified and Impact (Risk)s assessed to HSE Section.
- Setting and reporting on HSE objectives, and Key Performance Indicators.
- Submitting Updated SDS, SOP, Work Instructions, Forms.
 g) UBUC, Incidents are reported and
- investigated.
- h) Ensure job area has been inspected and all necessary precautions are taken up.
- Ensure timely certification / inspection of lifting-equipment, electrical installations, earth moving machinery, etc. from the relevant parties w.r.t. the HSE Monitoring Plan where required.
- All containers of hazardous chemicals / materials in designated area are properly labeled and secured.
- k) Timely and rightly disposal of waste chemicals / containers / bottles.
- I) To keep record for waste disposal.
- m) **Endorse** compliance obligations are met as applicable.





Ctreening Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- (hazards) and precautions, and ensure they are complied with.
- 12. Ensure the compliance of HSE Monitoring Plans.
- Formulate ERTs and ensure provision of adequate resources to them.
- 14. Ensure that all new employees are provided with a copy of the policy statement, receive such induction training as may be laid down in procedures, are issued with personal protective equipment as required.
- equipment as required.

 15. Participate in Safety Training
 Observation Program (STOP) and
 Hazard Hunt Program (HHP) to
 highlight UBUC. (Each week one
 Sectional IC pays Observation
 Tour along with Location HSE Rep.
 and fill-in the STOP Cards.)
- 16. Ensure the Statutory Notices, hazardous cautions, HSE Policy, ERP and Appointed First Aiders are displayed and maintained in prominent/ conspicuous areas.
- Ensure the relevant HSE statistics be submitted (preferably through email) to Locations I/C HSEQ for further dissemination to HSEQ Department H.O. on daily basis.
- Submit the consolidated HSE performance of working entity on the Monthly HSE Report.
- 19. Ensure to request a Fair Treatment Assessment process be activated in case of any incident / near hit/ miss where willful violation of OGDCL HSE policies, standards, protocols and procedures is considered to have taken place.
- Ensure to participate in Daily HSE meetings at the start / end of each business day in each location. This meeting can either be conducted separately or as part of daily 'operations' meeting.
- Ensure accident and near-hits reporting procedures are understood and complied with, and assist accident investigations where appropriate.
- Ensure management of change (MoC) procedure is followed where required by formulating ECR Committee.
- 23. Ensure that First-hand information of an incident be transmitted to all concerned at Head Office within 01 hour of the incident through available communication channels like telephonically, cellular messaging, email, etc. and submit Preliminary Incident Report (PIR) on the prescribed format on immediate basis but not later than 12 hours.

4.4.3.3 Location (Unit Level) HSE Officer/ Reliever Responsibilities Authorities

- Educate personnel on the company ESG, HSE & ERM Policy and promote a positive culture based on improved HSE performance.
- Act as Emergency Response Coordinator (ERC) in LMT during Emergency situations.
- Act as Secretary Location Risk Management Team (L-RMT).
- Participate in the emergency response planning process and develop ERPs, arrange / conduct and maintain record of fire and other emergency mockup drills.
 Coordinate to follow ERP and
- adequate "Notice to Employees" in areas where notices are usually posted.
- Develop Onsite HIRA Plan on quarterly basis and prepare Assessment Teams accordingly
- 7. To provide technical review of vulnerabilities associated with

- Prepare Annual Onsite Scenariobased Emergency Drill Plan, provide training to emergency response teams and conduct drills accordingly.
- 2. Prepare Annual Internal HSE Audit Plan and conduct internal audits.
- Stop the work if unsafe behavior/ condition observed resulting in serious incident.
- Conduct surveillance visits of the operations on regular basis to check compliance with the HSE system.
- Ensure that all new employees, visitors, sub-contractors / service companies, receive induction trainings and are issued with personal protective equipment as required.
- 6. In the case of Hot Work Permit;
 - a) To check that the Authority
 has carried out the required
 tests

Accountabilities

- Accountable to their direct line management as:
- a) To immediately report HSEQ Department H.O. in case of an incident.
- b) To regularly report the Location's HSE Performance to HSEQ Department H.O.
- c) To keep updated compliance status on Regulatory Requirements and report HSEQ Department H.O.
- d) To monitor & record the effectiveness of Toolbox (Safety) Talks.
- e) To act as Secretary of HSE Committee and take minutes of HSE Management Review Committee (MRC) Meetings
- (MRC) Meetings.f) To ensure ERP is developed and reviewed regularly for all field activities.
- g) In case of any hot work ensure that a standby Fireman has been assigned.





Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- various operations, methods, and purchased items and compile HSE Impact (Risk) Register after coordinating with other Sections.
- To provide technical review for Formulation of HSE objectives and action plans in collaboration with the sectional In-charge and to assist sections in meeting their HSE related responsibilities and objectives.
- To communicate the requirements laid down in JHA/JVA procedure to all employees and contractor's management and Assist other Sections in performing Job Vulnerabilities / Hazard Analysis (JVA / JHA) where required.
 Coordinate with Sectional I/Cs
- Coordinate with Sectional I/Cs regarding TNA and develop Annual Onsite HSE Awareness Plan.
- Prepare Onsite HSE Monitoring Plans and ensure HSE Monitoring Plans are followed.
- Participate in Safety Training
 Observation Program (STOP) and
 Hazard Hunt Program (HHP) to
 highlight UBUC. (On daily basis to
 pay Observation Tour and fill-in
 the STOP Cards.)
- Ensure Operating Departments have current copy of the related documents. Ensure STOP Cards and CPR Templates are available at designated places.
- Maintain an updated backup file of Hazardous chemicals / materials and SDSs.
- To provide assistance to other departments / sections in the preparation of HSE operating procedures / work instructions.
- Prepare Annual Onsite Waste Disposal Plan and maintain record (copy) of waste disposal.
- 17. Maintain a consolidated "List of Authorized Permit Issuing Authorities and Receiving Authorities" for various types of permits (duly signed by Location IC)
- Coordinate/ implement PTW system & in case of Hot Work Permit
 - Ensure that arrangements have been made for fighting any accidental fire.
 - b. a standby Fireman has been assigned.
- To maintain record of document change requests and change control requisitions.
- 20. Process Corrective & Preventive Action Requests (CPRs) and STOP cards and maintain their Logs.
- Provide assistance in the implementation of change control protocols (MOC).

- Adjoining area where the job has to be performed is safe from fire prevention point of view.
- In the case of Confined Space Entry Permit;
 - To check that Authority has carried out the required explosivity and oxygen tests.
 - b) Emergency equipment is available.
 - c) Emergency rescue arrangements have been made.
 - a standby Person has been assigned.
- 5. In case of Electrical Work Permits;
- a) To verify that IC Electrical or his assigned representative has looked into the matter that all relevant electrical circuits have been suitably isolated and have been locked as per requirements.
- 9. To investigate incidents where assigned.
- Coordinate with location management regarding comprehension of compliance obligations as per HSE regulatory requirement matrix.

In case HSE Representative is required to sign a permit at any stage, it would only be an act of endorsement that Permit Issuing Authority and Permit Receiving Authority both have taken all applicable safety measures against the Checklist prior to execution of safety critical job.

Note:-

1) Execution of any civil works, 2) maintenance /troubleshooting of machines, equipment or apparatus, 3) plumbing, 4) grass cutting, 5) whitewash, 6) mess/kitchen affairs, 7) refuse/scrap storage, 8) handling local issues/disputes etc. <u>DO NOT</u> come under the purview of HSE Section.

4.<u>4.3.4 Medical Representative</u>

Responsibilities To prepare, review and execute

- To prepare, review and execute Occupational Health Monitoring Plan of the Location.
- To prepare Annual OH
 Assessment /Fitness Tests (Tradewise) Plan & perform tests of the Locations' workforce.
- To keep a copy of SDS of all pertinent chemicals handled/ stocked/ used at Location.
- 4. Trained to be able to supply basic first aid of minor injuries. He/ She shall receive patients and also refer patients to clinics or government hospitals when necessary that provide emergency services.

Authorities

- To specify the nature of illness and injury after diagnosis/ examination.
- To carry out inspections of base camps, kitchen, dining facilities on regular basis and also check the quality of food and water treatment and advice
- accordingly.

 3. To supervise the camp sanitation and also examine the food handlers and advice accordingly.
- To advice job rotation of an injured or sick person if he is not satisfied with his heath conditions.
- 5. To respond swiftly to emergency calls.

Accountabilities

Accountable to their sectional management through:

- a) Regular reporting to his Sectional
- b) To perform inspections as per OH Monitoring Plan.
- c) To maintain sufficient amount of medicines stock in the clinic.
- To ensure availability of polyvalent snake bite anti-venom along with snake bite kits.
- To maintain and report personal medical record for each of the Location's workforce.





Ctreenings Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

5.	To maintain medical statistics of Location's workforce.
6.	Responsible for the medical
	welfare of Location's workforce
	on their health and hygiene.
7.	To segregate medical/clinical
	waste as hazardous and plan
	disposal accordingly.
0	
8.	To impart short awareness session
	on first aid, seasonal/ epidemic
	diseases and hygiene.
9.	To liaison with nearest medical/
	health facilities and maintain
	updated contact database.
	opadica comaci dalabase.

4.4.3.5 Purchase Committee

- To ensure that specifications of emergency detection systems like F&G detection system i.e. flame/smoke detectors and toxic/combustible detectors, alarm systems conforms to the requirements of NFPA and purchased accordingly
- To ensure that specifications of emergency response equipment such as ESD, fire extinguishers fire lorry, fire pump, hydrant system etc. meet the requirements of NFPA and purchased accordingly.
- To ensure that specifications of mechanical spares interacting with Fluid/Product such as bearings, valves, filters, etc. meet the requirements of ASME/ANSI standards and purchased accordingly.
- To ensure that specifications of mechanical spares exposed to external environment such as gauges, transmitters, switches, etc. are weatherproof & meet the requirements of ASME/ANSI standard and purchased accordingly.
- To ensure that specifications of chemicals, paints etc. includes non-toxicity, non-flammability, & environment friendliness, has SDS, proper packing/labeling, and purchased accordingly.
- To ensure that specifications of computer products are energy rated and purchased accordingly.

 To ensure that specifications of electrical equipment and apparatus within Zone 0&1 are intrinsically safe & explosion proof and purchased accordingly as per ATEX directives.
- To ensure that specifications of electrical appliances for Zone 02 meet the desired ratings as per intended use and purchased accordingly as per ATEX directives.
- To ensure that specifications of Personal Protective Equipment (PPE) conform to OSHA guidelines, are suitable for intended use and of good quality and purchased accordingly.
- To ensure that specifications of housekeeping services/ machinery/ equipment meets hygiene & quality standards, environment friendliness and purchased accordingly.
- To ensure that specifications of piping and sanitation material include good quality & environmental friendliness and purchased accordingly.
- To ensure that specifications of food products meet hygienic & quality standards and purchased accordingly
- To ensure that specifications of drinking water meet the requirements of WHO/ NDWQS (National Drinking Water Quality Standards) and purchased accordingly.
- To ensure that specifications of crockery, utensils, etc. meet quality & reliability standards, properly packed and purchased accordingly.
- To ensure that specifications of stationery items meet quality (recycled materials preferred) and purchased accordingly.
- To ensure that only the prescribed, licensed and valid to use medicines are purchased (DRAP approved).
- To ensure that specifications of communication systems like walki talkies, photocopiers etc. meet the requirements of hazardous area classification as per ATEX directives, environment friendliness and purchased accordingly.
- To ensure specifications of lube oils, gear oils, and transmission oils include desired API gravity, viscosity, fire resistance qualities and purchased accordingly.
- To ensure those brands of soaps, detergents, toothpastes etc. are purchased that are health and environment friendly
- To ensure/ prefer that EPA Certified Hazardous Waste Disposal Contractors (including auction and condemnation cases) are selected/prequalified.

Important Notes about Procurement Cases:

- OGDCL's Line management is to always ensure that the workforce is competent and have the necessary authority and resources to perform their duties safely and environment consciously. In doing so, line management shall involve in various purchase matters. Preparation of indents/TORs and performing technical assessments of such cases hence comes under the direct jurisdiction of User's/Indenting Department.
- HSE Department shall extend its positive support or input (in terms of advice/guideline/value addition as promulgated by any regulator or standard or best practice) as and when required at any stage of the procurement; However it is pertinent to mention that HSE Department shall not and cannot be the custodian of any system, equipment, machinery, or other asset that is part of the operational requirement (except for few portable gadgets and consultancy services) and hence shall refrain indulging into any such procurement matter directly or indirectly.





4.5 Crisis Management

OGM/P-HSE-4.5(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iffikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change			
1	Modified: New Logo and Tag Line			
2	Modified: Consequences Severity Table			
3	Added: Protocol for Hotline Contact Numbers			
4	Added: Appendix-I, an example of Muster Point/ Assembly Area/ Emergency Assembly Point harnessing			
	headcount			

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
EMT Duty Roster	HSE Officer	Manager HSE	GM HSE
LMT Duty Roster	Location HSE Rep.	HSE MRC	Location InCharge
Location's Emergency Drill Report	Location HSE Rep.	Any Member, Location HSE MRC	Location InCharge





4.5.1 Purpose

- To provide methodology to proficiently respond during crisis situations on collective basis to safeguard the safety of OGDCL's personnel, environment and assets as our business priority would remain firstly people, followed by environment, and company assets.
- To categorically define roles to be taken by OGDCL-H.O.-based-management to provide structured and methodical assistance & response to emergencies related to or arising out of company operations at its office buildings and field locations.

4.5.2 Scope

- This procedure is applicable to all OGDCL facilities including office activities; medical centers; operational activities of exploration, drilling, production & plants and projects; logistics; bases stores; field gathering construction parties; engineering field parties; data libraries; etc.
- Although the procedure provides a framework of collective and seamless response at all units and sub-unit levels of OGDCL; yet it does not replace the Emergency Response (ER) Plans already in vogue at OGDCL locations as essential requirements of their operations.

4.5.3 Emergency Levels

Emergency levels and subsequent actions are mentioned below:

Emergency Level-1:

An emergency that can be controlled by the localized action at the affected area by the available personnel and resources. This level of emergency doesn't have immediate serious injuries, potential of fatality, major equipment loss, major loss of primary containment, large fire/ explosion, major vehicular incident and/ or major environment impact.

- Emergency siren is NOT sounded at this stage.
- Mustering is NOT required.
- LMT is NOT activated; however, the situation is critically monitored by Location InCharge (Chairman LMT) for assessment of any further escalation potential.
- Work activities can be suspended temporarily in the localized area which is or likely to be affected.

Emergency Level-2:

An emergency situation which has potential to impact the affected site significantly and for which external support services may be required. It may result in serious injuries/ fatality, major equipment damage, major loss of primary containment, significant fire/ explosion, major vehicular incident, and/ or loss of controlled substance to the environment

- In case of incident at field location: Emergency siren is sounded with intermittent tones of 10 seconds each with 5 seconds pause, repeated 3 times. Where available, emergency announcement through Public Address system may also be made. Emergency termination would be managed through siren with continuous tone for 120 seconds.
- In case of incident at an Office Building, Islamabad: Fire Alarm Bell is sounded for 20 seconds and/or Public Address (PA) system is used. Once emergency is over, ALL CLEAR to be announced and announcement on mega phone and Public Address (PA) system to be made twice.
- Mustering is required. However, LMT Chairman may further decide to evacuate to the Assembly Points designated outside the main gate. Employees are to wait for further instructions there.
- LMT is activated; however, EMT may be activated depending upon crisis level (severity) 3,
 4 or 5
- All operations/ activities will be stopped.



4.5.4 Emergency Scenarios-Consequence

Following are the probable emergency scenarios-consequence analysis (in conjunction with Risk Management Procedure):

Scenarios	Consequences wrt Crisis Levels						
Fire / Explosion / Blowout Roadside		Reputation	International concern affacturity in compeny's orgoing business/ existence; Severe, long- institution affaroverable deterioration of the reputation of the reputation of the reputation and storagy nongany, with reliverable	Considerable negative publicity or demage to the company's regulation at astonial level with wide media coverage.	Negative publicity or damage to the company's reputations at national/ provincial level covered by mainstream media	Minor one-orf (rare) regative local publicity or ushele dissastisfaction by local stakeholder groups, resolved through table of negodiations	Some attention from minor staken blocks, prosingtively resolved by routiner, intermal processes.
Accident		7	of k-event \$ \$ stion	k-event s US\$ US\$ US\$	set of k-event s US\$	k-event n US\$ ation IS\$	nent or nent or s s ss
Oil Spillage		Financial	Extreme impact of investment or risk-event Routine business 3-48,5 million USS Order Diversification 9-99,9 million US\$	High impact of investment or risk-event Routine business 36 – 49,8 million US\$ Other? Diversification 60 – 99,9 million US\$	Significant but containable impact of investment or risk-avent Routine business ROUTINE DUSINESS Other, Diversification 30 – 59.9 million US\$	Winor impact of investment or risk-event Routine business 6.0.25 – 9.9 million US\$ Cothar/ Divarsification 5-29.9 million US\$	Not much significant impact of investment or risk-avant Routine business < 0.025 million US\$ Other/ Diversification < 5 million US\$
Gas Leakage			Extreme investm Routine > 49.9 m Other/ L	High impact of investment or r Routine busine 30 – 49.9 millio Other/ Diversit 60 – 99.9 millio	Significant but containable in investment or Routine busine 10 – 29.3 millik Other/ Diversit 30 – 59.9 millik	Minor in investm Routine 0.025-3 Other/ E 5-29.9	Not much signi impact of Inves risk-event Routine busines < 0.025 million Other Diversiti < 5 million US\$
Boiling Liquid Expanding Vapor Explosion	to	Security	Extensive loss of ilfo, widespread severe injuries, total loss of primary services, core processes or functions	Loss of tife/ serious injuries, damage to the Company assets, impairment of core processes and functions for extended period	Minor injuries, minor impairment of core functions and processes	Small procession near location with slight damage/ threat to the assets/personnel.	Small procession near location with no damage' threat to the assets/ personnel.
(BLEVE)	e Severity (Safety	Muttiple Fatalities/ Disabilities	Single Fatality/ Disability	Serious injury(ies) resulting in Lost Time	injury (or injurys) requiring medical treatment	Slight injuries requiring First Ald only
Natural Disaster (Heavy Rains, Floods, Earthquake, etc.)	Table-A: Consequence Severity (C) Potential Impact	Environment	Continuous excursions beyond allowable or regulatory units Or widespread adamage to multiple environmental attributes. Consequences of it attributes. Consequences of it artifluous consequences of it or remodiated or remodiation requires significant requires significant than a year time trame).	intermittent excursions boyond allowable or egislatory limits Or extensive damage to the environment, consequences that can be rectified and remediated within a year's timeframe	Occasional excursions beyond allowable or regulatory limits Or equidatory limits Or consequences that can be rectified and remediated within a month's limiterana	Fare excursions beyond a grown with a good and a good a good and a good a good a good a good a good and a good a goo	nmental hin the premises Y
Terrorist Attack / Bomb Threat		Social/Community	Widespread, visible complaints and involvement of MGOs, notables, national authorities and general public.	Major and repeated community & stakeholder concorns, involvement of notables, local entities outlities.	No serious community or stakenoidor concerns or negative sociat or other modia coverage that causes temporary disruption to business	Low impact community issues, remodied after negotations	Low impact community issues, quicky remedied
Civil Unrest (Local Strike) Snakebite		Regulatory & Legal	Broaches resulting in helty penalties. Imprisonment revocation of registrations, licenses or permits	Breaches resutting in significant penatties/ ceasing of operations	Breaches resulting in warnings without penalties	Breaches resulting in exposure to legal proceedings/show cause notices	Rectifiable breaches with no consequence to the company
Others		Regu	Cedestrophic [Very Material] [S] [Pery Material] [S] [S] [S] [S] [S] [S] [S] [S] [S] [S	Critical [Material] (4) Brain	Mejor (S) (S) B R R R R R R R R R R R R	Marginal [Inconsequential] (2)	Negligible (1) Rectifie (1) conseq

4.5.5 Crisis Management Teams

- There shall be two types of crisis management teams consisting of Core and Support Members:
 - Emergency Management Team (EMT), Head Office
 - Location Emergency Management Teams (LMTs)
- Importance-wise role of EMT and LMTs shall be to:
 - i. save lives;
 - ii. minimize damage to the environment;
 - iii. protect assets.
- Additional roles shall be to manage:
 - i. business continuity;
 - ii. liability; &
 - iii. reputation.



4.5.5.1 Emergency Management Team (EMT)

4.5.5.1.1 EMT Structure

- Located at OGDCL House Islamabad, EMT shall be responsible for providing support and guidance in case of crisis at Islamabad Offices or other facilities. However in case of inaccessibility of H.O., EMT Room at OGTI Islamabad shall be activated. Both EMT Rooms shall be maintained by Admin. Department.
- Structure of EMT is tabulated below and also mentioned at Appendix-A.

	Chairman/ Alternate						
•	ED (Production) / ED (Exploration) / ED(Petroserv) / ED (HR-Admin)						
or a	or any other ED nominated by MD/CEO						
	Core Member	Alternate Member					
1	HOD (Production)	M (Production)					
2	HOD (P&P)	M (P&P)					
3	HOD (Exploration)	M (Exploration)					
4	HOD (DO)	M (DO)					
5	HOD (HSEQ)	M (HSEQ)					
6	HOD (CA)	M (CA/EC)					
7	HOD (Security)	M (Security)					
8	HOD (HR/ Admin)	M (HR/ Admin)					
9	HOD (Medical Svc)	M (Medical Svc)					
10	HOD (Commercial)	M (Commercial)					
11	HOD (System)	M (System)					
12	Log Keeper (Preferably from EMT Chairman's Directorate)						
13							
	Support Member	Alternate Member					
1	ED (Services)	GM (SCM)					
2	ED (JV)	GM (JV)					
3	HOD (Legal)	M (Legal)					
4	HOD (CSR)	M (CSR)					
5	HOD (Finance/ Accounts)	M (Finance/ Accounts)					
6	HOD (OGTI)	Chief (OGTI)					

■ The Support positions may be called in on as-&-when-required-basis. Requirement for additional support functions as part of the incident response shall be dictated by the actual incident, and be at the discretion of EMT Chairman.

4.5.5.1.2 EMT Activation Process

- EMT may be activated when an **Emergency Level-2** occurs after assessing actual and possible consequences as Crisis Level (Severity) 3, 4, or 5 at any OGDCL Facility.
- **EMT** shall be activated as follows:
 - In case of incident at an office building, Islamabad:

HOD (HR-Admin)/ HOD (Security)/ HOD (HSEQ) shall inform EMT Chairman for further information to MD/ CEO; once notified, MD/ CEO shall make a decision on the requirement for EMT activation.

- In case of incident at field location:
 - LMT Chairman shall immediately activate the LMT upon Emergency Level 2;
 - LMT Chairman shall intimate the relevant Area Manager/ HOD;
 - o Relevant HOD shall inform EMT Chairman;
 - EMT Chairman may activate the EMT depending upon Crisis Level (Severity) 3, 4, or 5;





- o EMT Chairman shall further inform MD/ CEO about the situation;
- Once notified about the LMT activation, MD/ CEO shall make a decision on the requirement for EMT activation.
- It is the prerogative of EMT Chairman to declare the actual level/ severity of crisis upon start. Also, he would judge in how much time the level/ severity of crisis can escalate and inform MD/ CEO accordingly.
- EMT Chairman shall inform EMT Members telephonically or through electronic messaging application (either directly or through his team).
- During emergency, Admin. Member shall pass on instructions to spare the EMT Room; any ongoing meeting, seminar, training or other event shall be ceased to continue in the EMT Room at the time of emergency.

4.5.5.1.3 EMT Duty Roster Requirements

- A fortnightly EMT Duty Roster shall be issued by HSEQ Department H.O. to all EMT Members and transmitted to All OGDCL Locations.
- The Duty Roster shall show all the CONTACT DETAILS of EMT Members.
- **EMT Duty Roster guidelines are as follows:**
 - HSEQ Department shall be responsible for maintaining/ updating the overall Duty Roster;
 - All EMT positions shall remain filled at all times;
 - EMT Members shall ensure their presence on EMT callout.
 - In case of a change, the Core Member shall notify the Alternate Member and EMT Chairman;
 - All personnel "On Duty" (according to the Duty Roster) shall ensure they carry a mobile phone all times; &
 - All personnel on duty shall remain within 02 hours traveling time from the EMT Room and in a condition which permits them to carry out their emergency response duties.
- Once EMT roles are clearly scheduled for the fortnight, the Duty Roster shall be posted at MD/ CEO Secretariat as well as GF Notice Board.

4.5.5.1.4 Roles of EMT After Activation

(Prompt EMT Checklist specimen is given at Appendix-E)

MD/CEO/COO/CFO

- Upon receiving information from EMT Chairman, shall activate the EMT; however may nominate any ED to Chair the EMT irrespective of the Duty Roster; and based on the gravity of situation, may join the EMT proceedings anytime.
- Liaise with Chairman BOD/ Risk Management Committee (RMC/) Ministry of Energy (Petroleum Division) to share incident update;
- Take decisions after assessing the overall implications of crisis situation; &
- Ordering the deactivation of EMT after receiving necessary information.

EMT Chairman

(ED Production / ED Exploration / ED Petroserv / ED HR-Admin)

- Upon receiving information about an emergency, shall inform MD/ CEO for seeking consent on EMT activation;
 - (The preliminary incident information shall be passed on to EMT Chairman
 - a) by LMT Chairman through his Area Manager/ HOD, in case of field emergencies &
 - b) by General Manager (Admin)/ General Manager (Security)/ General Manager (HSEQ) in case of emergencies in office buildings, Islamabad);
- Ensure that EMT Members have been informed to assemble at EMT Room telephonically or through electronic messaging application either directly or through his team;





- Nominate and ensure that one Officer as Log Keeper is present in the EMT on immediate basis (preferably from his own Directorate);
- After assembling at EMT Room, shall take briefing on the incident and decide to call requisite supporting members keeping in view the severity and nature of the incident;
- Establish immediate priorities referring to the relevant Emergency Response (ER) Plan; identify any additional resources required for managing the emergency from nearby locations, service companies, JV Partners, etc.;
- Assign responsibilities to the team members;
- Identify the external emergency services in consultation with the HSE/ Security /Admin /CA Member in order to manage/ control the incident e.g. Rescue 1122, fire brigade etc.;
- Ensure that decisions made to respond incident are timely communicated to LMT Chairman through respective HOD after due deliberation in the EMT proceedings;
- Inform MD/ CEO with the current (updated) information and efforts being made to control the incident for briefing BOD and Ministry of Energy (Petroleum Division) (if required) in following sequence;
 - ✓ Nature and status of emergency
 - ✓ Cause(s) of the incident in so far as this is known
 - ✓ Media/ press situation
 - ✓ Prognosis/ Projection (loss and other consequences)
 - ✓ Rescue operations
 - ✓ Consequences in terms of production & revenue
- Take progress report on tasks from each team member to remain updated;
- Summarize the update, set priorities in accordance with the evolving situation and allocate responsibilities for actions. Set the time for the next update;
- Liaison with the relatives or Next of Kin (NOK) of the affected employees through HR-Member;
- Advice Commercial/External Communication/JV Member for preparing response to relevant agencies/stakeholders (if required);
- Issue media & press statement(s) after review by Spokesperson (Company Secretary/ HOD Legal) and approval from MD/CEO;
- Take decision for deactivation of LMT after receiving necessary information from the incident site and after assessing the integrity of assets, buildings, machinery, equipment, etc.
- Co-ordinate any post-incident recovery planning necessary;
- Ensuring that the appropriate EMT Members remain available during the initial recovery planning phase; &
- Hand over recovery and/ or normal operations to the relevant HOD at a mutually agreed time/ phase.

Log Keeper (preferably from EMT Chairman's Directorate)

- Begin collection and analysis of data as soon as possible;
- Maintain a chronological log (pay special attention to times of significant activities & events) on electronic file & project on screen. Print incident log when complete and pass to EMT;
- If log is written on board only, photograph board before clearing;
- Proactively monitor all communication and record pertinent points as they arise;
- Recover documents and notes from all EMT Members on a regular basis;
- Maintain situation chart/map of incident in the EMT Room;
- File all official forms and reports;
- Review records for accuracy and completeness; &
- Provide incident documentation as requested.



Operational Members (HODs)

(Production / Process / Drilling / Exploration)

- Obtain all the relevant information regarding incident including but not limited to the following:
 - ✓ Nature and status of emergency
 - ✓ Casualties status
 - ✓ Assets damaged
 - ✓ Medical requirements
 - ✓ Initial environmental/ community/ nearby industries implications
- Responsible to inform EMT Chairman and reach EMT Room;
- Brief in depth, to the EMT Members, nature and severity of the incident and "AS IS" situation in the incident site;
- Give his technical input for shutting down operations, handling the emergency as per relevant Emergency Response (ER) Plan and finalize the additional resources (if required) from other locations to cope the situation and subsequent mobilization of additional technical and/ or operational support as decided in the EMT;
- Give professional input to the EMT Members in finalizing the overall strategy for dealing with the incident;
- Liaise with LMT Chairman on the effectiveness of actions being taken to control the emergency and subsequently apprise the EMT Members;
- Provide assistance regarding movement of technical staff and/ or equipment to the incident site;
- Ensure that incident is timely reported by Location IC to the regulatory authorities;
- Deliberate on resumption of operational activities or otherwise; &
- After deactivation of EMT, taking over the charge for controlling of recovery and/ or normal operations.

Admin Member (HOD-HR/Admin)

- Establish and keep EMT Room up to date and ensure that all the facilities mentioned in Appendix-B1 are readily available and functional;
- In case of H.O. emergency, gather complete detail of the incident to be shared with EMT Chairman and ensure safe evacuation (considering headcount & muster point assembly) in collaboration with HSE Member;
- Give his input for handling the situation referring to the relevant Emergency Response (ER) Plan through arranging additional resources from agencies like Rescue 1122, Fire brigade, civil aviation, etc. to cope with the situation;
- Coordinate and manage additional transport requirements at incident site: &
- Advice on matters related to Staff Union.
- Coordinate & inform the relatives or Next of Kin (NOK) of the affected employees; &
- Process compensation claims arising as a result of any incident.

HSE Member (HOD-HSE)

- Advice EMT Chairman on the workforce health, asset's safety and environmental repercussions in perspective of national/ provincial regulations;
- Nominate and ensure that one Officer as Record Keeper is present in the EMT on immediate basis;
- Liaise with IC HSE at incident site for safe evacuation;
- Evaluate the emergency for its short and long-term impact implications; &
- Advice EMT Members in deciding to call for any sort of internal/ external help in the light of relevant Emergency Response (ER) Plan.





Record Keeper (preferably from HSEQ Deptt.)

- Remind EMT Chairman of outstanding issues or actions from the log;
- Maintain the issues and actions log;
- Organize incident documents in filing system;
- Establish copy/ duplication service, respond to requests;
- File all forms, reports and photos;
- Review records for accuracy and completeness;
- Provide documentation/ record as requested to EMT.
- Provide duplicating and copying services as requested;
- Store files for post incident use; &
- Take digital photos of status boards before they are cleaned and updated.

Security Member (HOD-Security)

- Advice EMT Chairman on security related matters;
- Arrange extra security, if needed for the incident site;
- Liaise with the Security IC at the incident site;
- Liaise with the law enforcement agencies if required;
- Make EMT Room out of bound (except EMT Members) during EMT proceedings by deploying appropriate Security Guards;
- Ensure security arrangements for all personnel on board (POB);
- Evaluate immediate impact on local community in consultation with CSR Member;
- Provide relevant security information to EMT Members;
- Advice on the application of relevant Emergency Security Procedure/ Emergency Response (ER) Plan;
- Liaise with embassies/ foreign offices, in case incident involves expatriates.
- Ensure that accessibility of the incident premises is not allowed to irrelevant personnel (including media) without prior approval of EMT Chairman;
- Ensure that all necessary personnel receive appropriate security briefings and are properly qualified; &
- Ensure that security personnel do not take photographs/ digitally record the incident scene and interfere in the operational activities.

Corporate Affair Member (HOD-CA)

- Deal with the print and electronic media during incident management and prepare press releases for review by Spokesperson (Company Secretary/ HOD Legal) and for approval of MD/ CEO;
- Coordinating media conferences and pre-briefing for the Spokesperson (Company Secretary/ HOD Legal);
- Monitoring media reports and subsequently informing the EMT Members accordingly; &
- Try to influence the print and electronic media to report in a responsible manner for the sake of company reputation. (Guidelines for Dealing with the Media are given at Appendix-F)

Commercial Member (HOD-Commercial)

- Collect information regarding oil and gas production, storage capacity and dispatch situation during incident management and inform EMT Members;
- Inform respective DG Oil or Gas, customers such as SNGPL, SSGS, Refineries, etc., if required (either directly or through EMT Chairman);
- Timely determine and implement product dispatch strategy in consultation with EMT Chairman; &
- Monitor/ control the bowsers' movement in accordance with the emergency situation.



Medical Services Member (HOD-Medical Services)

- Provide necessary medical expertise and advice to EMT Chairman;
- Establish contact with the on-duty Medical Doctor and provide expert medical advice:
- Assess the injured persons into those who need critical attention and immediate transport to the medical facility/ hospital and those with less serious injuries.
- Mobilize medical services (Doctors, Ambulances, and Paramedics) from other locations to the incident location;
- Maintain coordination with the Hospitals;
- Keep updates of the treatment being provided to the incident victims in hospitals and take feedback from hospitals for satisfactory treatment; &
- Give input for the press release regarding casualties/ injuries (fatalities, LTIs, RWIs, MTCs, etc.) and information to be provided to the Next of Kin (NOK) through HR Member.

System/Communication Member (CIO/ HOD-System)

- Ensure that necessary means of communication required to deal with the emergency situation are in operational condition in the EMT Room at all times;
- Mobilize system and communication resources to deal with the emergency;
- Ensure that the list of valid emergency contact numbers is maintained;
- Manage the actions of the Radio Room Operators and devise mechanism for receiving calls from locations/ external agencies during dealing with the emergency;
- Report regularly to EMT Chairman on the situation and level of calls received;
- Ensure that communication team is briefed on how to handle emergency communications and regularly check their performance for compliance;
- Ensure training of Radio Room Operator and Telephone Operators in such a way that they timely transmit relevant information during incident to the EMT Members.

Note: The updated lists of valid emergency contact numbers must be circulated to EMT Members, H.O. Radio Room and all locations Radio Room and both EMT Rooms. Ensure that a monthly exercise is carried out to maintain/update the emergency numbers.

Protocol for Hotline Contact Numbers

When the primary systems (e.g. website, email, internal network, regular phone/ cellular lines, etc.) are unavailable or compromised due to a cyber-attack, network and/ or power failure/ shutdown, EMT members must switch to the alternative secure cellular hotline numbers, which have been pre-established, pre-allocated and dedicated for them.

Support Members

- **JV Member (ED-Services):** The main responsibility of Services Member is to apprise about the service companies, contractors engaged at the incident site and how to coordinate with them during emergency situation.
- **JV Member (ED-JV):** The primary responsibility of JV Member is to communicate with JV Partners and apprise about emergency situation/incident and seek their help (if required).

Legal Member (HOD-Legal): Advice EMT Chairman regarding prevailing laws, regulations/policies; alert EMT to any legal repercussions that may result from actions taken or decision made by company response personnel or contractors' and review media/ press releases before final release.

CSR Member (HOD-CSR): Evaluate the immediate impact of incident on local community in consultation with Security member; coordinate with local



notables and district management in managing emergency; and take prompt actions to address the situation through Regional Coordinator (RC). **Finance/Accounts Member (HOD-Finance/ Accounts):** Arrange for securing finances as & when directed by EMT and liaise with EMT Operational Members on financial resources required to support the emergency.

4.5.5.1.5 EMT Deactivation Process

- EMT shall only be deactivated by MD/ CEO after determining that emergency response should cease and on receiving information from EMT Chairman that situation has been brought under control and normal recovery operations are in progress to restore the activities/ operations.
- On deactivating, EMT Chairman shall prepare a debrief with the help of Log and Record Keepers encapsulating the details of incident, responsive measures, highlighting the weaknesses/ shortcomings and lessons learned with recommendations to avoid recurrence.

4.5.5.2 Location Emergency Management Team (LMT)

4.5.5.2.1 LMT Structure

The makeup and structure of Location Emergency Management Teams (LMTs) shall vary depending on the location and the nature of the operation. LMTs are headed by the relevant FMs/ PMs/ OMs/ PCs (e.g. for Qadirpur Field, the team be called QP-LMT; for Rig N1 → RN1-LMT; for SP-1 → SP1-LMT):

	<u>Seismic</u> <u>Parties</u>	<u>Drilling</u> <u>Rigs</u>	<u>Production</u> <u>Fields</u>	<u>Gas</u> <u>Processing</u> <u>Plants</u>
Chairman LMT	PC	ОМ	FM/ OM	FM/ PM
Crisis Mgt. Coordinator (CMC)	IC Maintenance	IC Maintenance	IC Maintenance	IC Maintenance
On Scene Coordinator (OSC)	IC Shift/ Drilling/ Shooting	IC Shift/ DO	IC Shift/ Production	IC Shift/ P&P
Emergency Response Coordinator (ERC)	HSE Rep.	HSE Rep.	HSE Rep.	HSE Rep.
Medical	Medical Rep.	Medical Rep.	Medical Rep.	Medical Rep.
Security	IC Security	IC Security	IC Security	IC Security
Administration	IC Admin.	IC Admin.	IC Admin.	IC Admin.

Note:

Relevant HOD shall ensure that the location management develops, maintains and ensures bridging of documents that clearly outlines the interface between the contractors ER Plan and OGDCL Location's ER Plan and act accordingly during the LMT proceedings.

A designated Location Emergency Management Room (LMT Room/ ER Post) shall be established at every location and equipped with necessary facilities mentioned in Appendix B-2.

Note: LMT Room/ ER Post shall be dedicated for emergency preparedness and response purposes only.

4.5.5.2.2 LMT Activation Process

In the event of an **Emergency Level-2**, LMT shall be activated as follows:

LMT Chairman shall immediately activate the LMT with intimation to the relevant Area Manager/ HOD who shall inform EMT Chairman for further information to MD/ CEO about the situation.





- When activated, LMT shall provide field based technical, logistical, planning resources, security and community support and assistance to the on-ground emergency response teams handling immediate situation on incident site.
- LMT Chairman shall inform LMT Members telephonically/ walkie-talkie (portable, two-way radio transceiver) or through electronic messaging application (either directly or through his team).

4.5.5.2.3 LMT Duty Roster Requirements

- A fortnightly <u>LMT Duty Roster</u> shall be issued by the Field HSEQ Section to all field members of LMT and transmitted to respective HODs and HSEQ Department H.O. The Duty Roster shall show all the CONTACT DETAILS of LMT Members.
- The LMT Duty Roster guidelines are as follows:
 - Field HSE Representative shall be responsible for maintaining/ updating Emergency Response Team Duty Roster on fortnightly basis; &
 - All LMT positions shall remain filled at all times;
 - LMT members shall ensure their presence on LMT callout;
 - In case of a change, the Core Member shall notify the Alternate Member and LMT Chairman;
 - All personnel "On Duty" (according to the Duty Roster) shall ensure they carry a walkie-talkie (portable, two-way radio transceiver)
- Once LMT roles are clearly scheduled for the fortnight, the Duty Roster shall be posted at Main Notice Board of site as well as camp area.

4.5.5.2.4 Roles of LMT After Activation

LMT Chairman

- In case of incident at any OGDCL location, shall immediately activate the LMT with intimation to the relevant Area Manager/ HOD who shall inform EMT Chairman;
- Ensure that LMT Members have been informed to assemble at LMT Room telephonically/ walkie-talkie (portable, two-way radio transceiver) or through electronic messaging application (either directly or through his team);
- Seek out incident details;
- Provide support while referring to the relevant Emergency Response (ER) Plan and adequate backup resourcing for the response operations;
- Inform, and obtain the necessary support and guidance from the Chairman of the EMT at Islamabad;
- Liaise with the On Scene Coordinator (OSC) at the affected area to arrange & provide tactical support;
- Inform & liaise with relevant local government (Commissioner, Deputy Commissioner, etc.), community and regulatory authorities (e.g. Police) as appropriate;
- Provide support to the affected area in the planning and implementation of the recovery phase;
- Document all aspects of emergency response activities, decisions and communications; &
- Declare emergency clearance in consultation with EMT Chairman.

Crisis Management Coordinator (CMC): CMC is responsible for the immediate securing of the Operations as required by the nature of the incident and on instructions from the Chairman LMT. In the absence of Chairman LMT, he shall be the alternate Chairman.





On Scene Coordinator (OSC): OSC would be Operational Rep. and responsible for passing relevant information regarding the nature and status of the incident to the Chairman LMT. He shall also be responsible for updating the Chairman LMT of the actions being taken to control the incident.

Emergency Response Coordinator (ERC): ERC would be responsible for cocoordinating all firefighting and rescue efforts with the help of Onsite Emergency Response Team (ERT); Offsite Response Team (ORT); First Aid & Evacuation Team and Firefighting Team (Fire Section) and for passing updated information regarding the management of incident to the Chairman LMT. He shall also be responsible for advising the Chairman LMT of the additional actions to be taken to effectively & adequately respond to the incident. Emergency Response Teams will respond with their defined roles & responsibilities as follows:

Rapid Response Team (RRT)

RRT mainly comprises of the area-specific staff including operators, engineers or technician that shall be the first responder to the emergency.

On witnessing an emergency, hearing the alarm or being informed of an accident or incident, would stay upwind & clear of the affected location, give call on radio for Muster count; then follow further instructions to take emergency steps as per the defined procedures.

- Would check out the "Area of Concern" as advised and report back with the findings immediately.
- If there is a need of putting on the protective clothing, would put on Fire Suits & Breathing Apparatus Sets etc.
- On declaration of emergency, would assess the situation and provide prompt initial response to control the emergency (by using portable fire extinguishers, activation of deluge system, operating oscillating monitors, laying hose pipe, cooling the adjacent area if required, making casualty safe/ comfortable, isolating the source from safe distance etc.) after co-ordination with the Shift IC.
- Would remain on site to meet the ERT and apprise them of the situation. If the situation warrants, the OSC may ask them for assistance.

Emergency Response Team (ERT)

An Onsite Emergency Response Team (ERT) deals all emergencies inside facilities; whereas an Offsite Emergency Response Team (ERT) deals all emergencies outside facilities. ERT is comprised of field employees as nominated by the respective Location InCharge. I/C Maintenance leads the ERT. ERT Roster shall be nominated fortnightly and circulated along with LMT roster. ERTs are trained in support functions (hose unreeling, assisting the firefighters etc.) and above basic level firefighting skills.

- Once emergency is announced, all ERT members (except affected area ERT members) shall assemble at a designated point called "ER Post" (Emergency Response Post). ERT Lead shall be responsible to gather all members.
- Members shall follow instructions of ERT Lead and OSC to provide firefighting or any required assistance by immediately putting on turnout suits, prepare Breathing Apparatus and equip themselves prior to entering and responding emergent situation.
- Evacuate, provide necessary first aid to the affected people, rush them to Field Medical Center for further assistance and update ER Coordinator on nature of injuries and number of affected people.
- Lay fire hoses and assist firefighting team connect them to nearest fire hydrant, operate fire monitor and other firefighting equipment along with firefighting team and give support to front-line firefighting team for arranging firefighting logistics like hoses, coupling, foam etc.

First Aid & Evacuation Team

Members shall be trained and certified in basic first aid and CPR, nominated by different Sections.

- On hearing Emergency siren or being informed of an accident or incident proceed to their muster point and await directions from the Field doctor.
- When directed, take part in the evacuation & rescue by ensuring the safety of all concerned.
- Immediately put on their first aid jackets and prepare the first aid equipment.
- Ensure head count at each muster point and report to Medical Doctor

Medical Rep.: Medical Rep. is responsible for the timely treatment (by himself, his team and simultaneously liaison with nearby hospitals/ health facilities) of casualties resulting from an incident to lessen the probability of disabilities/fatalities; also responsible for managing and coordinating the efforts





of Medical staff / First Aiders / Triage Team (Appendix G); & informing/updating the Chairman LMT of the status and number of casualties.

Security Rep.: Security Rep. is responsible for maintaining the security of site during the emergency situations; advising Chairman LMT on the external security actions to be taken with assistance from Government agencies (Police, Rangers, others etc.) to effectively control and respond to the incident and liaison with external security agencies for advice and assistance.

Admin Rep.: Admin Rep. is responsible to ensure safe evacuation (considering headcount & muster point assembly) in collaboration with HSE; provide input for handling the emergency and finalize the additional resources required from other agencies like Rescue 1122, Fire brigade etc. to cope with the situation in consultation with ERC; coordinate and manage additional transport requirements at incident site; & advice on matters related to Staff Union.

Note: In case all LMT members are also affected in the incident, then Chairman LMT shall formulate an alternate team from the alternate members to handle such emergencies.

Support Members (as per availability)

- Location's InCharge Lab.
- Location's InCharge Material
- Location's InCharge Civil
- Location's InCharge TPT
- Location's InCharge System/ Communication
- Regional Coordinator (RC)

4.5.5.2.5 LMT Deactivation Process

- ELMT shall be deactivated by LMT Chairman after determining that the situation has been brought under control and normal recovery operations are in progress to restore the operations; however the consent of both HOD and EMT Chairman should be there to deactivate the LMT.
- On deactivating, LMT Chairman shall prepare a debrief encapsulating the details of incident, responsive measures, highlighting the weaknesses/ shortcomings and lessons learned with recommendations to avoid recurrence.

4.5.5.2.6 Location's Emergency Preparedness

- At each location, potential hazardous situations and risks shall be evaluated to determine the requirements of Emergency Response (ER) Plan (including procedures, emergency equipment, controls, etc.).
- Location's ER Plan be developed, disseminated and personnel be made aware through onsite awareness sessions.
- Location management shall be responsible for reviewing and revising ER Plan, particularly after each occurrence of incidents and emergencies.
- Emergency equipment shall include fire/smoke/heat/toxic gas detection & alarm systems; emergency lighting and power; means of escape; safe refuges/muster points; critical isolation valves, switches, and cut-outs; firefighting equipment; first aid equipment (including emergency showers, eyes wash stations, etc.); communication facilities, etc.
- Emergency equipment shall be tested at specified intervals for continuing operability and Risk Register be updated accordingly.
- An appropriate T-Card & Mustering System (or other modern/reliable system) shall be established to facilitate easy identification of workforce's location during emergency situations.





- When performance of emergency equipment falls below desirable level, corrective or preventive actions shall be initiated, and appropriate objectives/targets be established to ensure continuing operability of emergency equipment.
- Practical drills shall be carried out according to a predetermined schedule for all the probable emergency situations. Standardized template shall be used for recording the Emergency Drill Report (Appendix F); an example of Muster Point/ Assembly Area/ Emergency Assembly Point harnessing headcount is scribed at Appendix-I.
- In the event of the emergency siren sounding, ALL PERMITS become INVALID and all WORK being carried out under them shall CEASE. Personnel within permanently occupied buildings / offices / rooms should seek direction from the Fire Wardens. Vehicles must be parked away from access ways, ignition switched off with keys left in the ignition and remain standby for the period of the emergency. Driver and passengers must exit the vehicle and proceed to the nearest safe Muster Point. Personnel within vessels and tanks shall move outside the vessel or tank, climb to ground level and then proceed to the designated Muster Point and stay there until directed otherwise by the Emergency Response Coordinator (ERC).
- When an emergency occurs, the affected work must cease and not re-start until such time as the work areas affected have been risk reassessed and the Area Manager / Location IC has verified that the effective controls (to prevent recurrence) are in place.

4.5.6 Financial Approvals

- Special financial powers of MD/ CEO may be exercised where required to handle the emergencies as per relevant PPRA clause;
- If the financial amount exceeds the special powers delegated to MD / CEO, he may seek immediate financial approval from BoD.
- Financial powers already approved through delegation of powers to handle emergencies can be exercised by EMT Chairman, HODs, Area Managers and / or Location InCharges as per relevant PPRA clause; however for financial amount exceeding delegated authority, approval of MD / CEO to be immediately obtained.

4.5.7. Communication, Training and Drills

- This procedure shall be communicated to all EMT/ LMT Members.
- All EMT/ LMT Members should retain a hardcopy copy of this procedure in their offices and residences.
- Electronic copy of this procedure shall be made available at all locations whether permanent or temporary, also placed on website.
- When required, copies of this procedure shall also be made available to the external public relief authorities, in order to plan the organization of emergency assistance through simulations and joint drills, as per the requirement of any management system adopted by the company.
- Interactive emergency drills shall be conducted involving a particular location (esp. major / vital) with Head Office / OGTI on bi-annual basis.
- Action plan containing recommendations for improvement shall be followed after each drill.

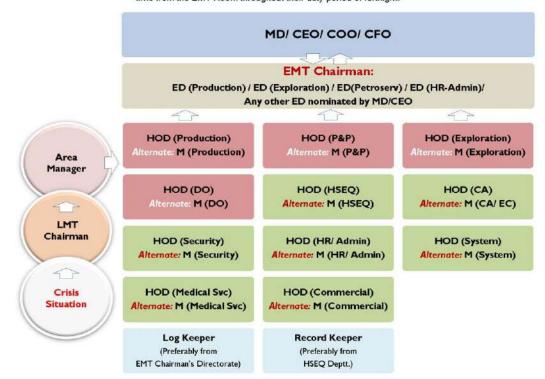




Appendix - A

Structure of EMT

Core Members are rostered EMT members and expected to remain within 02 hours traveling time from the EMT Room throughout their duty period of fortnight.



Appendix - B1 Facilities in EMT Room/ Alternate EMT Room

Committee/ Conference Room, on Ground Floor of OGDCL Head Office, Islamabad is the EMT Room. Cabinet, which has all necessary support facilities & equipment, is kept locked. Keys for the cabinet are kept with Manager Security and Admin at the main entrance.

While, the	Room, on	Floor of OGTI, 19, Islamabad, is the Alternate EMT
Room.		

The following information and hardware shall be contained in the EMT Room:

- ✓ Cabinet✓ Presentation screen/ overhead projector
- ✓ Whiteboard and markers
- ✓ Causality information board
- ✓ Event status board
- ✓ Three direct telephone lines with each number allocated to specific members.
- 01 Desktop PCs with link to OGDCL Local Area Network (LAN) and printer
- LED TV with multiple news channel facility
- Video Conferencing Facility (VCF)
- ✓ Video recording facility
- ✓ Dedicated Fax Machine (to be provided immediately by Communication Department at the time of EMT assembly)
- Stationery (writing pads, pens etc.)
- Clock
- CCTV Cameras
- ✓ Telephone directories
- ✓ Maps, charts and facility specific general arrangements drawings
- ✓ Display boards for: Personnel, Summary of Events
- Updated copies of Emergency Response Plans (Locations)
- ✓ Maps of Sindh, Baluchistan, Khyber Pakhtunkhwa (KPK) and Punjab, Map of Pakistan

Note-1:

EMT-Admin Member shall make formal monthly regular checks of the EMT Room Cabinet to ensure that the information is current and up-to-date. Also ensure that backup data is available and being updated on daily basis in both EMT Rooms.

EMT-Communication/ System Member shall ensure that hardware as mentioned above is functional round the clock.



Appendix – B2 Facilities in LMT Room/ Alternate LMT Room (ER Post)

The following facilities are contained in the LMT Room:

- Cabinet
- ✓ Presentation screen/ overhead projector
- ✓ Whiteboard and markers
- ✓ One direct telephone line
 ✓ 01 Desktop PCs with link to Local Area Network (LAN) and printer
- ✓ LED TV with multiple news channel facility
- ✓ Video Conferencing Facility (VCF)
- ✓ Dedicated Fax Machine
 - (to be provided immediately by Communication Department at the time of EMT assembly)
- Stationery (writing pads, pens etc.)
- Clock

The following minimum information is contained in the LMT Room (ER Post):

- ✓ Updated copy of approved Emergency Response Plan.
- Updated list of emergency response equipment, with locations on-and-off-site.
- ✓ Updated list of employees in the event counting is necessary.
- ✓ Emergency communication equipment.
- ✓ Facility's layout and community maps, including roads, evacuation routes and the locations of community facilities nearby.
- ✓ PFDs, P&IDs, utility drawings, including;
 - a) fire, water, & electric systems and
 - b) storage, usage and transportation location of explosives, hydrocarbons, and other flammable & toxic materials.
- ✓ List of contact numbers for key emergency and management personnel, local emergency response officials, and government agencies.
- √ Appropriate reference materials, including specific emergency plans (like helipad) coordinates for medievac/ evacuation purposes, contractors/ service companies bridging documents, etc.).

Note:

LMT-Admin Member shall:

- make formal monthly regular checks of the LMT Room Cabinet to ensure that the information/resources are current and up-to-date.
- ensure that valid emergency contact lists and EMT/LMT Duty Rosters are made available in the LMT Room. Also ensure that backup data is available and being updated regularly.

LMT Room/ ER Post shall be dedicated for emergency preparedness and response purposes only.





Appendix - C1 Template **EMT Duty Roster**

From:__dd/mm/yy___ to__ dd/mm/yy ___

#	Role		Design			Contact No
1.	Chairman/	ED (Production) / ED (Explor	ation) / ED(Pet	roserv) / ED (HR-Admir	n) /	
1.	Alternate	Any other ED nominated by	MD/CEO			
#	Role	Designation	Contact No	Role	Designation	Contact No
2.	Core Member-I	HOD (Production)		Alternate Member	M (Production)	
3.	Core Member-II	HOD (P&P)		Alternate Member	M (P&P)	
4.	Core Member-III	HOD (Exploration)		Alternate Member	M (Exploration)	
5.	Core Member-IV	HOD (DO)		Alternate Member	M (DO)	
6.	Core Member-V	HOD (HSEQ)		Alternate Member	M (HSEQ)	
7.	Core Member-VI	HOD (CA)		Alternate Member	M (CA/ EC)	
8.	Core Member-VII	HOD (Security)		Alternate Member	M (Security)	
9.	Core Member-VIII	HOD (HR/ Admin)		Alternate Member	M (HR/ Admin)	
10.	Core Member-IX	HOD (Medical Svc)		Alternate Member	M (Medical Svc)	
11.	Core Member-X	HOD (Commercial)		Alternate Member	M (Commercial)	
12.	Core Member-XI	HOD (System)		Alternate Member	M (System)	
13.	Log Keeper	Preferably from EMT Chairman's Directorate				
14.	Record Keeper	Preferably from HSEQ Deptt.				
#	Role	Designation	Contact No	Role	Designation	Contact No
1.	Support Member-I	ED (Services)		Alternate Member	HOD (SCM)	
2.	Support Member-II	ED (JV)		Alternate Member	HOD (JV)	
3.	Support Member-III	HOD (Legal)		Alternate Member	M (Legal)	
4.	Support Member-IV	HOD (CSR)		Alternate Member	M (CSR)	
5.	Support Member-V	HOD (Finance/ Accounts)		Alternate Member	M (Finance/ Accounts)	
6.	Support Member-VI	HOD (OGTI)		Alternate Member	M (OGTI)	





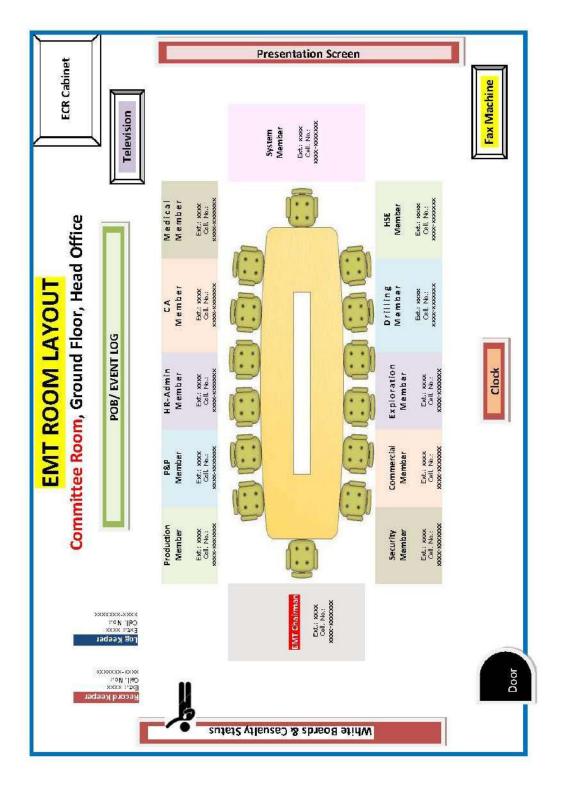
Appendix – C2 Template (Production Facility) **LMT Duty Roster**

From:__dd/mm/yy___ to_ dd/mm/yy ___

#	Role	Designation		Contact Nos	
1.	Chairman/ Alternate	Location InCharge/ Reliever			
Co	re Members			Alternate Members	
#	Role	Designation	Contact No	Designation	Contact No
2.	Crisis Mgt. Coordinator (CMC)	InCharge Maintenance		Maintenance Rep.	
3.	On Scene Coordinator (OSC)	InCharge Production/ P&P		Production/ P&P Rep.	
4.	Emergency Response Coordinator (ERC)	InCharge HSE		HSE Rep.	
5.	Medical	InCharge Medical		Medical Rep.	
6.	Security	InCharge Security		Security Rep.	
7.	Administration	InCharge Admin.		Admin Rep.	
Suj	oport Members			Alternate Members	
#	Role	Designation	Contact No	Designation	Contact No
1.	Support Member-I	InCharge Lab.		Lab. Rep.	
2.	Support Member-II	InCharge Material		Material Rep.	
3.	Support Member-III	InCharge Civil		Civil Rep.	
4.	Support Member-IV	InCharge TPT		TPT Rep.	
5.	Support Member-V	InCharge System/ Communication		System/ Communication Rep.	
6.	Support Member-VI	Regional Coordinator		RC Rep.	











Appendix – E

Specimen Prompt EMT Checklist Responsibilities of EMT Systems-Communication Process-Production Accounts-Finance EMT Chairman HR-Admin MD/CEO SCM Actions 1. Obtain list of personnel on Board ۵ (POB) at the time of accident. 2. Appoint a Log Keeper and ensure that an adequate time log of all 0 events and activities is maintained. 3. Determine the need and activate, 0 as necessary, the Support Teams. 4. Maintain a contact with LMT Leader to update the status of 0 emergency. 5. Update MD/ CEO with current info for onward communication to BOD/ GoP and JVPs (If necessary). Ensure through LMT to isolate the affected process(es). 7. Device an action plan to minimize 0 0 the impacts at the incident site. 8. Determine overall strategy in consultation with EMT's relevant 0 0 Operations Member and LMT before starting recovery activities. 9. Determine all risks associated with rehabilitation activities and ensure through LMT that all necessary 0 0 controls are taken prior to startup of recovery activities. 10. Determine the need for additional support from local authorities such as fire brigades, medical aid, O 0 ambulances, police, army and provincial civil authorities to start search and rescue activities. 11. Update the Coordination Support Team for any press releases. 12. Get the names and conditions of casualties (if required) and initiate contact with the immediate families 0 and relevant high commissions in the case of expatriate staff. Assess the need for possible medevac and accordingly plan for mobilizing medical aid either by air 0 0 or road, also explore the utilization of nearby airstrip for possible medevac activities. 14. Identify a list of stakeholders and seek to notify these stakeholders 0 0 through EMT members. 15. Ensure through LMT that the incident location is protected and 0 0 0 photographs are taken for records. Provide logistics support in case EMT Chairman asks any member to





$\overline{}$	reach the site.											
17.	Ensure arrangements for casualty											
	handling e.g. ambulances, casualty			٥			0			0		
	receiving person.											
18.	Secure the entrance with specific											
	instructions to ensure no				0							
	unauthorized persons are allowed				V							
	in the premises.											
19.	Evaluate the immediate impacts of											
	accident on local community and				0							
	advise EMT Chairman.											
20.	Assess the need for and mobilize				0							
01	additional security support.											
21.	Ensure adequate security arrangements for all OGDCL and											
	contract personnel at the incident				0							
	site.											
22.	Provide relevant security											
	information to EMT members.				•							
23.	Consider the security implications											
	of information released to the				0							
	media.											
24.	With advice of EMT Chairman,											
	make all possible arrangements to											
	guard the incident site from											
	possible disturbance from local				0							
	community through law											
	enforcement agencies/civil											
25.	authorities.											
25.	Ensure through LMT to assess impact near the affected areas.											
	Ensure a safety cordon has been											
	established and no smoking /				0							
	naked flame / lights enforced in the											
	vicinity.											
26.	Obtain the status of process-					٥						
	isolation.											
27.	Obtain all the relevant information											
	about the emergency and assess											
	the situation. Information required											
	includes:Nature and status of											
	 Nature and status of emergency. 											
	 Casualties status, numbers 											
	and evacuation requirements					0		0	0	0		
	(if any)											
	 Medical requirements 											
	• Initial security implications											
	 Initial environmental / 											
	community implications and											
	sensitivities.			-								
28.	Identify if additional OGDCL											
	specialist operations knowledge is required to deal with the incident					۵		0		0		
	(e.g. Drilling, production advice					w		W.		w .		
	etc.)											
29.	Inform the EMT Chairman regularly											
	about the nature and status of the					0						
	emergency.											
30.	Make available all operational and											
	technical data necessary for the					٥		0		0		
	emergency.											
31.	Provide technical advice and											
ı	operational support to the site	ĺ	Ī			0		0	0			
	emergency teams through EMT											





	Chairman.													
32.	In conjunction with incident site													
	management and the EMT													
	Chairman, develop contingency													
	plans to recover from the incident					0		٥	٥	٥				
	and commence execution of those													
	plans with the assistance of other													
	EMT members as required.													
33.	Inform the EMT Chairman regularly													
	about the nature and status of the						0		٥					
	emergency.													
34.	Advise on the quality and suitability													
	of local health care provision if			٥			0		٥					
	required.													
35.	If the situation requires, make													
	statutory notifications to													
	Government and authorities													
	through MD/CEO, keep records of						0							
	information passed to them and of													
	any useful feedback received.													
36.	Brief the EMT Chairman prior to			İ										
	speaking / contacting with any													
	Governmental agency (e.g. DGPC,						0							
	DG EPA, CIM etc.) dealing with													
	HSE matters.	<u> </u>		<u> </u>		<u> </u>		L	<u> </u>			<u> </u>		
37.	Advise on the applicable						٥							
	Contingency Plans Procedures.			<u> </u>					0					
38.	Advise necessary safety controls													
	that are needed to be taken in						0							
	order to control the risk involved in						U							
	rehabilitation activities.													
39.	Assess and advise the EMT on the													
	need for external specialist						0							
	assistance (if required).													
40.	Set up emergency contractual													
	arrangements, if not already in											0		
	place.													
41.	Consider the effects of the											٥		
	emergency on existing contracts.													
42.	Arrange for purchasing and supply													
	of any emergency equipment, via											•		
	SCM team.													
43.	Manage and co-ordinate the													
	logistical activities of both OGDCL			0								•		
4.4	and contractors.													
44.	Set up emergency financial													
	arrangements, if not already in												0	
/ E	place.			-										
45.	Arrange for securing finances as and when directed by EMT												٥	
	Chairman.												U	
46.				-										
40.	Set up emergency communication and IT arrangements, if not already													٥
	in place.													w .
47.	Ensure secure communication			-										
71.	during the emergency handling.													٥
48.	Arrange for additional													
.5.	communication and IT services as													
	and when directed by EMT													0
	Chairman.													
		l	1	<u> </u>	1	l		1	l	<u> </u>	<u> </u>	l		





Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

Appendix – F **Guidelines for Dealing with the Media**

- Determine the facts.
- Determine your audience.
- Prepare press release or stand-by statement.
- Have core spokesperson's training in media techniques.
- Provide the basic facts and refuse to speculate or hypothesis.
- Beware of making any statement that shall commit the Company to unspecified compensation payments.
- Do not answer any question if you do not have all the facts do offer to come back with a response.
- $\hfill \blacksquare$ Return all calls from the media recognize reporter's deadlines.
- Ensure, within reason that experts (scientists, engineers, etc.) are available if needed to deal with specialist press interest and see that they receive appropriate media training.
- Do not announce names of people killed or injured in incidents unless the Next of Kin (NOK) have been informed first.
- Indicate that the company intends to make searching enquiries and take any remedial action necessary, e.g. "An internal enquiry is part of our normal procedure in such incidents. We shall take any follow up action that is necessary to ensure that this should not happen again".
- Always express concern for casualties and other affected.
- The press can be used positively in reassuring the community. Ask the media for their help in getting messages across.
- Keep EMT / LMT informed of communications.
- Log all telephone calls.
- Consider whether community relations are affected after an incident and initiate appropriate action.





Appendix – G **Location's Emergency Drill Report**

Time Alarm Sounded:	me Alarm Sounded: Time Drill Concluded:								
Type of Drill:	Notification / Alert Method:	Weather Conditions:							
Emergency Level:	Exact Location of Drill:	Distance From LMT Room / ER							
		Post:							
No. of Participants:	Situation at Start of Drill:	Situation after Drill:							
Name of Participant/ Team	Emergency Role Assigned	Response Time							
Positive Points:									
Problems Encountered:									
Extenuating Circumstances/ Ide	ntified Factors / Special Condition	s Simulate:							
-									
Lessons Learned for Improvement:									
•									

Attach to this form a list of all staff who participated in the drill, and any visitors participating.





Cthe energy Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

Appendix – H **Triage System**

- Triage system shall be used in a scene of an accident, in order to sort injured persons into those who need critical attention and immediate transport to the medical facility/hospital and those with less serious injuries.
- $\hfill \blacksquare$ Triage should be started before transportation becomes available.
- Upon completion of the initial assessment by Medical Rep., each injured person may be labeled to identify the priority of his requirement for medical treatment and transport from the emergency scene.
- Field medical staff/ first aiders/ triage team should be trained & fully prepared to carry out rapid assessment of the injured persons to timely identify emergency treatment based upon severity of the injuries.
- At its most primitive, injured persons may be simply marked with the colored flagging tape or with marker pens as color codes defined below or pre-printed cards for medical care purpose known as a triage tags may also be applied:
 - ∞ **Red**-IMMEDIATE (MOST URGENT) attention required by the injured.
 - ∞ Orange-URGENT attention required by the injured.
 - ∞ Yellow–AS SOON AS POSSIBLE attention required by the injured.
 - ∞ Green-attention required by the injured AS & WHEN AVAILABLE.
 - Blue-NON-URGENT attention required by the injured.





Appendix – I **An Example of Muster Point/ Assembly Area/ Emergency Assembly Point**[Harnessing Headcount]

Field Manager	Plant Manager	Operation Manager	I/C Mechanical	I/C Electrical	I/C Instrument
I/C HSE	I/C Process	I/C Production	I/C Area (Mech)-I	I/C Area (Elect)-I	I/C Area (Inst)-I
HSE Rep.	I/C Shift	I/C Wellsite	I/C Area (Mech)-II	I/C Area (Elect)-II	I/C Area (Inst)-II
I/C Medical	DCS Boardman-I	I/C Area (Wellsite)-I	Area Supervisor (Mech)-I	Area Supervisor (Elect)-I	Area Supervisor (Inst)-I
Medical Rep.	DCS Boardman-II	I/C Area (Wellsite)-II	Area Supervisor (Mech)-II	Area Supervisor (Elect)-II	Area Supervisor (Inst)-II
I/C Stores	Process Area Operator-l				
Store Rep.	Process Area Operator-II				
I/C PE&FD					
PE&FD Rep.					

4.6 Structure: HSE Functional Setup

OGM/P-HSE-4.6(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo and Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
HSE Organogram/ Functional Set up Chart	Manager HSEQ	GM HSEQ	MD / CEO

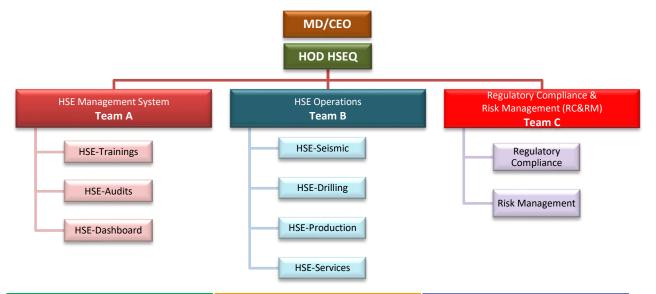




Leadership: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

Corporate HSE Setup (Functional)



HSE Management System

- **♣** Overseeing HSE & ESG Operations of
- exploration & production activities.

 Providing assistance to help develop capabilities of subordinates to enable them to perform their jobs effectively and efficiently.
- Appraising performance of subordinates reporting to the position and providing ongoing feedback to GM HSEQ in an
- objective and effective manner.

 Participating in the activities of local, state and industry for the exchange and development of ideas and best practices relating to HSE issues.
- Working as Editor-In-Chief of HSEQ
 Newsletter.
 Reviewing the effectiveness of HSEQ system
- related documentation and revise them accordingly.

 Based on TNA, coordinating formulation of
- Annual Training Planner.

 Developing/ updating HSE Training Modules and impart major training sessions to implement/ improve HSE system.

 ♣ Initiating cases for ISO 45001, ISO 45001 and
- other relevant Certifications.

 Preparing Terms of References (TORs) for hiring services of Certification Body to accomplish ISO 45001, ISO 45001 and other relevant Certifications.
- ♣ Participating in technical and financial bids evaluation and processing ISO 45001, ISO 45001 and other relevant Certifications case
- Vetting LOI/ Service Order for hiring services of Certification Body to accomplish ISO 45001, ISO 45001 and other relevant Certifications.
- Arranging/ coordinating Stage-I, Stage-II and
- Surveillance Audits.

 Reviewing Stage-I, Stage-II and Surveillance Audit Reports.
- Assisting line management in formulating suitable Action Plan against the major/ minor non-compliances and observations.

 Developing Annual Internal HSE Audit Planner
- (Schedule) and corresponding Internal HSE
- Arranging/ coordinating Internal HSE Auditing courses.
- ♣ Maintaining List of qualified Internal HSE Auditors.
- Arranging/ coordinating Internal & Follow-up HSE Audits.
- ♣Reviewing Internal & Follow-up HSE Audit
- Reviewing and disseminating Safety Alerts.

- **♣** Guiding HSE teams in measuring the compliance of applicable regulatory and other applicable requirements.
- ‡ Facilitating line management to achieve compliance of applicable regulatory requirements on proactive basis, facilitate visits of regulatory authorities and coordinate with the relevant functions for the implementation of observations.
- ♣ Guiding HSEQ teams in the development & implementation of HSE system (policies & procedures) and to encourage sharing/
- adopting best industrial practices.

 Providing feedback for the improvement of HSE system related procedures, handbooks,
- Coordinating/performing risk assessment
- studies and reviewing risk registers.

 Participating in process hazards analysis/ studies as a team with line management and review associated reports for the follow-up
- Performina/ coordinatina HSE monitorina activities according to the updated/ approved plans, gauging their effectiveness
- and follow-up corrective measures.

 Coordinating with line management that occupational health assessment (trade tests)
- of employees is timey carried out.

 Performing/ coordinating incidents investigation and preparing/reviewing incidents reports.
- ♣ Preparing Safety Alerts after occurrence of an incident or when there is a current or emerging HSE issue that needs immediate corrective & preventive action.
- ↓ Guiding HSE teams to oversee measures taken to control the recurrence of incidents and follow up to verify the effectiveness of
- actions taken.

 Working in close liaison with line management to ensure HSE protocols for management of contractors and service companies are followed.
- Preparing/ revising/ updating Fortnightly
 Emergency Management Team (EMT) Duty
- Ensuring Fortnightly Locations Emergency Management Team (LMT) Duty Rosters are timely shared with HO.
- Coordinating with line management for the implementation of Environment Management Plan (EMP) and engaging the services of Independent Monitoring
- Consultant (IMC), where obligatory.

 Lensuring Locations HSE MRC Meetings are convened in true perspective of PDCA Cvcle.
- Working in close liaison with line management to ensure that no modification job is commenced without the Change Management/ Control Protocols (MoC).

 Conducting Internal & Follow-up HSE Audits as per Internal HSE Audit Planner (Schedule).

 Coordinating Hazards Hunt Program, HSE
- Awareness Events and Reward & Recognition
- Liaising with Joint Venture Partners in TCMs/ OCMs/ FCMs and learn from their experiences to adopt good organizational/ industry practices.

RC&RM

- Reviewing/assessing legal & regulatory compliance of all operational areas in the company with respect to ERM.
- Reporting overall compliance status of applicable legal & regulatory requirements to the Board.
- Preparing/reviewing/updating risk management policies, procedure, practices and system.
- Maintaining Risk Registers of the company for all applicable functions. Consolidating Risk Registers, developing
- Corporate Risk Register and Dashboard considering a) operational, b) strategic and c) external risks.
- Ensuring quarterly updating of Corporate Risk Register by getting inputs from all stakeholders.
- Ensuring that the identified, especially the significant corporate risks, controls and objectives/ action plans are communicated to BOD and other stakeholders.
- Ensuring that line management timely implements sound internal controls (after assessing viable options) to avoid above operational risks.
 Conducting/coordinating Crisis
- Management (mockup) drills as risk mitigation strategy.
 Conducting/coordinating trainings on
- regulatory compliance a management.
- Examining the scope and requirement of environmental studies and representing company in the technical sessions/public consultations (hearings) for acquiring
- Maintainina/ updatina loas of NOCs.
- Acting as liaison between the company and governmental agencies such as CIM, EPA, or similar state, federal and international agencies.

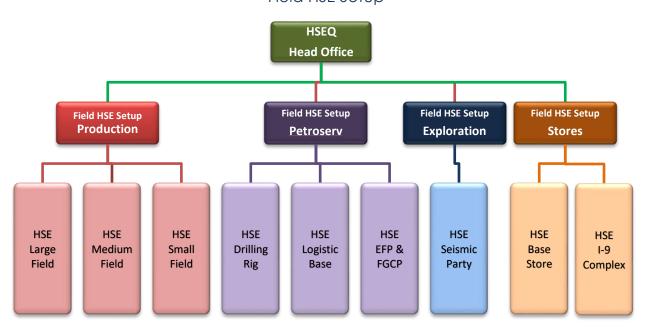
 Appraising performance of subordinates
- reporting to the position and providing ongoing feedback to the GM HSEQ in an objective and effective manner
- Providing assistance to help develop capabilities of subordinates to enable them to perform their jobs effectively







Field HSE Setup



Vulnerabilties Identification & Internal Impact (Risk) Assessment Team Team Vulnerabilties Identification & Internal Impact (Risk) Assessment Team Team Internal Impact (Risk) Assessment Team Team Internal Impact (Risk) Assessment Team Interna



Controlled Copy Do Not Duplicate For Internal Use Only

ISO14001:2015 & ISO45001:2018

Clause 6.1: Actions to address vulnerabilities associated with threats and opportunities.

Reference Standards

Clause 6.2: HSE objectives and planning to achieve them. PSM (22 Elements) Model

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.

This Section's Objectives

- Develop processes and prepare plans to establish HSE System.
- Identify significant HSE vulnerabilities, threats, opportunities and associated Impact.
- Study HSE vulnerabilities, threats, opportunities and identify compliance obligations.
- Address HSE vulnerabilities, threats, opportunities and associated Impact in the light of human rights, operational controls and applicable laws & regulations
- Set SMART HSE objectives for all relevant areas to prevent incidents and pollution.

Associated Documents

- Risk Register
- Risk Card
- HSE Objectives
- Annual HSE Activity Plan

Applicable Documents

Regulatory Requirement Matrix

Preamble Terms & Definitions Context

Leadership

Planning

Support

Operation

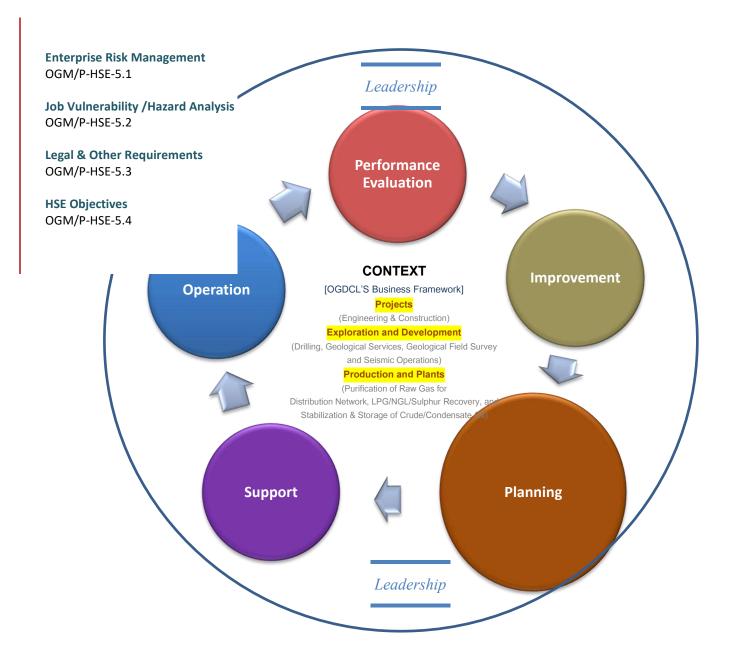
Performance Evaluation

Improvement



Cthe energy Planning: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only



1



Controlled Copy Do Not Duplicate For Internal Use Only

5.1 Enterprise Risk Management (ERM)

OGM/P-HSE-5.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Modified: Compliance of ISO 31000 Standard/ Guidelines

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 001 Risk Register (Template)			
OGF – HSE – 002			
Risk Card			



Controlled Copy Do Not Duplicate For Internal Use Only

5.1.1 Purpose and Scope

- The purpose of ERM framework is to assist all Directorates of the company in integrating risk management into "significant" activities and functions in a consistent and systematic manner across all levels of the organization
- Being a crucial element of Governance i.e. corporate decision-making and strategy-setting process, ERM framework is aligned with company's strategic objectives, such as ensuring energy security, operational efficiency, financial stability, and compliance to provide a system to manage following broad categories of enterprise risks:

External Influencing Factors	Internal Influencing Factors
- Strategic	- Infrastructure
- Reserves	- Process
- Country Risk – Geo/ Socio Political	- Social
- Financial / Economic	- Operational
- Laws, Rules, and Regulations/ Compliance	- Technology
- Natural Environment / Climate-change	- Internal Environment

- The enterprise risks shall be managed to as low as reasonably practicable (ALARP) by identifying the risks (identification phase), analyzing the risks (analysis phase), evaluating the risks (evaluation phase), implementing the effective controls/barriers (treatment phase), communicating the risks (communication phase), and reviewing the risks (review phase) for:
 - Investment opportunities and value chain
 - Business development & diversification initiatives
 - Field development & production sustainability
 - Exploratory projects
 - Production operations
- Whereas, the Locations' Risk Registers will be created at the commencement of financial year/project execution for:
 - Seismic operations
 - Drilling operations
 - Production field operations
 - Brown/ green field projects (conventional/ unconventional)
 - Others (Base stores, etc.)
- This update of ERM framework has been influenced from oil and gas E&P industry best practices and standard titled ISO 31000 Principles and Guidelines for Risk Management.

5.1.2 Definitions

	T		
ALARP	Principle is that the residual risk be reduced as far as reasonably practicable		
(As Low As Reasonably	as any additional cost involved in reducing the risk further would not be		
Practicable)	proportionate to the benefit gained.		
Barrier	Functional grouping of safeguards or hazards or threats control hierarchy		
	selected to prevent or limit the consequences.		
Due Diligence	Process to identify, prevent, mitigate, and account for how the actual and		
_	potential negative risks are addressed.		
Enterprise Risk	Process effected by an entity's Board of Directors, Management and key		
Management	personnel, applied in business planning, strategy setting, and designed to		
(ERM)	identify potential events that may affect entity, and manage risks to be within		
	the Risk Appetite, in order to provide reasonable assurance regarding the		
	achievement of organization's objectives.		
ERM Charter	ERM charter is a formal document that outlines Board-Risk Management		
	Committee's structure, responsibilities, authorities and functions.		
External Risk	Risk associated with uncontrollable sources.		
Hazard (Threat/ Cause)	Any process/operation/activity/ object/ substance/ body related event or		
	gap in the protection efforts or source that could potentially trigger damage/		
	loss and/ or give opportunity for improvement.		
Hazard	Disseminating safety information about hazards in a workplace.		
Communication			
(HAZCOM)			
Hazards Control	Elimination is removal of hazard by eliminating a requirement to carry out a		
Hierarchy	task, use of a particular equipment or use of a chemical.		
(Barriers)	Substitution is replacement of the material; plant; equipment; process; or		
(Addendum-D)	work practice with a less hazardous one.		
	Engineering controls reduce the reliance of human factors; engineering		
	controls can be redesign of equipment, redesign of process or increase of		
	automation. Engineering controls also include change in layout, ventilation,		
	guards, enclosures, firewalls etc.		



Controlled Copy Do Not Duplicate For Internal Use Only

	Administrative controls are the procedural aspects, such as planned and preventive maintenance, awareness events, policies, Standard Operating
	Procedures (SOPs), work permit system, job hazards analysis, competence of personnel, etc.
	Personal Protective Equipment (PPE) is the last and might be the least effective method (to counter OH&S hazards/ threats only) as it relies on human behavior.
Risk Assessment Matrix	Visualization tool for the graphical presentation of the risks. Also known as Risk
(RAM)	Dashboard, Risk Heat Map or Risk Heat Chart, it shows likelihood on the horizontal axis (X) and consequence on the vertical axis (Y).
Response Owner	An individual or entity who facilitates the Risk Owner in managing a risk.
Risk Management Team	Team of domain professionals (subject matter experts) trained on Hazard/ Threat Identification & Risk Assessment methodologies/ ESG framework.
Key Risk Indicators	A Key Risk Indicator (KRI) is a measurable metric used to monitor the potential
(KRIs)	risks, essentially acting as an early warning system to identify potential issues before they become major problems.
Residual Risk	Residual risk is the amount of risk that remains after controls are in place or accounted for.
Risk Mitigation	The mitigation of an "actual" negative risk refers to actions taken to reduce
	the severity of the negative impact that has occurred, with any residual
	impact needing remediation. Whereas the mitigation of a "potential"
	negative risk refers to actions taken to <u>reduce the</u> <u>likelihood</u> of the negative
Diale	impact occurring.
Risk (Pating)	The effect of uncertainty on objectives. Numerical value of a risk as combination of an incident-likelihood and
Risk (Rating) Positive Risk	consequence-severity within a 5x5 risk assessment matrix.
	An "opportunity" is considered a positive risk – an event which makes objectives easier than expected.
Negative Risk	Negative risk is that event which stops or hinders the achievement of objectives. These types of events are considered as "risks".
Risk Appetite	Level of risk an organization is prepared to accept or tolerate in pursuit of its
	objectives, before action is deemed necessary to reduce the risk. In a risk
	appetite scale, these include as Risk seeking, Risk tolerant, risk neutral and risk
	averse.Risk seeking: Aggressive risk taking is required.
	 Risk tolerant: Greater than normal risk taking is tolerable due to controls.
	 Risk noteral: Risking taking is more balanced.
	 Risk averse: Risk must be avoided.
Risk Assessment	Overall process of estimating the magnitude of risk and deciding whether it is significant.
Risk Charter	It is a committee charter in a formal written document form outlining the
(Addendum-A)	intentions of the risk management committee, its authoritative powers, and its overall operating structure.
Risk Card (Addendum-F)	Document to describe elements of a significant risk (as recorded in the Risk Register) for the sake of mitigation.
Risk Criteria	Terms of reference which evaluates the significance of a risk as Low = 1-6;
	Medium = 7-12; High = 13-20; Intolerable = 21-25.
Risk Management	System to eliminate or mitigate the risks.
Risk Owner	An individual or entity accountable as well as authoritative to assess and manage a risk.
Risk Register	A comprehensive document used to scribe and rate potential risks along with
(Addendum-B)	existing and future controls.
Risk Source	Element which has potential to give rise to a risk.
Risk Treatment	Controlling, avoiding or transferring the risk.
Significant Risk	Intolerable or high risk. Terms and Definitions: Addendum F
Sustainable Development	Terms and Definitions. Addenaum r
Threat Control	Methods used to reduce the overall impact of a threat. For example, hazards
(Addendum-E)	control hierarchy
	(barriers), training & induction, local development investments & stakeholder
	initiatives, customer management, recruitment retention & skilled labor, R&D
	projects, recovery/ emergency plan, automation/ digitalization, contract risk
	management (pre/post award), surveillance & intelligence (security),
	technological & operational improvements, asset integrity management,
	strengthening resources & tools, legal defense activities, portfolio
	management, partnerships for risk management, hedging & factoring,
	insurance & guarantees, transfer of risk liability contract, sale/ closure of assets,
	carbon offset, etc.

5.1.3 Enterprise Risk Management Policy

OGDCL recognizes that an effective system of risk management and internal control is critical for its success. Company is committed to managing risks, in a manner consistent with its businesses, so as to:

- Protect its people, communities, environment, its assets and reputation;
- Ensure good governance and legal compliance; &
- Enable it to realize opportunities and create long-term shareholder value.



Controlled Copy Do Not Duplicate For Internal Use Only

OGDCL's Board of Directors oversee the risk management and control framework of the Company to ensure an appropriate control environment is established and maintained, spanning OGDCL's significant operations, financial reporting and compliance activities. The Audit and Risk Management Committees assist the Board in fulfilling its responsibilities in this regard by reviewing and monitoring financial and reporting matters, and the Company's risk management and internal control processes.

Management will be responsible for implementation of this policy through the following phases:

- Formulation of Risk Management Framework/ SOP and Risk Management Teams;
- Identification, analysis (quantification) and evaluation of risks using audit criteria;
- Compiling the enterprise-wide risks on pertinent risk registers;
- Treatment of the risks through action plans for the significant risks using risk cards; &
- Communication and review of the risks and controls (risk registers and risk cards).

Whereas the Risk Management Committee of the Board will be responsible for the following:

- Assessment of the significant risks using a risk dashboard; &
- Allocation of necessary and appropriate resources in support of risk management.

Identification and communication of vulnerabilities and changes to OGDCL's risk profile are an integral part of day-to-day management - all risk owners and response owners are encouraged to identify and manage risks in their areas of operation on a continual basis so as to develop a "risk aware" culture and an environment of continuous improvement.



5.1.4 Structure of Enterprise Risk Management (ERM)

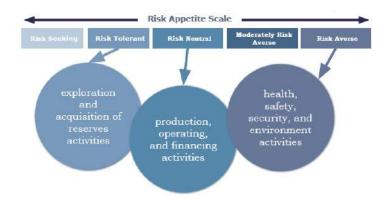
ERM Function shall operate through enterprise-wide RMTs constituted as follows:

Level I				
Team	Chairman	Secretary	Members	ERM Record
Corporate Risk Management Team (C-RMT)	MD/ CEO	As nominated (GM Level having ERM Background)	As nominated (EDs & GMs Level; however, CFO will be the mandatory member)	Corporate Risk Dashboard

The role of Level-I Risk Management Team (RMT) shall be to a) ensure the effectiveness of ERM framework by monitoring the enterprise-risks and controls as well as risk appetite, b) ensure risk-taking by the "significant" functions/ activities aligns with the strategic objectives, and c) ensure the Corporate Risk Dashboard (risk profiles/ factors) are updated for presenting to Board's RMC.

5.1.4.1 Risk Appetite

Based on the context, operational challenges and strategic outlook, OGDCL's Risk Appetite describes which risks need to be controlled more tightly and those for which there is greater appetite as exhibited:



© OGDCL's fundamental risk exposures shall be within the predefined risk boundaries as defined/updated by Level-I Risk Management Team (RMT) at the commencement of financial year using the following areas of concern:

4

Controlled Copy Do Not Duplicate For Internal Use Only



Area of concern	Risk Appetite Statement	Scale	KRI
Personnel Safety	Incident not to result in fatality or permanent disability	Risk averse	LTIF - Lost Time Injury Frequency
Net Reserves Replacement Ratio Adding new reserves greater than those produced with the strategic objective in place regarding production growth, preferably through optimization efforts, unconventional extraction, etc.		Risk seeking	Net RRR
Net Production Target	Achieving oil, gas and LPG production targets provided forced curtailment, security, and force majeure situations are avoided	Risk tolerant	Net production
Project Estimation, Funding and Cost Overrun	Project cost not to exceed more than the allocated cost of any specific project as per the approved business plan	Risk neutral	Project cost
Discovery to First Production	First production from the undeveloped discoveries, which are economically viable, not to be delayed	Risk tolerant	First production in months
Supply Chain	Procurement cycle (excluding projects and seismic test line processing) from bid opening to award of contract or PO issuance to be optimized	Risk neutral	Material/ service procurement days
Cost of Production	Cost of Average cost to conventionally		Operating cost USD per BOE
Spare Parts Availability	Availability of safety critical equipment's (SCE's) spare parts	Risk averse	%age of time the right parts are readily available when needed for repairs or scheduled maintenance
Credit Risk	Receipt of outstanding payments from the oil refineries and gas distribution companies not to exceed from the date of invoicing	Risk neutral	Debtor Turnover Days (normal debt) Debtor Turnover Years (circular debt)

- The areas of concern for which risk appetite should be within the predefined risk boundaries shall be as
 - Target Risk Appetite
 - Within Tolerance (Risk Appetite Range)
 - Intolerable

4



Controlled Copy Do Not Duplicate For Internal Use Only

Le	∕el	Ш

Team	Chairman	Secretary	Members	ERM Record
Financial & Value Chain Risk Management Team (F&VC-RMT)	CFO	As nominated (Fin. Background)		Financial & Value Chain Risk Register
Business Development & Diversification Risk Management Team (BD-RMT)	HOD JV	As nominated (BD Background)	Concorned	Business Development & Diversification Risk Register
Field Development & Production Sustainability Team (FD-RMT)	HOD RMD	As nominated (Reservoir Mgt. Background)	Concerned GMs/ HODs & Area Managers	Field Development Risk Register
Exploration Risk Management Team (E-RMT)	HOD Exploration	As nominated (Expl. Background)	(cross- functional)	Exploration Risk Register
Drilling Risk Management Team (D-RMT)	HOD Petroserv	As nominated (Drilling Background)		Petroserv Risk Register
Production Risk Management Team (P-RMT)	HOD Production	As nominated (Prod. Background)		Production Risk Register

ERM Function shall be strengthened by enabling Secretaries from Level-II RMTs to be in close liaison with Secretary C-RMT (Level-I) on risk management matters: -

Secretary C-RMT



Secretaries of RMTs



F&VC-RMT BD-RMT FD-RMT E-RMT D-RMT P-RMT

Level III

Team	Chairman	Secretary	Members	ERM Record
Location's Risk Management Team (L-RMT)	Location InCharge (PC/OM/FM/ PM/Incharge Base Store/ Project Manager, etc.)	As nominated (Technical Background)	All Sectional InCharges	Location's Risk Register

■ The roles of Level II & III Risk Management Teams (RMTs) are scribed as follows:

	Chairman	Secretary	Members
Identification	Constitute RMT and ensure provision of requisite resources for its training to enable carrying out risk identification, analysis and evaluation. Probable Risk Owner(s) and Response Owner(s) to be collectively made Members of each RMT.	Arrange training for the RMT based on TNA to carry out risk identification, analysis and evaluation, as & when required.	Participate in specific training to learn to carry out risk identification, analysis, evaluation and treatment. Team leads with the agreement of their respective heads to identify the risks at their respective functional, project or activity level.
Analysis & Evaluation	Ensure risk assessment is carried out by the RMT applying risk criterion. Endorsing the overall risks in the form of final Risk Register.	Document the risks after getting inputs from all stakeholders as result of risk assessment applying risk criterion with the aid of working papers / supporting documentation.	Participate in the risk assessment (analysis & evaluation) process applying risk criterion by focusing on risk sources. Risk Owners to carry out risk assessment at the inherent as well as residual level.
nent	Ensure timely creation of Risk Cards to mitigate the significant risks.	Assist Members in the creation of Risk Cards to mitigate the significant risks.	Response Owners to identify/ recommend Controls and timelines. Create Risk Cards to mitigate the significant risks accordingly.
Treatment	Ensure risk treatment is prioritized by RMT by controlling	Document the entire risk treatment process	Commit to treat risks by controlling (mitigating) the

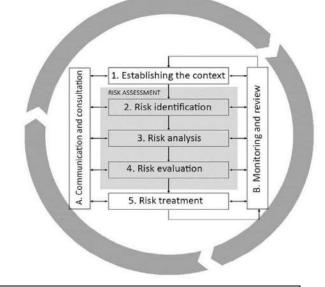


Controlled Copy Do Not Duplicate For Internal Use Only

	(mitigating/ minimizing) the HIGH	with the aid of	HIGH risks through interim
	risks through interim controls/ barriers and strategic decision making, whereas INTOLERABLE risks by stopping the activity until risks have been reduced or transferred through an outsourced service or shared through contracts.	working papers / supporting documentation.	controls/ barriers and strategic decision making, whereas INTOLERABLE risks by stopping the activity until risks have been reduced or transferred through an outsourced service or shared through contracts.
	Ensure Risk Register along with Risk Cards are timely presented in the RMT meeting for approval.	Circulating agenda and delivering a presentation on draft Risk Register and Risk Cards in the RMT meeting. Compile/ update and circulate the final Risk Register.	Provide inputs on the draft Risk Register and Risk Cards during the RMT meeting to finalize the same, resultantly to enable Secretary RMT to timely communicate the approved risks & controls to all concerned.
Communication	Ensure the approved risks & controls are timely communicated to all concerned.	Communicate the approved risks & controls through distribution of final Risk Register and Risk Cards to all concerned.	Follow up to confirm whether the Final Risk Register and Risk Cards have been distributed and communicated to all
Review	Ensure the compliance status regarding the Risk Appetite Statement is discussed. Ensure the approved risks and controls are reviewed and updated in the subsequent RMT meetings. Follow up the progress of mitigating significant risks on the Risk Cards.	Circulating agenda related to RMT meeting on the approved Risk Appetite Statement, risks and controls. Update and circulate the reviewed Risk Register & Risk Cards.	units'/ sub-unit's teams. Share feedback with Chairman on the mitigation on the Risk Cards as well as compliance status regarding Risk Appetite Statement.

5.1.5 Risk Management Process

- Risk management process shall comprise of six phases:
 - i. Risk Identification Phase
 - ii. Risk Analysis Phase
 - iii. Risk Evaluation Phase
 - iv. Risk Treatment Phase
 - v. Risk Monitoring & Review Phase
 - vi. Risk Communication & Consultation Phase



5.1.5.1 Risk Identification Phase

- The enterprise risks shall be identified and assessed by the respective <u>Level II</u> RMT at the time of developing annual business plan (budget).
- Whereas, locations' <u>risks</u> shall be identified and assessed by the respective <u>Level III</u> RMT at the time of commencement of financial year/ at the time of project execution.
- For each risk event, respective RMT shall identify the risks by focusing on the following risk-sources (but not limited to):

Source	Detail
Context	vision, mission, strategic direction, objectives, etc.
Human	awareness, competence and experience of workforce,
потпаті	contractors, service companies, etc.
Machine	aging factors and integrity of infrastructure, design, equipment,
Macrine	tools, safeguards, etc.
Material quality of chemicals, parts/spares, backup machines, etc.	
Method	mechanism, processes, supply chain systems, practices, policies,
Memod	operating procedures, work instructions, drawings, modelling, etc.
Technical	g&g and other studies related to sedimentary basins source rock,
Studies	reservoir, seal & trap, reservoirs porosity, permeability, & fluid



5

			saturations, reservoirs fluid flow, volume, temperature & pressure	
	F	Budget	changes, diagnostic, etc. income/expenditure estimates for a set period for business planning	
		ouger	sources of energy production, including renewable and non-	
	F	Portfolio	renewable resources, strategically balanced to meet the energy	
	_		demands while ensuring sustainability and reliability	
	l l	HC Products	product's characteristics & quality with respect to lifecycle perspective, contractual obligations, etc.	
	<u> </u>		historical logs, audits/ inspections, STOP cards, permits, JHAs,	
	F	Record	shutdown/ breakdown/ accidents history or trend, maintenance history, risk registers of associated operations/ activities, etc.	
	F	egal ramework	applicable laws, regulatory/other requirements, etc.	
		Social Factors	workload, working hours, working culture, leadership style, etc.	
	1 1	Ext. Environment	flora, fauna, protected areas, terrain, climatic region, aquifers, water bodies, neighboring industry, socio-economic & security	
		inancial	conditions, ethnic values, etc. business firms, investors, and markets including banks, investment	
	<u>E</u>	Environment T	funds, insurance companies, etc. algorithms, software, hardware, networks, etc.	
		al Domintor	-	
			(template, Addendum-B) to be used to document the risks. n risk event, the following shall be scribed in the Risk Register:	
		Risk Event Risk Event Cl	Category/ Sub-category (Risk Event Categorization, Addendum	
		Applicable	e Hazards/ Threats/ Causes (Addendum-D)	
		Conseque	ences ontrols/ Barriers already in place using Hazards/ Threat Control	
	_	_	(Definitions) and/ or List of Controls (Addendum-E).	
5.1.5.2 Risk Analysis Phase			(with Existing Controls/ Barriers) and Residual Risk (after g Further Controls/Barriers) shall be calculated as	
		Risk Rating (RR) or Risk Level = Consequence (C) x Probability (P) by using the		
		ollowing risk	· · · · · · · · · · · · · · · · · · ·	
		impact po Safety, Se <u>be select</u> Whereas Climate-r Event (P) Occurren Risk Rating	rence (C) Severity Table-A = numerical values attached to each pertaining to Regulatory & Legal, Social/ Community, Environment, ecurity, Financial and Reputation; the highest numeric value shall ted for Risk Rating or Risk Level calculation. Table-A1 be considered for Consequence Severity (C) for related Risks. Probability Table-B = numerical values attached to Probability of nace/ effectiveness of controls/ barriers. In (RR) or Risk Level Table-C = 5x5 Risk Assessment Matrix (Risk Heat k Heat Chart)	
		ne risks shall	l be compiled objectively in the Risk Register by assigning values	
	■ In		RP is not attained, Further Controls/ Barriers against the risk event	
			itioned in the respective column and the residual risk rating or risk gned in the last column.	
	l	_	s well as Response Owner(s) shall also be mentioned.	
5.1.5.3 Risk Evaluation Phase	rc ris fu tc	ratings or risk levels and existing controls/ barriers shall be compared with the risk criteria to see how fittingly the assessed (rated) risks be treated e.g. no further action required; risk treatment option(s) to be applied; opportunity(ies) to be availed; or risk analysis phase to be redone. While determining the climate-related risks & opportunities, consequences (w.r.t probability of occurrence) be classified into futuristic time horizons as scribed in Table-A1: Consequence Severity (C) for Climate-related Risks.		
5.1.5.4 Risk Treatment	■ Ri	sk treatmen	nt and actions shall be prioritized in the following manner:	
Phase		isk Rating	Risk Action and Timescale	
		Risk Level) Opportunity Eve risk)	Action and innescens	
1	Ì			



Controlled Copy Do Not Duplicate For Internal Use Only

Low (Negative) [1-6] (ALARP)	Nil	No action is required.
Medium (Negative) [7-12] (ALARP)	Not Mandatory	No additional controls/ barriers are required. Consideration may be given to a more cost-effective solution or improvement that imposes no additional costs. Monitoring is required to ensure that the desired controls are maintained.
High (Negative) [13-20]	Risk Mitigation	Urgent action should be taken, and considerable resources be allocated to reduce the risk to ALARP through Management Program/ Action Plan comprising interim controls/ barriers and strategic decision making/ objectives & targets to mitigate or minimize the risk. When considering interim controls/ barriers, Hazards/ Threats Control Hierarchy or Mitigation Measures shall apply.
Intolerable (Negative)	Risk Removal	Removing the risk source.
[21-25]	Risk Avoidance	Any planned activity or decision should NOT be commenced or taken whereas an ongoing activity should be immediately STOPPED until the risk has been reduced. The ultimate decision to RESUME the activity or TAKE the risk as an opportunity shall be conditional with the approval of top management.
	Risk Sharing	Employing risk-sharing contracts to distribute potential financial losses and profits in a structured way.
	Risk Transfer	The entire activity or process may be outsourced; OGDCL, however, to retain governance responsibility for the monitoring of such outsourcing arrangements to include the arrangements for risk management.

- Risk Card (template, Addendum-F) to be used to formulate and follow-up Management Program/ Action Plan to control the significant i.e. Intolerable & High risk rating (Negative) and Opportunity (Positive risk), which includes:
 - Influencing factor
 - Event category/ sub-category
 - Risk owner/ Response owners
 - Objective and targets to be achieved
 - Methods and means to achieve the objective
 - Timeframe for completing the program and/or its elements or phases

Note: More than one Risk Card may be used to control a significant risk.

5.1.5.5 Risk Monitoring & Review Phase

- Risk Register & Controls shall be updated by respective Secretary RMT, deliberated/ examined by RMT members, and endorsed/ approved by Chairman RMT on biannual basis for any changes.
- Secretaries of all <u>Level II</u> RMTs shall submit the approved Risk Registers along with Risk Cards (Management Programs/ Action Plans) to Secretary C-RMT who, further, will consolidate/filter the risks in the Corporate Risk Dashboard.
- However, Corporate Risk Dashboard shall include only those enterprise risk profiles/ factors (usually the top ten) which are mutually agreed in the <u>Level I</u> C-RMT Meeting or Workshop or as delegated to be discussed with the Secretaries of all RMTs.
- During the normal course of action/ operations (other than the prescribed risk review frequency), a risk may escalate from High to Intolerable or Medium to High, unpredictably, when any of the following conditions (not exhaustive) are met:
 - Budget shortage/ expenditure curtailment relevant to risk control
 - Risk treatment requires expenditures that are beyond what the risk owner is authorized
 - Grievances from stakeholders to which the risk owner cannot impartially and/ or effectively respond
 - Event impacting personnel/ facilities/ environment requiring unplanned treatment measures
- When the escalation is urgent and requires transfer of risk owner, it shall be completed within 24 hours and communicated by updating the pertinent Risk Register(s); whereas the escalated risks shall be managed through regular reporting lines to the appropriate levels.
- When the objective and associated targets are achieved, the reduction in risks shall be gauged and if found satisfactory, Management Program/ Action Plan shall be closed out on the Risk Card.



Controlled Copy Do Not Duplicate For Internal Use Only

5.1.5.6 Risk Communication & Consultation	To gather different perspectives, additional insights and to align the above risk management efforts with the broader environment, further collaboration and consultation may take place where deemed appropriate as follows:
	 Input from internal stakeholders: Employees with different roles, responsibilities, and expertise. External stakeholders' viewpoint & feedback: Consultants, regulators, customers, suppliers, and other relevant parties.
	Secretary of respective RMT shall be responsible for communicating the approved risks & controls to Directorates/ Departments/ Functions/ Locations/ Sections for timely mitigation on the management programs/ action plans to reduce significant risks.
	Concerned InCharges shall be responsible for the communication of the approved risks & controls further to the employees, contractors and service companies working within their areas of operations.
	Communication may be carried out through distribution of Risk Register/Dashboard; meetings, toolbox talks; workshops/training/awareness sessions; bulletins; alerts; circulars; HazCom (signboard/poster/color-coding), etc.
	CFO shall be responsible to disclose/ communicate the enterprise risk profiles/ factors (usually the top ten) in the financial/ sustainability reports and to the BOD.

5.1.6 Frequency of Risk Management Phases

	Board- RMC	C-RMT	F&VC-RMT BD-RMT; FD-RMT; E-RMT; D-RMT; P-RMT	Location's L-RMT
		<u>Level I</u>	<u>Level II</u>	<u>Level III</u>
Risk Assessment	N/A	N/A	At the time of developing annual business plan (budget)	At the time of commencement of financial year/ project execution
Review Meetings	As required	Before the meeting of Board-RMC	Biannually (or as per requirement)	Biannually (or as per requirement)
Trainings	As required	As required – base	d on TNA	

Secretary C-RMT shall be responsible for ensuring that Enterprise Risk Management (ERM) Procedure is reviewed for any changes every three years to remain up to date with the emerging trends (if any) as well as accessible and comprehensible to all concerned for compliance.

5.1.7 ERM Performance Audits

- ERM performance shall be checked after every three years as an independent or combined audit to determine whether the ERM framework conforms to the planned arrangements; has been properly implemented & is maintained; and is effective in meeting the ERM policy; and provide feedback to management of the results of such audits."
- Auditors selected to conduct ERM performance audits shall be trained, internally or externally, on ISO 31000 Guidelines to develop auditing expertise to add value to the internal auditing process.

4



Controlled Copy Do Not Duplicate For Internal Use Only

Addendum A Enterprise Risk Management (ERM) Charter

Objective

The objective of ERM Charter is to clearly articulate the Committee's role and responsibilities, composition, structure and membership requirements, authority, processes and procedures, as approved by the Board, ensuring an appropriate risk-aware culture has been embedded throughout the company. It is customized to the needs of the company as well as reflects sustainable energy industry practices and objectives. ERM Charter is to act as a governance tool to reinforce accountability, transparency, and alignment of risk management with corporate strategy.

Terms of Reference

- Review the risk identification & management process developed by management to confirm it is consistent with the Company's context and addresses business planning;
- Review management's assessment of risk profiles periodically and provide an update to the Board after inquiring of management and the independent auditors about the significant enterprise-wide risks and controls;
- Oversee & monitor management's documentation of the material risks that the Company is exposed to and update as events change and risks shift and assess the steps management has implemented to manage and mitigate the identified material risks;
- Review the following with management, with the objective of obtaining reasonable assurance that all risks are being effectively managed and controlled as low as reasonably possible:
- management's appetite and tolerance for enterprise-wide risks,
- management's assessment of significant risks the Company is exposed to,
- the Company's policies, procedures, plans, processes and any proposed changes for controlling significant financial/ nonfinancial risks,
- to review with the Company's counsel, legal matters which could have a material impact on the Company's public disclosure, including financial statements; and
- Consider any other issue or matter as may be assigned by the Board of Directors.

Role and responsibilities

The Risk Management Committee assists the Board in carrying out its duties by providing independent and objective review, advice and assistance in developing Board's governance related policies and monitoring corporate activity within the scope of its concern and making recommendations to the Board for resolution. The Risk Management Committee, hence, assists the Board in the oversight of the company's risk management framework. The role of the Committee includes assisting the Board in the company's governance and exercising of due care, diligence and skill in relation to risk assessment, treatment strategies and monitoring. Consistent with the company's determined appetite for risk, it includes assisting the Board to understand risks, that may:

- impede the company from achieving its goals and objectives;
- impact on the company's business/ operational performance;
- affect the health, safety or welfare of employees and others in relation to the company's operations;
- threaten compliance with the company's regulatory and legal obligations;
- impact on the community and the environment in which the company operates;
- impact on the company's reputation and that of its people; and
- result in a liability for the company arising from the company's operations.

Additional responsibility

• To refer to and consider the applicability of industry-based disclosure topics in identifying climate-related risks & opportunities and ensure that the disclosure of information is made about where in the company's business model and value chain risks and opportunities are concentrated.

Authority

The Board authorizes the Risk Management Committee, through the Chair of Risk Management Committee, may decide to:

- hire/ retain independent risk/ actuarial/ insurance/ other Consultants to advise the Risk Management Committee or assist in the conduct of risk related issues; and
- seek any information it requires from the employees, who are directed to co-operate with the Risk Management Committee's requests, or from external parties.

Composition

The Risk Management Committee will consist of at least three, and usually no more than five, members of the Board. The Board, usually on the recommendation of its nomination Committee, will appoint Risk Management Committee members and the Chair of the Committee. Membership of the Risk Management Committee will be reviewed annually, and members are eligible for reappointment. Membership will be confirmed annually by the Board in alignment with the Annual General Meeting (AGM). The Risk Management Committee should comprise both nonexecutive and executive directors, although the majority should be non-executive independent directors. Members should be conversant with risk management principles and standards, with the majority of members having a sound understanding of the business, operations and affairs of the company and the industry in which it operates.

Important: - The Chair of the Committee must be non-executive & independent; and, also, not be the Chair of the Board.

Invitees

Non-members may attend meetings by invitation of the Risk Management Committee, including the:

- Managing Director/ Chief Executive Officer/ Chief Financial Officer.
- Executive Director(s).
- Secretary C-RMT.

Important: - These personnel may take part in the business of, and discussions at, the meeting but have no voting rights.





Controlled Copy Do Not Duplicate For Internal Use Only

Meetings

The Risk Management Committee will meet a minimum once a year and, additionally, as the Committee considers necessary. A quorum will be more than half the members. In the Chair's absence from a meeting, the members present will select a Chair for that particular meeting. All Risk Committee members are expected to attend each meeting in-person, or through other approved means, such as teleconference or video conference. The Risk Management Committee may invite other personnel to attend as it deems appropriate and consult, or seek any information it considers necessary, to fulfil its responsibilities.

Important: - The notice & agenda of the meeting may include a) update on previous agenda, b) status of top 10 enterprise-wide risks & controls, c) actionable items, and/ or d) advisories along with relevant supporting papers (if any).

Voting

Any matters requiring decision will generally be decided by consensus, or if consensus is not achievable, then by a majority of votes of members present.

Secretariat duties

The Company Secretary/ IRO (or other appropriate designated person like Secretary C-RMT will act as Secretary to the Risk Management Committee. The Secretary will assist the Chair to develop and distribute agendas, papers, minutes and calendar.

Minutes

Minutes must be prepared by Company Secretary/ IRO (or other appropriate designated person like Secretary C-RMT, approved by the Chair of the Risk Management Committee and circulated to the members within two weeks of a meeting. They must be ratified and signed by the Chair, at the next meeting of the Committee.

Reporting to the Board

The Chair of the Risk Management Committee is to report to the Board following each Committee meeting. Such reporting may be by distribution of a copy of the minutes, supplemented by other necessary information, including recommendations requiring Board's action and/or approval. The Chair of the Risk Management Committee, in consultation with MD/ CEO/ CFO, will organize the supply of information regarding the Committee's proceedings to be included in the company's annual report.

Reviews

The Risk Management Committee will review its performance on an annual basis. The review may be conducted as a self-assessment and will be coordinated by the Chair of the Risk Management Committee. The assessment may seek input from anywhere the Chair deems appropriate. Training needs will be monitored by the Chair of the Risk Management Committee. The Risk Management Committee will review this Charter and its composition annually, to ensure that it remains consistent with the Board's objectives and responsibilities. The Board may consider the Committee's review and either approve or further review the Charter.



5

Activity-I Details of Risk Assessment

The second secon													
Area/Location:													
Section/ Department:													
Directorate:													
Date of Risk Assessment:													
Risk Assessment Team:				Name & Designation					Rot	e in Risk A	Role in Risk Assessment		
													_
# Risk Event	Risk Event Category/ Sub- category	List of Hazards/Threats (Causes)	Consequences	Existing Controls/Barriers	Actual Risk Rating or Risk Level C P RR	1 200	ALARP Further (Yes/ No)	Further Controls/Barriers	Risk R Risk R C Fisk	Residual Risk Rating or Risk Level C P RR	Risk Owner	Response Owner(s)	
							0. 70						
						- 15	16 6						
							8 6						_
													_
						× ×	S =30		S - 11.				_
1							is 12						_
						-							_
													_
				P. C.									_



OQ)(the energy Planning: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

Addendum B Risk Register (Template)









Addendum C **Risk Event Categorization**

Risks will be assigned into event categories and sub-categories. Following event categories list is a dynamic list and can be updated from time to time in response to changing internal and external business environment.

Influencing Franken Fakensel	Influencia Francisco Internal
Influencing Factor: External	Influencing Factor: Internal
Category: Strategic	Category: Infrastructure
Sub-Category: Acquisitions, Farm-in & Farm-out Evaluation of New Blocks Competitiveness Unconventional Projects Business Diversification/ Renewable Energy Investment	 Sub-Category: Allocation of Capital (Budget, Trained Resources) Availability of Assets (Maintenance, Back-up) Capability of Assets
Outsourcing Services	
Category: Reserves	Category: Process (Exploration / Production)
Sub-Category: Availability Success Potential Commercialization Geological & Reserves Management	Sub-Category: Feasibility/ Technical Studies Exploration/ Appraisal/ Development Engineering/ Design Procurement Construction/ Execution Testing/ Commissioning Controls/ Monitoring/ Measurability
Category: Country Risk – Geo/ Socio Political	Category: Social
Sub-Category: Corporate Citizenship Local Constraints Security including Terrorism Sabotage Social Instability War, Insurgency or Armed Conflict Political/ Economic Instability Impact/ Interference of Investigation Agencies Category: Financial / Economic Sub-Category: Capital Availability Competition Financial Markets (including interest rates, exchange rates, commodity prices, etc.) Liquidity Macro-Economic Conditions Demand & Supply Mergers / Acquisition	Sub-Category: Human Resource Availability/ Attrition D-E-&-I/ Physical and Psychological Space Occupational Health/ Fitness Behavioural/ Operational/ Process Safety Corporate Social Responsibility Fraudulent Activity Reputation Damage Category: Operational Sub-Category: Operation & Maintenance (O&M) Supply Chain & Contractual Obligations Ageing Oil & Gas Infrastructure/ Obsolescence Material & Inventory Management Petroleum Data Preservation Retrofitting/ Modification/ MOC
Category: Laws, Rules, and Regulations/ Compliance	Category: Technology
Sub-Category: Legal and Regulatory (Registrations, NOCs, Licences, etc.) Public Policies (HSE, Security, Anti-Corruption etc.) Reputation damage	Sub-Category: Digitalization/ Data and System Availability Data Integrity Deployment Development Maintenance Emerging Technology/ System Selection Interruptions/ Cyberattacks/ Hardware-Software Failures Reputation Damage
Category: Natural Environment	Category: Internal Environment
 Sub-Category: Energy/ Emissions / Waste/ Water Management Natural Disaster/ Pandemic Climate Conditions/ Changes Transition (Policy & Legal/ Technology Adoption/ Reputation) Physical (Acute/ Chronic) Opportunities (Resource Efficiency/ Transition of Energy Source/ Markets Participating in low-carbon ventures/ Resilience) Reputation damage 	Sub-Category: Culture Structure Management Style



Controlled Copy Do Not Duplicate For Internal Use Only

Addendum D List of Hazards/ Threats/ Causes (Not exhaustive)

- Physical: Electrical (shock/burn), hazardous/stored energy, radiations (ionizing or non-ionizing), revolving or rotating entities, moving entities/dynamic situation (on floor/soil, in water or overhead), falling objects, ejection (flying pieces or parts), improper storing/stacking (falling materials), improper floor or surface (tripping/slipping), high pressure points, high temperature points/surfaces/fluids, extreme low temperature points/surfaces/fluids, explosion/rupture/boiling liquid expanding vapor explosion (BLEVE), work at heights (falls), confined space (toxic gases/suffocation), obstructions/collisions/contacts/impacts (sharp edges, low head-rooms), objects under tension/induced stress, objects under compression, vibration, noise (high level/intrusive), natural hazard (storm/lightning/flood/earthquake), terrain (swamps/marshes/morass/slopes/streams), etc.
- Chemical: Toxic, chemical and physical properties of the material e.g. explosion (explosive/ chemical/ fuel/ electric), fire (electric/ chemical/fuel), splash, asphyxiation (e.g. low oxygen atmospheres, excessive CO2, drowning, excessive N2, halon, smoke, etc.), combustible materials, flammable materials, oxidizing materials, corrosive/ irritating materials, carcinogenic materials, toxic materials (e.g. H2S, exhaust fumes, SO2, benzene, chlorine, welding fumes, tobacco smoke, CFCs), dust/ particles, fumes/ vapors/ steam, mist/ fog, frost bite, etc.
- Ergonomical: Poor organization and job design, Work planning issues, Improper work environment (temperature/ humidity), Improper light (glare/ poor light), Indoor climate (too hot/ cold/ dry/ humid, draughty), Heat stress (high ambient temperatures), Cold stress (low ambient temperatures), Improper ventilation, Manual lifting, handling or shifting, Repetitive movements, Poor Posture, Poor workplace design/ layout, Congested workplace, Stressful tasks, Long sittings/ duration of work, Improper work rest cycles, Mismatch of work to physical abilities, Assigning task to unskilled/ untrained person, etc.
- Biological: Unhygienic conditions, Food contamination/ food-borne bacteria (e.g. e. coli), Water-borne bacteria (e.g. legionella), Clinical waste, Infections (blood/needles), Contagious diseases, Bacteria/ viruses (endemic/ epidemic/ pandemic), Poisonous plant (e.g. poison ivy and oak, stinging nettles, nightshade), Animal/insect bite or sting, Algae or diseased plants, Disease-vectors (mosquitoes: dengue, malaria, yellow fever; ticks: lyme disease; fleas: plague), Parasitic insects (e.g. pin worms, bed bugs, lice, fleas), etc.
- Psychological: Post-traumatic stress, burnout/ fatigue, bullying/ harassment, motion/ sea sickness, travel sickness, height phobia, violence, stress, constant low-level noise, threats of danger, discrimination, public relations, intense workloads, shift work, etc.
- Security related: Violence/terrorism, Assault, Sabotage, Military action/civil disturbances, Pilferage/burglary, etc.
- Occupational Health: Acute coronary syndrome, Accidental trauma; Heat related disorders, Exposure to high noise; UV light; vibration; welding fumes; oil fumes; chemicals; extreme heat/ coldness; human blood; video screens; cleaning liquids, detergents and insecticide spray, Contaminated drinking water; infected sewage, Lifting of heavy weight; prolonged standing; shift work
- § Safety: Equipment malfunctions, equipment breakdowns, inappropriate machine guarding, tripping and slipping hazards, etc.

Considerations while identifying social hazards/ threats

- Diversity, equality and inclusion in the workplace
- Fair pay, living wages and other labor practices
- Employee experience and engagement
- Fair treatment of customers and suppliers
- Oversight of practices at supply chain partners
- Responsible sourcing of supplies and materialsCommunity engagement and involvement
- Charitable donations and funding of social programs
- Support for human rights and international labor standards



Addendum E **List of Controls** (not exhaustive)

Controls	Description
1 - HAZARDS CONTROL HIERARCHY (BARRIERS)	Elimination, substitution, engineering controls, administrative controls, personal protective equipment (PPE) as defined in the Definitions Section.
2 - TRAINING AND INDUCTION	A process of knowledge and content transfer, aimed at generating learning, i.e. increasing awareness, knowledge, developing skills and abilities, modifying and/or improving behavior. It includes INDUCTION, a program designed to introduce new employees to the company, help them learn more about the company and quickly integrate with the culture, environment and colleagues and feel comfortable.
3 - CONTINUOUS TRAINING ON-THE-JOB AND	(i) TRAINING: technical and practical training on operational skills and abilities in relation to the use of devices and equipment, systems, etc., carried out on-the-job, in a laboratory or field area:
KNOWLEDGE MANAGEMENT SYSTEMS	ii) KNOWLEDGE MANAGEMENT: process of managing and sharing information and company knowledge (know-how, experience and lesson learned).
4 - PROJECTS OR DEDICATED WORKING GROUPS	Groups are established to cope with a specific problem and generate recommendations or work on a resolution. Such groups are generally temporary and will be dissolved when they achieve their objectives satisfactorily.
5 - ADHOC COMMUNICATION CAMPAIGNS	A set of communication activities carried out to achieve mitigation objectives with respect to a certain risk event.
6 - ASSESSMENT, MONITORING & FOLLOW UP	Complex of control activities (management, operational, economic, market, scenario) aimed at i) collecting continuous and/or periodic detailed information ii) identifying the need for action and iii) verifying ex post its implementation iv) periodic audit/assessment and follow up.
7 - QUALITY CERTIFICATIONS/ ISO	External certification of compliance with requirements to meet quality assurance criteria as defined by industry standards.
8 - OPINIONS AND CONSULTANCY	Analysis and evaluation of specific issues to implement the best solution of the problems. Technical and professional consultancy.
9 - ADVOCACY, EXTERNAL RELATIONS AND COUNTERPARTY MANAGEMENT	Activities aimed at representing the company's point of view vis-à-vis various stakeholders (institutional players, society sectors, commercial counterparties) in order to reduce risk exposure.
10 - LOCAL DEVELOPMENT INVESTMENTS AND STAKEHOLDER INITIATIVES	Activity aimed at creating added value brought by OGDCL to the socio-economic conditions of a host territory through: (i) the participation of local people and businesses in OGDCL's industrial activities (ii) the transfer of skills and know-how (iv) Business investments in public services (e.g. schools, hospitals, etc.) (iii) building capacity in communities.
11 - CUSTOMER MANAGEMENT (E.G. LOYALTY, MICRO-PRICING,)	A set of systems, processes and initiatives aimed at improving customer portfolio management and relations with customers.
12 - INCENTIVES AND MBOs	Sharing of de-risking objectives into the management incentive system.
13 - RECRUITMENT RETENTION AND SKILLED LABOUR	A set of activities aimed at selecting, maintaining and developing the portfolio of skills consistent with the needs of the business. Includes trade union relations.
14 - R&D PROJECTS	Technological innovation, development of innovative skills and specialist know-how, for example through the use of proprietary technologies and innovative solutions, implementation of specific risk reduction-oriented R&D projects, R&D activities and links with international universities and partnerships also with other companies.
15 - RECOVERY / EMERGENCY PLAN	Risk/ impact containment plan that defines the trigger, the scheduled set of activities to be carried out and also the means to implement them. Plan contingencies are excluded.
16 - AUTOMATION / DIGITALIZATION	adoption of digital technologies to support and improve activities and processes.
17 - CONTRACT RISK MANAGEMENT (PRE/POST AWARD)	Use of relevant guidelines (Contract Risk Management rules) in contract negotiation and management.
18 - SURVEILLANCE AND INTELLIGENCE (SECURITY)	Physical measures both active/passive, business security or cyber intelligence.
19 - TECHNOLOGICAL AND OPERATIONAL IMPROVEMENTS AND ASSET INTEGRITY MANAGEMENT	Implementation of technological, structural and operational improvements to assets/plants or new projects in order to achieve more effective or more efficient risk containment. Including actions part of the Asset Integrity Management system and improvements aimed at reducing emissions.
20 - STRENGTHENING RESOURCES AND TOOLS	Strengthening of processes and operating methods aimed at better risk containment.
21 - LEGAL DEFENSE ACTIVITIES	Legal defense activity carried out by OGDCL professionals or entrusted to external Legal Offices.
22 - SECURITIZATION AND IN- KIND RECOVERY	Debt collection by means of contractually provided mechanisms, such as securitization and in- kind recovery.
23 - PORTFOLIO MANAGEMENT	Diversification of activities with the purpose of new assets, acquisitions, markets and procurement for de-risking purposes.
24 - PARTNERSHIPS FOR RISK MANAGEMENT	Collaboration relationship between two or more companies for the implementation of joint or complementary projects that allow the sharing / management of risk.
25 - HEDGING AND FACTORING	Insurance contracts in place at the time of evaluation. Letter of Credit, Parent Company Guarantee and other contractual guarantees that mitigate the risk wholly or partially.



26 - INSURANCE AND GUARANTEES	Hedging of the risk by financial instruments (derivatives or others) and/or assignment of receivables without recourse. Including the natural hedge.
27 - TRANSFER OF RISK LIABILITY CONTRACT	A contractual clause that, when a trigger occurs, allows the partial or total containment of the impact.
28 - SALE / CLOSURE OF ASSETS	Optimization of the portfolio of activities, assets, investments, etc. aimed at mitigating the probability of joint occurrence of related risk events.
29 - CARBON OFFSET	Carbon offsets include specific projects that either lower CO2 emissions, or "sequester" CO2, meaning they take some CO2 out of the atmosphere and store it. Some common examples of projects include reforestation, building renewable energy, carbon-storing agricultural practices, waste and landfill management, etc.



Secretary RMT (SIGN):



Addendum F

Risk Card

RISK E	VENT											
				CAL	ISES		CONSI	EQUE	ENCES	EXIST	ΓING	CONTROLS
				SEVE	RITY	/	PROB <i>A</i>	ABILIT	Υ	RISK LEVE		ING (RISK
REF.	ACTIVITY (RISK	ASSESSA	MENT):									
CATE	GORY											
	JENCING FAC	TOR:		□ II	NTER	RNAL []	EXTERN	IAL				
	IT CATEGORY:											
EVEN	IT SUB-CATEGO	ORY:										
	OWNER:											
RESP	ONSE OWNER	S:										
GENE												
	ATION / TIME S	PAN:				FROM (DATE	:		1	O (DA	ATE):	
OBJE	CTIVE:											
TARG	ET:											
				1					Π			
CHA	IRMAN RMT (SI	IGN):		MΕΛ	1BER	S RMT (SIGN):			SECRET/	ARY RA	MT (S	SIGN)
MITIG	ATION PLAN											
NO.	ELEMENT / IT	EM	RESPONSE	OWN	<u>ER</u>	RESOURCES REQUIRED		DA DU		CTUA	\L	REMARKS
DE: //E								<u> </u>				
KEVIE	W LOG					IDEN CE				CI	<u> </u>	TUDE
NO.	DATE OF REVIEW	REVIEV	V ELEMENT			IDENCE HECKED	PRO	OGR	ESS STATU	(ATURE RMAN RMT
C1.O.	F OUT DEV	A/	-									
	E OUT REVIEW	v		DOD 4	דו ווח	V		- 1	DECIDITAT	חומע ח) A T/A	IC (DISK LEVEL)
SEVE	KIIŸ		P	ROBAI	DILII	T			KESIDUAL	KISK K	AIIN	NG (RISK LEVEL)

Close Out Date





			Potenti	Potential Impact			
	Regulatory & Legal	Social/Community	Environment	Safety	Security	Financial	Reputation
Catastrophic [Very Material] (5)	Breaches resulting in hefty penelties/imprisonment/revocation of registrations, licenses or permits	Widespread, visible complaints and involvement of NGOs, notables, national authorities and general public	Continuous excursions beyond allowable or regulatory limits Or widespread damage to multiple environmental attributes. Consequences of the event can either not be remediated or remediation requires significant resources and time fmore than a year time frame).	Muttipte Fatalities/ Disabilities	Extensive loss of life, widespread severe injuries, total loss of primary services, core processes or functions	Extreme impact of investment or risk-event Routine business > 49.9 million US\$ Other/ Diversification > 89.9 million US\$	international concern affecting the company's ongoing business/ existence; Severe, longlasting and irraversible deterioration of the reputation of the company, with reiterated long-term and strongly negative media impact
Critical [Material] (4)	Breaches resulting in significant penatties/ceasing of operations	Major and repeated community & stakeholder concerns, involvement of notables, local entities	Intermittent excursions beyond allowable or regulatory limits Or extensive damage to the environment, consequences that can be rectified and remediated within a year's timeframe	Single Fatality/ Disability	Loss of tife/ serious injuries, damage to the Company assets, impairment of core processes and functions for extended period	High impact of investment or risk-event Routine business 30 – 49.9 million US\$ Other/ Diversification 60 – 99.9 million US\$	Considerable negative publicity or damage to the company's reputation at national level with wide media coverage
Najor [Consequential] (3)	Breaches resulting in warnings without penalties	No serious community or stakeholder concerns or negative social or other media coverage that causes temporary disruption to business operation	Occasional excursions beyond allowable or regulatory limits Or environmental damage with consequences that can be rectified and remediated within a month's timeframe	Serious injury(ies) resulting in Lost Time	Minor injuries, minor impairment of core functions and processes	Significant but containable impact of investment or risk-event Routine business 10 – 29.9 million US\$ Other/ Diversification 30 – 59.9 million US\$	Negative publicity or damage to the company's reputation at national/provincial level covered by mainstream media
Marginal [leitneupesnooni] (2)	Breaches resulting in exposure to legal proceedings/ show cause notices	Lowimpact community issues, remedied after negotiations	Rare excursions beyond allowable or regulatory limits Or no significant environmental damage to the local environment, effects can be rectified amediately with some clean-up intervention within days	Injury (or injuries) requiring medical treatment	Small procession near location with slight damage/ threat to the assets/ personnel.	Minor impact of investment or risk-event Routine business 0.025 – 9.9 million US\$ Other/ Diversification 5 – 29.9 million US\$	Minor one-off (rare) negative local publicity or visible dissatisfaction by local stakeholder groups, resolved through table of negotiations
eldigilgeN [leivint] (t)	Rectifiable breaches with no consequence to the company	Lowimpact community issues, quickly remedied	Slight environmental damage within the premises of the facility	Slight injuries requime First Aid only	Small procession near location with no damage/ threat to the assets/	Not much significant impact of investment or risk-event Routine business < 0.025 million US\$ Other/ Diversification < 5 million US\$	Some attention from minor stakeholders, preemptively resolved by routine/ internal processes



5

Table-A1: Consequence Severity (C) for Climate-related Risks

Severity	Policy and leg emissions and	Policy and legal framework addressing methane emissions and flaring while exploring, producing and marketing selling oil & ass	ressing methane g, producing and	Delay in technolo,	Delay in technology adoption to adopt low carbon technologies	carbon technologies	Reputation damage	Reputation damage due to unable to adapt or deferral to adopt tow carbon technologies	rai to adopt low carbon	Acute and chronic bursts, GLOF and	Acute and chronic risks like floods, storms, hunicanes, cloud bursts, GLOF and sustained higher temperature heat waves	s, hurricanes, cloud ature heat waves
Тте	Short-term	Medium-term	0.500	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term	Short-term	Medium-term	Long-term
Catastrophic 70 12 12 12 12 12 12 12 12 12 12 12 12 12	1-5 years	5 – 10 years	+10 years Taxes, errissions caps, carbon levy, permities, and/or trade embargoes strongly and revatinely in place/ in-vogue	1 – 5 years	5-10years	+10 years Erode competitiveness to a very infa levet, drastic changes in market demand; very large poor of stranded assets; underable cost of doing tossil feels business; alarming reliability issues compatibility issues	7 – 5 years	5-10 years	+10 years Complete non-tuffliment of partnerships's commitments, severally affecting investor confidence, access to confidence, access to attract require resources, further resulting in long- illasting and irroversible detenioration of the reputation	1 -5 years	5 - 10 years	+10 years Assets, operators, workers or any infrastructure exposed to extreme climate conditions and patterns resulting in disruption and stoppage of business operations and or
Critical [Material] (4)		Taxes, emissions caps, carbon leay, pensities, and/ or trade embargoes embargoes in-vogue			Erode competitiveness to a fight level; substantial changes in market demand; large pool of stranded assects; high cost of denigness; very considerable reliability and competibility and competibility issues			Non-fulfilment of partnerships/ commitments to a greater extent, initicate to a chieve multiple organizational objectives, highly affecting investor confidence, access to captal, and eligibility to attract requisite resources; knrher resulting in relevant and prolonged deterioration of the reputation			Assets, operations, workers or any infrastructure exposed to high and patterns resulting in disruption of husiness operations and do value chairs system	
noteM [JeitnaupaznoD] (5)		Taxes, emissions caps, carbon lay, penalties, and/ or trade embagos sightly in place/ in-vogue			Erode competitiveness to a moderate fevel; moderate changes in market demand; medium pool of stranded assets; mild cost of doing fossil fuels business; considerable reliability and compatibility issues			Partial Infilliment of partial Infilliment of partialenging to achieve some organizational objectives, moderately affecting mestor confidence, access to capital, and eligibility to attact requisite resources; further resulting in relevant and repeated deterioration of the reputation			Assets, operations, workers or any infrastructure exposed to moderate climate conditions and patterns resulting in disruption of value chain system	
Marginal [Inconsequential] (2)	Regime regarding taxes, emissions caps, carbon levy, pensities, and or trade embargoes unider development in the making.			Erode compatitiveness to a less moderate level; low changes in market demand; low pool of strandard assets; low cost of doing fossil fuels doing fossil fuels compatibility and compatibility issues			Significant fulfillment of parametris, partnerships occuminants, having few undesirable outcomes in the pursuit of organizational objectives; magnalty affecting investor confidence, acc ess to capital and eligibility to attract requisite resources; may requisite resources; may result in slight detenioration of the reputation.			Assets, operations, voorkers or any infrastructure exprosed to low climate conditions and patterns essulting in sight of six upon or value chain system.		
eldigilgeM [leivit] (f)	No regime of taxes, emissions caps, carbon levy, penalties, and/or trade embargoes presently exist		20 20 20 20 20 20 20 20 20 20 20 20 20 2	No competitiveness erosion, No changes in market demand; No stranded asseets; No stranded asseets; normal cost of doing fossil fuels business; no maliability saues compatibility issues compatibility issues			Fulfillment of partnerships/ commitments, having no noticeable impact on organizational objectives; not affecting investor confidence, access to capital and eligibility to attract requisite resources			Assets, operations, workers or any infrastructure exposed to pointed climate conditions resulting in no expension in retires that a continue in the condition in retires that is experient.		

5

Table-B: Event Probability (P) Likelihood That Exposure Would Result Into Loss

	IN TERMS OF FREQUENCY	IN TERMS OF EFFECTIVENESS OF CONTROLS/ BARRIERS
Highly Likely (5)	Incident/ event occurred THREE OR MORE TIMES DURING LAST TEN YEARS within E&P oil and gas industry, Pakistan	NO operational control/ barrier is in place
Very Likely (4)	Incident/ event occurred TWO TIMES DURING LAST TEN YEARS within E&P oil and gas industry, Pakistan	INSUFFICIENT operational controls/ barriers are IN PLACE
Likety (3)	Incident/ event occurred ONCE DURING LAST TEN YEARS within E&P oil and REVIEWED REVIEWED	Operational controls/barriers are IN PLACE and are NOT ROUTINELY REVIEWED
Untikety (2)	Incident/ event occurred SELDOM/ RARELY DURING LAST TEN YEARS within E&P oil and gas industry, Pakistan	Operational controls/ barriers are IN PLACE and ARE REVIEWED as per plans
Very Unlikely (1)	NEVER heard of DURING LAST TEN YEARS in E&P oil and gas industry. Pakistan	Operational controls/ barriers are EFFECTIVE to WITHSTAND their intended purpose

Table-C: 5x5 Risk Assessment Matrix (Risk Heat Map/ Risk Heat Chart)

				Event P	Event Probability (P) (Chance of Happening)	(Suing)	
			Very Unlikely	Untikety	Likely	Very Likely	Highly Likely
		73	· ·	2	8	4	2
	Catastrophic	9	5	10	15	20	25
	Critical	4	199	8	12	16	20
Q) (y) dne	Major	3	3	9	6	12	15
	Marginal	64	2	4	9	8	10
	Negligible	-		2	8	4	9



5

Example of Risk Register



Activity-I

Acti	lvity:		Dritting Exploratory	Well *Khuzder Nor	th X-1" of TD=4250m @ Cor	st=40	MM (JSD								
	a/Location:	- 5	Khuzdar North Cone													
	tion/ Department:	8	Dritting Operations													
Dire	ctorate:		Petroserv													
Date	e of Risk Assessment:	10	May 2025							50						
Risk	Assessment Team:				Name & Designation							F	lote i	n Risk	Assessment	
a	Risk Event	Risk Event Category/ Sub cotegory	List of - Hazards/Threats (Couses)	Consequences	Existing Controls/Barriers		Actus k Rati	ng or	ALARP (Yes/ No)	Further Con	ntrots/Barriers	Ris	Residi k Rati isk Le	ing or	Filsk Owner	Response Owner(s)
r:	High H2S and CO2 content in the reservoir leading to high CAPEX and greater process hazerds	Geological & Reserves Management Operations & Maintenance	Presence of high H2S and CD2 in surrounding gos discoveries Non prioritization of leads for well dritting	- Loss of well integrity - Higher CAPEX and OPEX - Greater process huzard	3D Basin Modelling Study carried out to understand the origin and distribution of H2S and CO2. However, the actual concentration to be known through MDF samples/ DST results	d	,	12	Yes	dritting with of encounte concentration	on of H2S and ts, based on	4	3	12	Exploration	Exploration
	Higher risk prospects due to Stratigraphic plays	Geological & Reserves Management Operations & Maintenance	- Limited chance of identifying any undrified structural trap -No de-risking exercise for strategraphic plays based on selsmic quantitative data	- High risk exploration wells - Limited chances of exploration success	High resolution 3D seismic data covering the whole block will be acquired after commercial discovery for seismic quantitative analysis	3	,	9	Yes	de-risk the i stratigraphi - Data gathe planned exp	approach to dentified	3	,	9	Exploration	Exploration
100000	Uncertainty regarding hydrocarbon volumes, Estimated Utimate Recovery (EUR) & well productivity	Geological & Reserves Hansgement Operations & Maintenance	- Uncertainties associated with gost-water contacts - Properties variation (facies, porosity, tractures etc.) - Poor understanding of velocity variation across the field and/or reservoir - Thickness variation across reservoir	Investment loss	- Wets data (for t testing + VSP) - 30 seksmic data; PSTM & PSDM velocity data	3	3	ø	Yes			3	,	9	Exploration	Production
í:	Non-commercial discovery due to possible poet hydrocarb on quality, sub-commercial quantity or poor reservoir properties	Geological & Reserves Management Operations & Haintenance	- Hydrocarbon quality, sub- commercial quantity or poor reservair properties	Investment loss	Marginal field development planning for dealing with the non- commercial discoveries and to accept any new concept for its development	4	3	12	Yes	potential fail to divest the risk		4	3	12	Exploration	Exploration

	06)(ov.												OGF/XXX	ERM-001(00)
			- No synergy to produce HC with other existing undeveloped discoveries							discoveries and nearby production facilities					
6	Unavailability of funds or susteinable access to funds	Financial / Economic	- Delay in capital injection - Delay in budgetary/ regulatory approvals	- insecure project financing - Detay in work program delivery	Overall availability of funds due to the company's good financial neolth (level of profitability)	5	2	10	Yes	- Explore other options to secure project financing, just in case - Expedite budgetary/ regulatory approvats	5	2	10	Petroserv	Finance/ Budget & Planning
6	Delayed completion of EIA Study and subsequent NOC	Lows, Rules, and Regulations	- Delay in provision of requisite information including well coordinates - Unavailability of Rig and equipment/ layout and specifications	- Delay in well spud dates - Delay in well completion	Consultant shortlisted and onboard to expedite EIA Study to the extent possible	3	3	9	Yes	Prioritize provision of required information and plans for exploratory wells in cl. ariting plan, testing plan, to-ation, composition etc.	3	3	9	Petrose <i>r</i> v	Exploration. Drilling Planning, HSE
7	inaccessible assets due to taw & order situation/ protests/ domands	Country Risk - Socio Political	-Lack of Infrastructure in remote areas	- Project delay - Human injury/ loss - Asser damage - Financial losses	Security cover through LEAS; IEO Jammer; Movement with convoy under FC ascort: Restricting night traveling in viberable areas; A specific capital reserve for self insurance of rigs, buildings, weits, plants, pipellines, vorteant compensation, inventory, terrorism, vehicle repair & losses for pertorieum products or transit.	5	4	20	No	-Close linison with LEAs for meaningful dialogie with local through drone carneras - Training and awareness riaking of remote amployees encountering risks	5	4	20	Petroserv	Security/ CSR/ OOT!
*:	Uneate vig building/ rig up/ down	Operations & Maintenance	certified 3" party transportation treet, umane thring clings, works at neight, works at neight, works at neight, striking by objects, failures of utring gears' atings, exceeding crane timits, electric chocks, failure/tereskings of artist ring wires/ fink eyes of failure uninspected utrings gears from the 3" party uninspected utring gears from the 3" party the 3" party	- Project delay - Human injur/ Loss - Asset demege - Financial Iosses	Mechanical lifting aids, mobile cranes, Use of tag lim during henryweight lifting, elearance of the movement are at it g aite, toolbox talk, sofety meeting, first aid ambutance with parametic in advance party, PPE, inspection/mointenance of draw-works before rig up/ sig down, preventive maintenance plans, energy lectation disconnection, presence of experience diffler, it of experience drifler, it sup/ sown in daylight of channes of all meat lines & electric wires, viewal inspection of bridle line, insurance	3	2	•	Yes	-3" party inspection & certification of lifting gears - Training on safe lifting/crame signate & crame operations for eignaliman/floor-mani/sigman deputed with erane operations - Haintenance of machine guards on rotating cathoods of draw work	3	2	rep:	Dritting Operations	Rig Maintenance , MSE, Medical





9	Challenges in mobilization of personnel and equipment during construction activities	Operations & Maintenance	- Lack of infrastructure in remote areas	- Project delay - Human injury fose - Asset damage - Financial fosses	- Journey Management Plan, Movements with LEA's event. Close coordination with LEA's event. Close thousand in build proof vehicles, Movement by Hell in case of security threat/road blocks atc Prior approval of logistics movement plan from LEA - Strict compliance of all SOPs, 3" party certification of vehicular fitness, Adequate buffer (advance planning of movement) in movement plan Insurance	3	2	*	Yes	Heil medical evacuation in case of emergency, Medical evacuation by medievac (with escort)	3	2	6	Drating Operations	Rigi Maintenance , HSE, Medical, Security
10	Wellbore Intiux / Breach of Well Control	Operations & Maintenance	- Human error in operational handling - Well Planning/ Well Integrity design failure - Violation of SOP Fautty eaulpment - Well control edupment - Integrity design failure - Unexpected over pressured farmation errountered	- Project delay - Human injury! loss - Aaset damage - Financial losses - Environment damage oil spills - Reputation damage	Inspection and testing of Well Control equipment - Appropriate Mud Weight election based on offset well data - Well Control Contrigency Planning and Services - PVT and flow sensors inplice, calibrated and function tested - Well Control id rille - F&G System	d	3	12	Yes	-Blowout contingency pian and relief well planning - Hirng well litting services for disaster management - Sailt control clean-up services - INCF certification for citaling crew (level 2/4) - Insurance coverage to address blowout scenario	4	3	12	Dratting Operations	Drilling Operations
11	Delays in construction of connecting pipeline for offfice by SSGC/ SNGPL	Infrastructure	- Delay in installation of surface facilities - Directive by the GOP to expedite on fast track basis to connect gas to further contribute towards the energy needs of the country.	- Pinancial loss - Delay in work program delivery - Disruption of business	-Coordination with SSGC/ SNGPL to apprise them of development plan and asek commitment for tumed availability of additional capacity through pipeline - Negotiation with SSCC/ SNGPL for enhancement of existing pipeline capacity and timely communication with authorities.	3	3	9	Yes	Commercial agreement	3	3	9	Production	IV-BD/ Commercial
12	Condensate/crude oil transportation risk	Infrastructure	- Delay in finalizing Contract and selection of Contractor	- Roadside incidents - Regulatory issues - Financial toss	- Adequate protections and requirements to be built into the contract to limit legal exposure - Selection of Contractor based on stringent HSE requirements - Special monitoring mechanism to be put in place to ensure integrity of vehicles and	3	3	9	Yes	Follow-ups with concerned Departments	3	3	9	Production	Commercial/ Legal Services/ HSE



					compliances of HSE requirements										
13	Land acquisition issues and complexity in community engagement	Lows, Rutes, & Regulations	- Market conditions - Internal policy Issues - Luck of engagement with focals	- Conflicts - Financial losses - Reputation damage	- Expediting internal/external approval process - Proactive role by land acction: Detailed procedures in place to deal with land acquisition - Active internal procedures in place to deal with land acquisition - Active internal place to deal with land acquisition with the locat comments of CSR plan, Periodic meetings with land owners for act community was, where required - Active liaison with locat authorities / LEAs, where required	3	3	9	Yes	-Engagement of locals for small tasks, daily wagers to create their interest and avoid any oursest. -Appointment of simple point responsibility to handle local community. -Engagement of local tribule leaders/ notables if so required. -Communic attribules if so required. -Communic attribules if so required, -Communic attribules if so required, -Communic attribules if so required, -Communic attribules of -Communic attribules	3	3	0	Production	Land Management CSR/ Securit
14	High staff attrition rate	Personnel Infrastructure	- Market conditions - Internal policy issues - Lack of employee engagement	Delay in work program delivery	-Performance appraisat system in place to reward high performers - Training & development system in place	3	3	9	Yes	- Conduct Employee Engagement Survey - Develop stoff Retention Policy - Implement Succession Planning	3	3	9	Petroserv	HR
15	Poor data quality, data loss of breach	Technology	- Compromised QC - Unauthorized access policy - Cyber attack	- Delay in work program delivery - Disruption of business	- Trainings on document/ data control & QC - Use of cloud-based ERP/ SAP - IT infrastructure audits/ reviews	d	3	12	Yes	Implementation of action plan/recommendations of IT audits/ reviews to protect unauthorized access/ cyberattack	3	3	9	Exploration Petrosery	System
16	Non-Compliance with Legal and Regulatory requirements	Laws, Rutes, & Regulations	- Lack of awareness	- Litigation charges/line - Negative publicity	Departmental level compliance system in place on Regulatory Requirements Matrix	3	э	9	Yes	Training on Regulatory Requirements Matrix	3	э	9	Petroserv	Ordling Operations, Services, HSE
17	Conflicts with locals /egarding waste disposal/ pits/ site restoration	Lows, Rules, & Regulations Natural Environment	- Mot following conditions scribed at the time of hiring of land - Oil/chemical spills - Seepage/ overflow from pits - Mot involving locals (vendors) in waste management	- Detay in work program delivery - Environment damage - Reputation loss	- Roles defined for the Land Management & CSR Sections - Framework for after restoration and integrated water management handbook available - Secondary containment in vigue - Contractor shortfuted and onboard to bicremediate OBH drift cuttings	d	2	а	Yes	Training on integrated waste management and related laws/ regulations	4	2	8	Drätling Operations	Drilling Services/ HSE



Controlled Copy Do Not Duplicate For Internal Use Only

5.2 Job Vulnerability & Hazard AnalysisOGM/P-HSE-5.2(9) Revision Number 9

Original Issue: This Issue: June 25, 2007 November 21, 2025

Updated By: Muhammad Mubashir Abbas Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By: Babar Iftikhar General Manager HSEQ-Security, OGDCL

> Approved By: Ahmed Hayat Lak Managing Director, OGDCL

Change/ Revision Log

#	# Description of Change	
1	Modified: New Logo & Tag Line	

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 003 Job Vulnerability/ Hazard Analysis (JVA/ JHA)	Department / Section ICs	Location HSE IC Permit Issuer	Location IC



Controlled Copy Do Not Duplicate For Internal Use Only

5.2.1 Purpose of JVA/JHA

- A JVA/ JHA shall be intended to provide a structured approach to identifying hazards and incorporating controls measures for those hazards related to tasks.
- If JVA/ JHA shall be required for any task performed under a Permit to Work (PTW). However, there may be exceptions; In such cases, the rationale for not conducting a JVA/ JHA should be clearly stated on the PTW template.

5.2.2 Requirements for JVA/JHA

- Jobs with the worst accident history shall have priority and should be analyzed first.
- JVA/ JHA will be based upon following factors:
 - **Frequency of Accidents:** a job has repeatedly caused near hits or accidents is a candidate for JVA / JHA.
 - Rate of Disabling Injuries: Every job that has caused disabling injuries should be given a JVA / JHA.
 - Severity Potential: Some jobs may not have a history of accidents but may have the potential for a severe injury (high impact ratings).
 - **New Jobs:** Analyses of new jobs and jobs where changes have been made in processes and procedures should follow.
 - SIMOPS (Simultaneous Operations) Jobs: Jobs that involve a number of functional groups or disciplines.
- If JVAs / JHAs shall be attached to the corresponding work permits and discussed during the toolbox talks / safety meetings.
- The following list is designed to assist in determining the requirement for a JVA / JHA and contains jobs that are considered DO NOT require a JHA. This list is not exhaustive and be used as a guide only:

Production – Routine Operations:

- Weekly line of sight gas detector cleaning
- Radiation surveys using the radiation survey meter
- + Lube oil top offs
- Taking water/ oil samples (LP process)
- Draining of sight glasses (to prove levels)
- + Laboratory work
- Greasing LP pumps
- Inventorying activities
- Topping off tempered water tank
- Compressor lubricator rate check
- Greasing production chokes
- Draining liquids from compressors
- Solenoid leakage checks
- + Housekeeping
- Testing export gas H2S levels
- Removal and installation of pressure gauges for calibration from block and bleeds
- Checking oil levels on chemical pumps and topping off
- Backflush process seawater strainers
- ◆ Drills
- Filling of bowzer

Maintenance – Routine Operations:

- + Housekeeping
- Test running emergency generator, fire & Foam pumps
- Test running standby machinery
- Washing gas turbine compressors
- Starting/ stopping gas turbine
- Internal visual gas turbine inspections
- Changing over equipment
- Topping off of oil and water in machinery
- Boiler water tests
- Use of Elec/Mech workshop machinery
- Use of hydraulic press
- Portable equipment testing in nonhazardous areas
- Charging of batteries
- Adding refrigerant
- Routine checking of electric motors
- Foam system checks
- CO2 room checks not including opening release stations
- Visual inspection of 440 volt MCC's prior to resetting overloads
- + Lube oil sampling
- Inspection of Slings, Shackles etc.

5.2.3 JVA/ JHA Development Team

- The Team shall constitute of the following members:
 - Team Lead: Representative from exploration, construction, seismic, production, maintenance or drilling (depending on the scope of work). This person should be experienced in the work and at least at supervisor level.
 - Representative(s) at the "hands on" level ideally, the Job Supervisor who will directly oversee the execution of the Job
 - Technical specialists / engineers who can bring additional knowledge to the assessment (if required)
 - Location HSE Rep. (if required)
 - At a minimum one representative from every discipline or contractor involved in execution of job



Controlled Copy Do Not Duplicate For Internal Use Only

5.2.4 JVA / JHA Responsibilities

- It shall be the responsibility of Job Supervisor to coordinate and conduct JVA / JHA prior to execution of the task.
- Location HSE Representative shall communicate the requirements laid down in this procedure to all employees and contractor's management.
- For activities to be carried out by projects personnel or any contractor inside plant boundary / live areas / process areas (i.e. Brown field), all risk assessments shall be reviewed and endorsed by Permit Issuer.
- In green field (development of new facility / construction sites / projects) outside of plant boundary; all JVAs/ JHAs shall be reviewed and endorsed by designated person as authorized by Location IC.

5.2.5 Modus Operandi: JVA/ JHA

Step 1 – Establish the Context

Establish the context of the scope of work required by the JVA/ JHA:

Complete Section of	of the JVA / JHA Worksheet:				
Job Description	- What will be done?				
	State the specific job to be performed that may have a history of				
	potential for injury, incidents, safety critical, new jobs, jobs changed, new personnel performing job.				
Location	- Where?				
	Identify the location where the work will be conducted.				
JHA Date	- When?				
	Record the date that the JVA/ JHA is being recorded.				
JHA Leader	- Who facilitated the JVA/ JHA?				
	Record the name of the person who facilitated the JHA.				
Review Team	- Who will be involved?				
	Record details of the Department, responsible Job Supervisor for the work and the names of JVA/ JHA participants.				
Hazard Checklist	- Identify applicable Hazards from list				

Step 2 – Break the Job into Logical Steps

Divide each job into simple steps. Number these and describe what is to be done and in what order. Ensure steps are not too complicated or too simple.

Complete Section of the JVA / JHA Worksheet:						
Step No.	How many steps can the job be broken into?					
	Number the steps of the job, i.e. 1,2,3 etc.					
Job Step	What shall be done at each step?					
	Against each step number, briefly describe what is to be done in order					
	of the work to be conducted.					

Note: Consider these in each step

Are there safer methods to achieve the same results?

Are there alternative methods such as avoiding confined space entries via remote device, removing task from a hazardous area, shutting in the process (consider hierarchy of controls).

Step 3 - Identify the Hazards for Each Job Step (Hazards)

For each step of the job, identify all significant hazards associated with the work, whether they are part of the employee's task or part of the job surroundings. For each of these hazards, identify the potential incident that may occur. Also identify any potential control measures that may fail as a result of the activities conducted during the job.

Complete Section	Complete Section of the JVA / JHA Worksheet:						
Hazard	What can happen at each step?						
	What are the potential incidents that could occur from each of the						
	Job Steps?						
	Are there any potential failures of existing controls that could occur						
	as a result of the Job Step?						
	Identify the hazard for each step of the job and the potential						
	incident that may occur.						
	Identify any existing control measures that may be impacted or						
	compromised by the job.						



Controlled Copy Do Not Duplicate For Internal Use Only

Step 4 – Develop Hazard/ Risk Elimination or Reduction Measures

Once the hazards have been identified, hazard / risk reduction or elimination measures shall be developed. When adopting measures to control a hazard, the following Hierarch of Controls should be followed.

The Hazard Control Section of the JVA / JHA shall be completed by following the below given guidelines:

Complete Section of the JHA Worksheet:

Hazard Controls

What is or will be in place to manage or remove the hazards?

For each step of the job, identify the controls in place to manage or remove the hazard. Use the hierarchy of control, i.e. elimination, substitution, redesign, separate, administrate, PPE

Are the controls listed specific and complete?

All of the controls shall be implemented before the job commences, complex controls may not be able to be implemented before commencement of the job – this will require further interim controls to be in place before commencing the job.

Have all the hazards and controls been identified from previous times that this job was completed?

Review any previous JHA Worksheet for this job, ensuring any relevant hazards and controls are included in this JHA worksheet

Step 5 – Calculate the Risk and Determination of Tolerability

The fifth and final step of risk assessment shall be to determine the risk associated with each step of the work tasks. Risk is defined as the product of the probability of occurrence (likelihood) and severity of loss (Consequence) from exposure to a hazard.

Risk Rating (RR) = Consequence (C) x Probability (P)

The Risk shall be calculated as per following 5x5 Risk Matrix (Risk Heat Map / Risk Heat Chart) while risk tolerability/treatment of each step shall be assessed as per the criteria as scribed in the Enterprise Risk Management (ERM) procedure.



Ctho energy Planning: OGDCL's Integrated HSE System Manual

5

Controlled Copy Do Not Duplicate For Internal Use Only



Oil & Gas Development Company Limited

Location / Site:__

3HA No	OGFXXX - HSE - 003(04
Rev. No	
Issue Date:	

Job Vulnerability / Hazard Analysis (JVA / JHA)

#	JOB DESCRIPTI	TON DEPA	RTMENT	RESPONSIBLE PERSON	SUPERVISOR
101/201		TON DEPA	RTMENT	RESPONSIBLE PERSON	SUPERVISOR
101/201		TON DEPA	RTMENT	RESPONSIBLE PERSON	SUPERVISOR
101/201	ROLE				
0200	ROLE				
	Delication of the last of the	NAME		COMPANY / POSITION	SIGNATURE
1 Lea	ader	1931pg-33150-5			
	p. Permit Issuing othority				
	p. Permit ceiving Authority				
4 Rep	p. HSE				
HAZARD	/ RISK CHECKLIST		36	-10	
Slips, 7	Trips and Falls	☐ Access / Egress	☐ Moving Machinery	Manual Handling	Stored Energy
Lifting	Operation	☐ Noise	☐ Illumination	☐Waste Management	☐ Miscommunication
Corres	sive Substance	Use of Oils / Chemicals	SIMOPS	☐ Flaring / Venting	☐ Inadvertent unit / facility trip
☐ Flamm	nable Materials	☐ Explosives	☐ Ignition Source	☐ Hydrocarbon Release	☐ Hydrogen Sulphide
☐ Droppe	ed Object	☐ Working with Pressure	☐ Weather Conditions	☐ Electricity	☐ Working at Height
	e / Over Exertion	☐ Explosives	☐ Isolation	☐ Vehicle/Equip. Movement	

Ref. Section 05 (Planning) of OGDCL's Integrated HSE System Manual Page 1 of 3

OGFXXX - HSE - 003(04)

_	JOB STEPS BREAKDOWN		CONTROL	RISK CALCULATION			RISK TOLERABLE
#		HAZARD		С	P	R	(Y/N)
					t c		
							ĵ.
			Ų.			ļ	
						1	
							j .
							ĵi



OGFXXX - HSE - 003(04)

Prepared by:	Reviewed by:					
Signature (Concerned Departmental/ Sectional In-Charge)	Signature (Permit Issuer)	Signature (Location In-Charge HSE)				
Date:	Date:					
Remarks:						
Approved by:						
Signature (Location In-Charge)						
Date:						

Ref. Section 05 (Planning) of OGDCL's Integrated HSE System Manual Page 3 of 3



Controlled Copy Do Not Duplicate For Internal Use Only

5.3 Legal & Other Requirements

OGM/P-HSE-5.3(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGM/RR-HSE-001 HSE Regulatory Matrix (Preparation/ Updation)	Chief HSE	Manager HSE	GM HSE
OGM/RR-HSE-001 HSE Regulatory Matrix (Compliance Status)	Location HSE	Location HSE IC	Area Manager/ Location IC



Cthe energy Planning: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

5.3.1 General

- HSE Department shall be responsible for identifying the applicable regulatory and other requirements.
- HSE Regulatory Requirements shall include the national/ local regulations related to environment, occupational health & safety e.g.:
 - a) Directorate General Petroleum Concession (DGPC) Guidelines
 - b) Oil & Gas Safety Regulations (Mines Act)
 - c) IEE/EIA Regulations (Pakistan Environmental Protection Act)
 - d) Oil and Gas Regulatory Authority (OGRA) Rules & Regulations
 - e) Exploration and Production Rules (Petroleum Act)
 - f) National Environmental Quality Standards [NEQS] Rules[Pakistan Environment Act]
 - g) Electricity Rules [Electricity Act]
 - h) Wildlife Protection Ordinance [Federal/ Provincial]
 - i) Explosives Rules
 - j) Pakistan Nuclear Regulatory Authority (PNRA) Regulatory Guides
- All applicable laws, regulations and other requirements shall be listed in the Regulatory Requirements Matrix, which is maintained by the HSE Department.
- HSE Section / Department in consultation with all stakeholders shall seek, record to check compliance on all applicable laws, regulations, and other requirements and report on the Regulatory Requirement Matrix on biannual basis.

5.3.2 Access to Regulatory and Other Requirements

- Information related to regulatory and other requirements shall be obtained by contacting the regulatory bodies, browsing the official websites or through industrial associations.
- HSE Department shall track legislative and regulatory developments applicable to the oil & gas industry and area where the facility is located. The information shall be acquired from internal and external sources.
- HSE Department shall respond to the applicable changes by updating the Regulatory Requirements Matrix. The format of Regulatory Requirements Matrix is mentioned below:

				Appli	cable)	
Requirement	Regulation, Law, Recommended Practice	Authority/ Stakeholders	Office Building	Seismic	Drilling	Production	Status of compliance with regulations/ Comments (or Action taken in case of non- compliance)
							•

5.3.3 New & Modified Activities & Services

- Changes to, and development of new activities, processes and services may change OGDCL legal and regulatory obligations. Such changes include:
 - a) Changes in processes and technology, and introduction of new processes/ material substitution;
 - b) Increase, reduction, or modification of the point of sources of emissions and discharges;
 - c) Changes in the inventory of chemicals and other regulated substances;
 - d) Significant expansion or reduction in business activities;
 - e) Facilities addition or relocation;
 - f) Temporary projects, such as construction, installation of new equipment
- Departmental heads shall be responsible for identifying changes in activities, processes and services that may change the facility's legal and regulatory obligations, and to communicate the same to the HSE



Controlled Copy Do Not Duplicate For Internal Use Only

Department/Section.

- Relevant changes may also be identified by the Location HSE Management Review Committee (MRC) meetings or by internal or external audits of the HSE System.
- The HSE Department shall review the reported changes and determine their legal and regulatory impact and impact. When the change triggers new regulatory requirements, the Regulatory Requirements Matrix shall be updated accordingly.
- In addition, the Regulatory Requirements Matrix shall be reviewed at least once every year.
- Based on the changes / amendments in the legislative requirements, HSE Department / Section shall seek any change(s) in the Risk Register and any need to modify & implement relevant HSE Objectives and Management Programs in consultation with all stakeholders.



Controlled Copy Do Not Duplicate For Internal Use Only

5.4 HSE Objectives

OGM/P-HSE-5.4(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by



Controlled Copy Do Not Duplicate For Internal Use Only

5.4.1 HSE Plan

- HSE Plan shall be the cornerstone of planning & goal setting. Development of HSE Plan shall be of strategic process because it involves the best way to respond to the circumstances of business environment whether or not these are known with any degree of certainty. Being strategic, means being clear about objectives, being aware of the organization's objectives and resources, and incorporating both to be able to respond to a dynamic environment.
- An Annual HSE Activity Plan (specimen attached at Appendix A) shall be rolled out on the start of each year and then subsequently every year. The Annual HSE Plan shall be developed by HSEQ Department; reviewed and agreed by concerned management team; approved by MD/ CEO/ concerned Executive Director; and updated annually & "rolled forward" to reflect improved knowledge

Note: Following Table provides "examples" that may be referred to while setting up HSE Plan based on the identified focus areas of Facilities, People, System & Procedure and Failures. The Table provides a glossary of Objectives, Goals & Targets to be considered where applicable.

FACILITIES	PEOPLE	SYSTEMS & PROCEDURES	FAILURES
Technical audits	Incentive schemes	Emergency response training (mock up) drills	Lost Time Injury Frequent Rate
Operational audits	Percent of workforce with approved HSE training completed	Management system audits	Number of near hits per month
Percent completion of maintenance programs	Percent of workers trained (operational) - actual versus plan	Project safety reviews and actions complete	Days off sick those are not caused by reported workplace incidents
Inspections of facilities	HSE awareness programs	ISO 14001/45001 Certification	Total Recordable Injury Rate Rate (=LTI+RWC+MTC)
Management safety behavior audits	Wellbeing programs	Percent completion of planned HSE meetings; Toolbox talks	Number of spills, leaks, fires, injuries as a percent of historical average
Number of toolbox meetings/quarter	Staff and contractor employee turnover	Percent of workforce undergoing health screening.	Hazard/unsafe behaviors reported
Project HSE plan compliance	Percent line managers/superviso rs achieving 100% HSE competency	Percent complete of HSE action plans within a challenging timescale	Following an incident: identifying learning points and instigating actions to prevent recurrence
Written scheme of verification implemented	Number of hazards reported per month	Percent compliance with legal compliance register	Re-use/ Reduce/ Recycle/ Refurbish/ Repair Success
Safety equipment inspections	Senior management site visits	Percent completion of planned HSE audits	Energy efficiency/conserva tion
Calibrations	Percent attendance in HSE MRC meetings	Percent of job safety analyses performed	Emissions / Vent / Flare
Safe disposal of hazardous waste	Percent complete safety induction	Closeout from action tracking register	Bio-diversity

5.4.3 HSE Objectives

All locations shall establish HSE Objectives based on Annual HSE Plan. As next level down from the Annual HSE Plan, the location HSE Plan shall be much more detailed with all Objectives further subdivided into actions and



Controlled Copy Do Not Duplicate For Internal Use Only

responsibilities. Progress – actual versus planned – shall be monitored and discussed in HSE Management Review Committee (MRC) Meetings.

- Location HSE Plan shall be developed and rolled out within one month of the rollout of Annual HSE Plan.
- Also, based on the results of risk assessment, HSE Section in consultation with the Sectional ICs, shall set the Objectives using Risk Cards to control the Significant Risk Ratings.
- The HSE Plan shall be reviewed by the concerned Sectional IC and then discussed in the Location HSE MRC meetings for approval.
- The approved targets as per HSE Plan shall be kept with the HSE Department/ Section and displayed on notice boards, bulletin boards, and/ or electronic/ print media for easy access to employees and stakeholders.
- Progress to be reviewed by Location Management on fortnightly / monthly basis.
- When HSE performance falls below desirable level, or when there is a possibility of a non-compliance against a law or regulation, or in order to avail an opportunity for the sake of improvement, establishment of appropriate HSE Objectives shall be recommended as well.

5.4.4 Setting HSE Objectives

- The objectives shall define the goals to be achieved given in subjective terms and the target is the measurable and specific indicator related to objective. Overall following SMART approach shall be adopted:

 S: Simple

 M: Measurable

 A: Attainable

 R: Realistic

 T: Time-bound
- While executing SMART approach, impact (risk) control hierarchy shall be used to fill the HSE variances (as appeared from the results of HSE Risk Assessment).
- While formulating objectives, the following table shall be consulted to assess the vulnerabilities and check the "effectiveness" of existing controls in a given situation, which is based on lifecycle perspective of Man-Machine-Material-Method.

Machine-Marenc										
	1AM	1								
DESIGN STANDARDS	Systems or sub system elements are designed for a more severe duty than they experience	-)	The systems or sub system elements were constructed to standards lower than the current norm							
SUPPLIER (CONTRACTOR / SUB-CONTRACTOR / SERVICE COMPANY) LEVEL OF COMPLIANCE	The suppliers are more conscious and never compromise on HSE	Scenarios, where targets and objectives	The suppliers are reluctant to implement and follow HSE e.g. to remain on the lower cost side							
COMPETENCE OF OPERATOR	The operators are well- trained and skilled to operate the process systems or sub system element	to be defined →	The operators are untrained and unskilled to operate the process systems or sub system element							
MATERIAL										
	MATER	IAL								
QUALITY OF COMPONENTS (MATERIAL)	The quality of components (material) is better than the industry norm	Scenarios, where targets and objectives to be defined ->	Severe service conditions apply, e.g. highly corrosive							
COMPONENTS	The quality of components (material) is better than the	Scenarios, where targets and objectives to be defined >								
COMPONENTS	The quality of components (material) is better than the industry norm	Scenarios, where targets and objectives to be defined >								



Controlled Copy Do Not Duplicate For Internal Use Only

	withstand design conditions	to be defined →	known to have severe fatigue
ACCEPTANCE CRITERION	OGDCL has a criterion to verify/ validate critical jobs and consignments to formally rule-out any potential faults and failures	Scenarios, where targets	OGDCL has not set standardized criterion to verify/ validate critical jobs and consignments
PRODUCT CHARACTERISTICS	HSE features are intertwined in the product quality as per agreed specs & regulations before dispatch	and objectives to be defined →	HSE features are overlooked in the product quality as per agreed specs & regulations before dispatch

- Following factors shall be considered before finalizing the objectives:
 - Financial constraints
 - Operational constraints
 - Business constraints

5.4.5 Review and Closeout

HSE Department/ Section shall monitor the progress of HSE Plan on quarterly basis or as deem practical depending upon the nature of case and reports it to the management immediately or in the Location HSE Management Review Committee (MRC) meetings.

5.4.6 Amendment of HSE Plan

- Issues related to new developments or to new or modified activities, processes and services or changes due to lifecycle perspective shall be reported to the HSE Department/ Section. Such projects may include:
 - a) Significant expansion, reduction or modification of facility;
 - b) New suppliers (contractors, sub-contractors, service companies);
 - c) Temporary project activities.
- Location HSE Management Review Committee (MRC) shall review the proposed changes and determine whether the HSE Plan needs to be amended or updated to address the change.



Appendix A
Annual HSE Activity Plan (Specimen)

		An	nual HSE Activity Plan (Spec	cimen)	
#	TASK		DESCRIPTION OF TASK	RESPONSIBLE	STATUS
		1.	Management System Certifications	Corporate HSEQ	
		2.	HSE KPIs (related to facilities; people;	Location InCharge →	
		_	systems & procedures; & failures)	Corporate HSEQ	
		3.	Management Walk Around (MWA)/ STOP Intervention Program	EDs/ HODs/ Area Managers	
A.	Leadership & Commitment	4.	HSE Leadership & Commitment Training for All Sectional In-Charges/ Area	Corporate HSEQ	
		5.	Mangers Regulatory (CIM/ EPA/ OGRA)	Location Management →	
		6.	Compliance Engineering Change Requests (ECR) Reviews	Corporate HSEQ ECR Committee	
		7.	HSE Training Need Assessment	Location InCharge/ Location	
В.	Competence, Training and	8.	Update of PPE Need Assessment Matrix	HSE InCharge Respective Sectional InCharges/ Location HSE	
Δ.	Development	9.	Onsite HSE Training (Awareness) Planner and Execution	InCharge Location HSE InCharge/ HSE Development Facilitator (DF)	
		10.	Hazards Identification & Risk Assessment	and as assigned Location InCharge → HIRA Team/ Location HSE	
C.	Hazards Identification & Risk	11.	(HIRA) Plan and execution Development/ Updation of HSE Risk	InCharge Sectional InCharges →	
С.	Assessment		Register & Risk Dashboard	Location InCharge	
		12.		Sectional InCharges	
			Jobs' Hazard Analysis (JHAs)	Sectional InCharges	
		14.	Roster	Location HSE InCharge → Location InCharge	
		15.	Management of Emergency Response Post	Location Management	
D.	Emergency Preparedness &	16.	Emergency Drill Planner	Location HSE InCharge → Location Management	
υ.	Response	17.	Scenario-based (Mockup) Emergency Drills	Location Management/ Location HSE InCharge	
		18.	Safety (Proactive) Monitoring Plan and execution	Sectional InCharges	
		19.	Calibration of Safety Critical Equipment	Sectional InCharges	
			Submission of HSE Plans & Protocols	Reps. of Contractors/ Service	
		20.	Compliance (Risk Control Mechanism)	Companies	
		21.	Pre-Job Meetings with the Reps. of Contractors/ Service Companies	Sectional InCharges	
E.	Contractor Safety	22.	PPE Compliance by Subcontractors & Local Labors	Sectional InCharges	
	Management	23.	Performance Gauging of Contractors (High Risk Jobs)	Location Management	
		24.	Contractors HSE Awareness Activities/ Inductions (HSE Pledge Handbook For Contractors & Service Companies)	Location Management/ HSE InCharge	
		25.	Journey Management & Safe Driving Instructions (Leaflet)	Location TPT InCharge	
F.	Road Safety Management	26.	Onsite Awareness for Drivers (Defensive Driving)	Location HSE InCharge / External Trainer	
		27.	Vehicular Inspections	TPT InCharge	
_			Acknowledgment of Safe Drivers	Location Management	
		29.	HSE Routine/ Daily Reporting	Location HSE InCharge	
	Measuring	30.	Analysis & Compliance of HSE Audit Observations	Location HSE MRC Members	
G.	Performance	31.	Onsite HSE MRC Meetings	Location HSE MRC Members	
			•	Location HSE InCharge →	
		32.	HSE Performance Reports Toolbox (Safety Talks)	Location InCharge → H.O. Sectional InCharges	
			STOP Intervention/ Observation Tours	Location Management/	
		35.	Hazard Hunt Program (HHP)	Sectional InCharges Hazard Hunt Teams	
Н.	HSE Campaigns/ Readiness		Celebration of HSE Events/ HSE Reward & Recognition	Location Management	
		37.	Health Awareness, Campaigns &	Location Medical InCharge	
		38.	Wellness Initiatives Maintanance of plants / saplings	→ Medical Services H.O.	
		აბ.	Maintenance of plants/ saplings	Location Admin. InCharge Location Medical InCharge/	
		39.	Health Monitoring Plan and execution	Location Medical InCridige/ Location HSE InCharge/ Location Admin InCharge	
I.	Occupational Health (OH)	40.	Occupational Health Assessment Plan & Trade-wise Assessment Tests of Employees	Location Medical InCharge	
1.	ricum (on)	41.	Occupational Health Trainings (First Aid; Respiratory Protection; Stress	Location Medical InCharge	
			Management/; Seasonal Diseases &		
	Environment	40	Management/; Seasonal Diseases & Hygiene) Environment Monitoring Plan and	Location Lab. InCharge/	



		43. Air Emissions Data Analysis	Location HSE InCharge → H.O.	
		44. Maintenance of Air Emitting Point Sources (Generators etc.)	Location Mechanical InCharge	
		45. Carbon Footprint Study	Carbon Footprint Study Team	
		46. Onsite Waste Management Plan	Location HSE InCharge	
		47. Waste Handling Awareness Sessions	Location HSE InCharge	
		48. Storage & Maintenance of Disposal Site/ Treated Waste	Location Material InCharge	
K.	Waste Management	49. Pre-&-Post Treatment QC of Waste/ Pits	Location InCharge/ Location Lab InCharge/ Outsourced (EPA Certified Env. Labs)	
		50. Safe Disposal of (Hazardous) Waste	Location InCharge/ Location Material InCharge	

Preamble

Terms & Definitions

Context of OGDCL

Leadership

Plannina

Support

Operation

Performance Evaluation

Improvement

Reference Standards

ISO14001:2015 & ISO45001:2018

Clause 7.1: Resources.

Clause 7.2: Competence.

Clause 7.3: Awareness.

Clause 7.4: Communication.

Clause 7.5: Documented information.

PSM (22 Elements) Model

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 ways communication in prevention of

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 Pevelopment: This element signifies that all the communication is a second performance of the communication in the communication is a second performance of the communication in the communication in the communication is a second performance of the communication in prevention in the communication in the communication in prevention in the communication in

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.

This Section's Objectives

- Support HSE System by providing necessary resources.
- Support HSE System by ensuring that workforce is competent.
- Support HSE System by making workforce aware of their roles, duties, accountabilities and authorities.
- Support HSE System by creating effective communication processes.
- Support HSE System by facilitating internal communications.
- Support HSE System by establishing external communications.
- Support HSE System by managing and employing documented information.

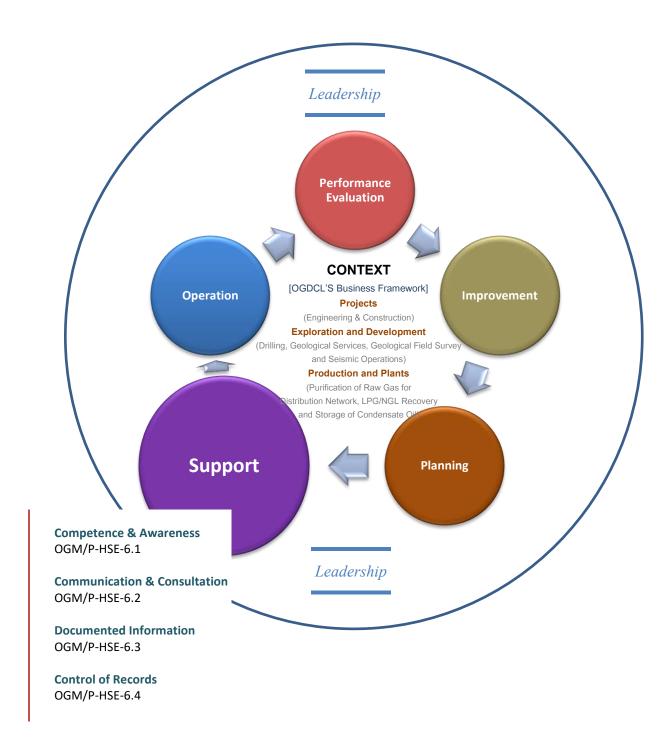
Associated Documents

- 🗎 HSE Short Awareness Session (Training) Planner
- Emergency Drill Planner
- Toolbox Talk Program
- HSE Short Awareness Session Attendance Record
- HSE Short Awareness Session Evaluation Form
- Product Safety Data Sheet (PSDS)
- External Environmental Complaint (EECS) Sheet
- Master List of Documents
- List of External Documents
- Document Change Request (DCR) Form
- Distribution Log

Applicable Documents

-- Nil --





Controlled Copy Do Not Duplicate For Internal Use Only

6.1 Competence & Awareness

OGM/P-HSE-6.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 005 Onsite Short Awareness Session (Training) Planner	Location HSE IC	Location HSE MRC	Location IC
OGF – HSE – 006 Emergency Drill Planner	Location HSE IC	Location HSE MRC	Location IC
OGF – HSE – 007 Toolbox Talk Program	Location HSE IC	Location HSE MRC	Location IC
OGF – HSE – 007A Toolbox Talk Evaluation	Location HSE Rep.	Sectional Rep. / Supervisor	Location HSE IC
OGF – HSE – 008 HSE Short Awareness Session Attendance	All Concerned	Location HSE IC	Location IC
OGF – HSE – 009 HSE Short Awareness Session Evaluation	All Concerned	Location HSE IC	Location IC
OGF – HSE – 010 Training Certificate	Trainer / Instructor	OGTI	OGTI



Controlled Copy Do Not Duplicate For Internal Use Only

6.1.1 General

- The objective of HSE System awareness and training program shall be to ensure that all personnel know:
 - a) the importance of HSE management system and their roles in maintaining it;
 - b) significant vulnerabilities of their work on environment, health & safety, potential consequences of departure from procedures, and benefits of improved personal performance; and
 - c) emergency preparedness and response requirements.
- HSE trainings shall be in any format like demonstrations, mockup drills, classroom instruction, and participation in external seminars or conferences; whereas general awareness on HSE shall also be communicated through banners/postings, HSE awareness programs/ events, etc.

6.1.2 HSE Competence and Skill Determination

- HSE and all other Departmental/ Sectional Heads shall be responsible for ensuring that personnel whose work can cause significant vulnerabilities (hazards) are sufficiently competent and skilled in performing their work.
- If workers are deemed "not" to be competent, refresher / remedial training of existing workforce members, recruitment of additional personnel or hiring / contracting of external expertise in order to acquire the necessary competence shall be arranged. The actions taken to raise competence to the required level shall be evaluated for effectiveness by means of the following mechanisms:
 - Interlocution of the workers on their understanding of their competence to perform the relevant tasks following the prescribed training;
 - Assessment of competence of the workers by observing them undertake the relevant tasks following the prescribed training;
 - Peer review or supervision following the required training.
- © Competence requirements for individual tasks shall be determined by considering the following factors in deliberations:
 - The education, training and experience required to undertake the role and the re-training necessary to maintain competence;
 - The work environment;
 - The preventive and control measures arising from the risk assessment process;
 - The requirements applicable to the HSE management system;
 - The potential consequences of compliance and non-compliance, including the impact on the worker's health and safety;
 - The duties and responsibilities associated with the roles;
 - The complexity and requirements of operating procedures and work instructions;
 - The results from incident investigations;
 - Legal and other requirements;
 - The necessary updating of the competence made necessary by context or work changes;
 - Individual capabilities, including experience, language skills, literacy & diversity.
- Personnel who have proven experience in operating relevant processes and equipment shall not "necessary" be required to undergo any formal HSE training; however they may require behavior-based HSE sessions to avoid complacency.

6.1.3 Identification & Assessment of HSE Training Needs

- HSE Monthly Reports and Minutes of MRC Meetings shall be a regular ongoing source of determining the HSE performance levels and identifying the HSE training needs of the personnel.
- At the start of each year, HSE Department / Section, in consultation with the Department / Section heads, shall review the current HSE performance levels. Following factors shall be taken into account while identifying the gaps:
 - a) Changes in the HSE System, such as new or revised procedures, or changes in the HSE policy;
 - b) Changes in processes, or operations;
 - c) Changes in applicable laws, regulations, and other requirements;
 - d) New significant HSE issues, objectives, or targets;





Controlled Copy Do Not Duplicate For Internal Use Only

- e) New management programs;
- f) Results of Internal HSE Audits of the HSE System;
- g) Non-compliance against applicable laws, regulations, and other requirements;
- h) Non-attainment of specified HSE performance, or decreasing performance;
- i) Inadequate performance of individuals or groups of personnel.
- HSE Department / Section shall carry out HSE Training Need Assessment (TNA) based on core HSE competencies in consultation with the Department / Section Heads on the following format (specimen):

	HSE	HSE Training Need Assessment (TNA) of								Depo	artmer	nt/ Se	ction								
		1		1	Esse	ntial tı	aining	gs req	uired	to imp	art H	SE cor	npete	encies	in an	indiv	idual			1	
Name & Designation Role	HSE Laws & Regulations for oil and gas E&P Sector	2 Enterprise Risk & Crisis Management	Emergency Preparedness & Response Systems	Rules of Permit To Work (PTW) System & Right Use of PPE	Pollution Elimination & Waste Management Methods	9 Journey Management & Defensive Driving	Legonomics & Office Safety (Monitoring, Measurement & Compliance)	© Electrical Safety (Monitoring, Measurement & Compliance)	Mechanical Safety (Monitoring, Measurement & Compliance)	Process & Chemical Safety (Monitoring, Measurement & Compliance)	Control of Service Companies, Suppliers and Contractors	Ti First Aid & CPR	E How to conduct Effective Toolbox / Safety Talks	Right Use of STOP Cards	15 Management of Change (MOC)	9 Accidents Prevention & Investigation through RCFA	Health & Hygiene	8 HSE Auditor	5 Train The HSE Trainer	Process Safety Management	O Competence Level in Percentage

Legend:-

- Exempt from this training/competency
- Not yet capable to perform task as per HSE requirements and/ or demonstrated poor HSE Performance; hasn't
 - participated in the training Some capability to perform task as per HSE requirements and/or demonstrated average HSE Performance; training
- completed but found ineffective Capable to perform task as per HSE requirements and/ or demonstrated good HSE Performance; however refresher
- course required
- Fully capable to perform task as per HSE requirements and/ or demonstrated $\underline{\text{excellent}}$ HSE Performance; training/ refresher completed & followed-up quite effectively

 Expert to perform task as per HSE requirements, even can train others

6.1.4 HSE Training Plan

- Based on TNA, HSE Department/ Section shall prepare a biannual / annual HSE Training Plan/ Program.
- Annual HSE Training Planner may contain following essential trainings:
 - + HSE Laws & Regulations for oil and gas E&P Sector
 - Enterprise Risk & Crisis Management
 - Emergency Preparedness & Response Systems
 - Rules of Permit To Work (PTW) System & Right Use of PPE
 - Pollution Elimination & Waste Management Methods
 - Journey Management & Defensive Driving
 - Ergonomics & Office Safety (Monitoring, Measurement & Compliance)
 - Electrical Safety (Monitoring, Measurement & Compliance)
 - Mechanical Safety (Monitoring, Measurement & Compliance)
 - Process & Chemical Safety (Monitoring, Measurement & Compliance)
 - Control of Service Companies, Suppliers and Contractors
 - First Aid & CPR
 - How to conduct Effective Toolbox / Safety Talks
 - Right Use of STOP Cards
 - Management of Change (MOC)
 - Accidents Prevention & Investigation through RCFA





Controlled Copy Do Not Duplicate For Internal Use Only

- + Health & Hygiene
- **+** HSE Auditor
- **Train The HSE Trainer**
- Process Safety Management
- Personal Protective Equipment: Location management shall ensure that all employees, contractors, and visitors required to wear PPE are trained to know the followina:
 - When PPE is required.
 - What PPE is required?
 - How to properly wear, remove and adjust the PPE.
 - What are the limitations of the PPE?
 - Proper care, maintenance and disposal of PPE.
- Personnel shall demonstrate an understanding of the training and show their ability to use PPE properly before being allowed to perform work. Retraining should be required if:
 - There are changes at the work site that impacts the previous training.
 - There are changes to the PPE used at the work site.
 - There are inadequacies in the individual's knowledge or use of the PPE.
- Permit To Work (PTW) System: To ensure that work is done safely and efficiently, training on Permit To Work (PTW) System shall be arranged. These shall be specific to hazardous areas & jobs and involve procedures to request, review, authorize, document and most importantly, de-conflict tasks to be carried out by front line workers. Before authorizing an individual for permit issuance or receiving, he shall have to undergo an evaluation on a standardized criterion to get his competence assessed. This evaluation shall be conducted by Location HSE Rep.; however formal authorization shall be granted by Location InCharge on recommendation of by Location HSE Rep.
- Pollution Prevention: Awareness sessions on Pollution Elimination & Waste Management Methods shall be arranged to equip workforce members with the knowledge of different environmental monitoring techniques for water, noise, air, and wastes; how to interpret the impacts of pollutants; and the techniques available to eliminate the pollutants and manage waste.
- **Emergency Preparedness & Response:** Effective emergency preparedness and response shall be achieved by implementation of the incident command system. Trainings to successfully implement ERP on fires, BLEVE, natural disasters, etc. highlight the need to incorporate incident command system in incidents such as well blowouts, fires, personnel injuries, pipeline ruptures, spills and uncontrolled releases.
- Defensive Driving: Location management shall support and encourage defensive driving. Employees authorized to drive a company vehicle shall be required to participate in a company sponsored defensive driving course.
- Health Awareness, Campaigns & Wellness Initiatives: In order to promote wellness & healthy lifestyle, health awareness information about common medical problems, seasonal diseases, epidemic medical threats, chronic diseases, their complications and their management shall be provided by Medical Services department to workforce members as follows:

Medium	Detail	Frequency
Handouts/ posters	 Handouts/ posters shall be printed about the common medical problems, seasonal diseases, epidemic medical threats, chronic diseases, their complications and their management. Copy of health awareness by handouts/ posters shall be placed or pasted at prominent suitable places at the plant. 	Quarterly
Newsletters	 Occupational Health Newsletters shall be published containing clinical statistics of general interest, highlights of medical activities and awareness articles on important medical problems. Newsletters shall also be sent through E-mail and request be made to communicate the contents to those who don't have access to mail. 	Quarterly

Controlled Copy Do Not Duplicate For Internal Use Only

Trainings	Awareness sessions to employees about healthcare subjects of importance and epidemic medical threats shall be arranged. Following must be covered: First Aid: The Advance First Aid team may provide additional medical training, which equips them with the skills to assist Location Doctor in emergency situations. The course contents may be designed by the Location Doctor in coordination of HSE with particular emphasis on the techniques and aspects of care considered important when escorting a seriously ill, injured casualty e.g. monitoring of vital signs, transportation of casualty (s), triage etc. Basic Life Support (BLS)/ Cardiopulmonary Resuscitation (CPR) Healthy Lifestyle to Reduce Coronary Risk Factors Schedule of presentation shall be embedded with Onsite Training Planner and communicated through E-mail and circulars.	Biannually
Walk Promotion Campaign	Walk Promotion Campaigns shall be organized to encourage employees to be physically active and walk more whereby they also benefit from seeing positive messages & information that reassure them to participate in such programs more often.	Annually
Sports	Sports events shall include tournament of table tennis, cricket, football, hockey, etc. types of matches and be organized as a regular feature of the company.	Annually

6.1.5 Onsite Scenario Based Emergency Mockup Drills

- Location IC shall ensure that all personnel designated for specific emergency response activities are adequately trained.
- Location HSE Department/ Section shall prepare an annual Emergency Drill Plan for probable scenarios like:

#	Drill Scenario	Facilitator	Target Audience	Frequency
a.	Fire	Fire Rep.	All Employees	Monthly
b.	Explosion	HSE Rep.	All Employees	Quarterly
c.	Toxic Gas Leakage	HSE Rep.	All Employees	Quarterly
d.	Chemical/ Oil Spill	HSE Rep.	All Employees	Quarterly
e.	Electrical Shock	HSE Rep.	All Employees	Quarterly
f.	Burst Gas Pipeline	HSE Rep.	All Employees	Quarterly
g.	Snake Bite	Medical Rep.	All Employees	Quarterly
h.	Natural Calamity/ Disaster	Admin. Rep.	All Employees	Semi Annually
i.	Pits overflow/ seepage	HSE Rep.	All Sectional ICs	Semi Annually
j.	Oil Tanker Turn Turtle	HSE Rep.	Commercial	Quarterly
k.	Drowning	Medical Rep.	All Employees	Semi Annually

Standardized template shall be used for recording Emergency Drill Report.

6.1.6 HSE Training Record and Effectiveness

Participation in all HSE specific trainings and general orientation shall be recorded. HSE training record of each employee shall be maintained by Location's HSEQ Section as follows:





Controlled Copy Do Not Duplicate For Internal Use Only

Name of Em	iployee:			
Employmen	t No.:			
Designation.	•			
DOJ:				
Location:				
Training Date	Title of Training	Training Hours	Trainer's Name	Result (Qualified/ Reappear)

- © Competence (i.e. applying skill, knowledge into work & attitude) acquired (gained) through experience shall be identified and recorded in the form of Experience Certificates or biodatas, which shall also be maintained by HSE Department/ Section.
- HSE Department / Section shall follow-up the implementation of HSE Training Plan/ Program and report the progress to the Location HSE Management Review Committee (MRC).
- However, it shall be the primary responsibility of Location IC to oversee the effectiveness of HSE sessions in terms of best-utilization of the training delegates. For that prescribed template shall be used.



Controlled Copy Do Not Duplicate For Internal Use Only



OIL & GAS DEVELOPMENT COMPANY LIMITED Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other) OGF/XXX-HSE-005(01)

ONSITE HSE TRAINING (AWARENESS SESSION) PLANNER FOR YEAR _

[based on Training-Need-Analysis (TNA)]

Date	Duration	Time	Topics	Instructor/Facilitator	Target Participants	Venue
et .						**
			HAS BEEN PREPARED UNDER T	HE SECTION 6.0 "SUPPORT" O	F OGDCL INTEGRATED HSE	SYSTEM MAN
		D BY MD&CEO OO	GDCL. TICIPATION WILL BE MONITOR	ED SO THAT AWADENESS &	CONTENT AT IMPROVEMENT	IN THEIR
		EAS WOULD BE A		ED SO THAT AWARENESS &	CONTINUAL INFROVENIENT	IN THEIR
Pr	epared by		Rev	iewed by	Apr	proved by
	**************************************			39/v4005004/92 # 1	0.51	ACATHETINA CHARLES
Sectio	n 06 (Support)	of OGDCL's Integra	ted HSE System Manual			Page 1

00)(OIL & GAS DEVELOPMENT COMPANY LIMITED Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other)

EMERGENCY DRILL PLANNER FY

SCHEDULE S/ NO TITLE SCOPE / SCENARIO VENUE Planned Actual Planned Actual Planned Actual Actual Planned Actual Actual

Notes:

1) THIS PLAN HAS BEEN PREPARED UNDER THE SECTION 6.0 "SUPPORT" OF OGDCL INTEGRATED HSE SYSTEM MANUAL DULY APPROVED BY MD&CEO OGDCL.

2) THE ABOVE MENTIONED DATES ARE JUST THE PROPOSED DATES; THE EMERGENCY SURPRISED DRILLS WOULD BE CARRIED OUT AT EITHER ON THE ABOVE DATES, ONE DAY BEFORE OR AFTER THE PROPOSED DATES TO CHECK THE ACTUAL PREPARATION OF THE EMERGENCY TEAMS & EMPLOYEES.

Prepared by	Reviewed by	Approved by

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 1 of 1





Controlled Copy Do Not Duplicate For Internal Use Only

OGF/XXX - HSE - 007(01)



OIL AND GAS DEVELOPMENT COMPANY LIMITED

Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other)

TOOLBOX TALK PROGRAM FY

Department / Section: ___

#	Topic	Talk Leader/Initiator	Frequency	Proposed Date/Time	Proposed Venue	Target Participants
1			Weekly			
2			Weekly			
3			Weekly			
4			Weekly			
5			Weekly			
6			Weekly			
8			Weekly			
9			Weekly			
10			Weekly			

Note:
1) THIS PLAN HAS BEEN PREPARED UNDER THE SECTION 6.0 "SUPPORT" OF OGDCL INTEGRATED HSE SYSTEM MANUAL DULY

APPROVED BY MD&CEO OGDCL.

2) THE EFFECTIVENESS OF THE PARTICIPATION WILL BE RECORDED SO THAT IMPROVEMENT IN THEIR RESPECTIVE AREAS WOULD BE ACHIEVED.

Approved By

Consulted By Reviewed By Approved By Prepared By Signature Concerned Domain Expert Signature Location In-Charge Signature Members - Location HSE MRC

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 1 of 1



Oil & Gas Development Company Limited OGF/XXX-HSE-007A(00)

Location: (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other)

Toolbox Talk Evaluation Template

	72.2		ETAILS	
	/ Department:	<u> </u>		
Supervi	sor:			
Date:				
Time:				
Descrip Be Perf	tion Of Task(s) To ormed:			
	ion On bilities / Impacts ted With Task(s):			
Require	ble Procedural ments Reviewed e details):			
Hazards / JHA) I	nerabilities / s Assessment (JVA Discussed With rce (mention :			
			ENDANCE	
#	PARTICIPANT	NAME	DESIGNATION	SIGNATURE
			8 =	
			9	
			ORSEMENT	
Toolbox	 Talk Conducted by 	:		
		1		
Cianata	Iros			
Signatu				
	re: eness checked by:	e-		

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual





0	0	3	e.	the enterpy
~	u	-	-	

DATE:

Oil & Gas Development Company Limited

OGF/XXX - HSE - 008(00)

HSE SHORT AWARENESS SESSION

ATTENDANCE SHEET

TITLE					
REFERE	NCE				
DURATI	ION				
VENUE		T.			
NO. OF	FRAINEES	76			
FACILIT	ATOR	14 10			
		1			
#	PARTICI	PANT NAME	DESIGNATION	OG NO.	SIGNATURE
SIGNAT	URE (FACILITAT	OR) :	1		

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 1 of 1





6 Support: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only



Oil & Gas Development Company Limited

OGF/XXX - HSE - 009(01)

Location: (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other)

HSE SHORT AWARENESS SESSION					
EVALUATION TEMPLATE					
Lecture Title:		Venue:			
Lecture Delivered By: Lecture Date/ Time:					
LECTURE MATERIAL:					
Parameters	Strongly Dissatisfied	Dissatisfied	Average	Satisfied	Strongly Satisfied
Contents of course	- 49	Į.	3.5		
Practical information on subject					
Readability of course material					
. Formatting					
 Sample Examples What information is missing or lacking in 					
ECTURE PRESENTER (overall): Parameters	Strongly	Dissatisfied	Average	Satisfied	Strongly
	Dissatisfied	21000000			Satisfied
Presentation & Teaching Skills					
. Clarity of Presentation					
Two-way Communication		ç.			
Ability to answer questions					
Use of practical examples					
 What area(s) do you think the tutor need 	ds to improve?				
OVERALL LECTURE'S PERFORMANCE:					
Parameters	Strongly Dissatisfied	Dissatisfied	Average	Satisfied	Strongly Satisfied
Meeting your expectations					
5. Learning experience	E				
6. Relevance to your work					
7. What areas need to be emphasized or i	mproved to make the over	all course more effect	ive and useful?		
		1.1			
		7			





Controlled Copy Do Not Duplicate For Internal Use Only



□ Questioning ability

☐ Personal attributes

☐ Understanding as a behavioural content

Oil & Gas Development Company Limited OGF/XXX-HSE-009(01)

Loca	tion: (EFP/FGCP/Seisr	nic Party/Drilling Rig/Field/Plant/Oth	er)	
TRAINEE'S EVALUATION (to gauge his / her performance)				
Present Designation:		Qualification:		
Trainee's Evalua	ation	Effectiveness / Objectiv	e 1	
Trainee's Performance	Presenter's Signature / Date and Final Remarks	How this short awareness session/ lecture has been useful or can be made useful in near future?	Location HSE IC Signature / Date and Final Remarks	
Attention and participation				
	Qualification / Grade:			
	□ Excellent			
Contribution to feedback	□ Good			
	□ <u>Average</u>			
	□ <u>Poor</u>			
Contribution to learnwork				
Problem solving ability				

Copy only to most concerned person e.g. PC/ OM/ FM/ PM/ Area Manager/ Manager HSEQ:-Date:

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 2 of 2

6.2 Communication and Consultation

OGM/P-HSE-6.2(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Added: Additional Considerations regarding pipeline visibility

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 011 Product Safety Data Sheet (PSDS)	Location Lab. IC	Location HSE IC	Location IC
OGF – HSE – 012 External Environmental Complaint Sheet (EECS)	Complainant → Location HSE Rep.	Location IC	GM HSE
OGF – HSE – 013 Inter Office Memos Format	HSE Department H.O.	Manager/ Chief HSE	GM HSE

Controlled Copy Do Not Duplicate For Internal Use Only

6.2.1 Internal Communication

The internal communication channels used for communicating HSE information shall mainly include (but not limited to):

	HSE Information	Internal Communication Channel
a)	HSE Policy, Procedures & Work Instructions	 Website / Newsletters / Inter Office Memos / Bulletin & Notice Boards Safety Handbooks
b)	Identification & Management of HSE vulnerabilities, impacts (Risk Register) and Objectives & Management Programs	 Training & Awareness Sessions STOP Cards Toolbox Talks PTW/ Energy Isolation Standardization through Color Coding Schemes Area Classification & Signs / Labels Minimum Approach Distance (Safe Distance Communication) HSE Awareness Weeks / Workshops / Seminars
c)	Hazardous Materials / Chemicals / Processes	Signs / Labels / SDS/ PSDSToolbox TalksPTW/ Energy Isolation
d)	Feedback on HSE System and HSE System Performance	HSE Management Review Committee (MRC) MoMsSTOP Cards
e)	Lessons Learned From Incidents Investigations	Toolbox/ Safety TalksSafety Alerts
f)	Progress in eliminating hazards and associated OH&S risks	ERPsHSE Awareness Weeks / Workshops / Seminars
g)	Progress with consultation and participation of workers	
h) i)	Operational Changes Suggestion and Feedback from Personnel	

6.2.1.1 Communication of HSE Policy, Procedures & Work Instructions

- HSE policy shall be documented in the HSE System Manual and shall be posted in all locations. Revisions of the policy shall be communicated through memos. Personnel shall also be made aware of the significance of policy through training sessions and informal meetings.
- Procedures and work instructions shall be issued formally to the relevant departments and sections and controlled.
- HSE Policy, pertinent procedures, work instructions and handbooks shall also be communicated to the service companies, suppliers and subcontractors to ensure compliance.

6.2.1.2 Toolbox (Safety) Talk Program

- Toolbox Talk shall be done on daily or weekly basis as per nature of operations / jobs / project activities.
- Topic shall be chosen that is relevant to the audience; one that shall create a discussion; a two-way communication; either an in-internal topic shall be used e.g. an incident that happened on site the week before, new work hazards, or one generated from the Toolbox Talk Programme.
- The talks shall take place directly in the workplace, whether it is a production site, plant area, and workshop or at a construction site where between 4 and 10 in number shall be the most effective audience.
- Toolbox Talks shall be monitored for their effectiveness to generate interest in the topic by building up the discussion point by point.
- Signatures from delegates shall be obtained to confirm attendance and to maintain record.



Controlled Copy Do Not Duplicate For Internal Use Only

6.2.1.3 Communication of Hazardous Materials/ Chemicals / Process

(Hazardous Materials Identification System)

■ The four bars shall be color-coded, using the modern color bar symbols and the number ratings as follows:

0 = Insignificant hazard; 1 = Slight hazard; 2 = Moderate hazard; 3 = High hazard;

4 = Extreme hazard

Type of Hazard

Health

Flammability

Physical Hazard

Personal Protection

HMIS Color Bar

Blue

Red

Orange

White

The color bar is not for emergencies and is used to convey broader health warning information.

6.2.1.3.1 Permanent signs

- Permanent signboards must be used for signs relating to prohibitions, warnings and mandatory requirements and the location and identification of emergency escape routes and first-aid facilities.
- Signboards and/or a safety color must be used to mark permanently the location and identification of firefighting equipment.
- Signboards on containers and pipes must be placed as per material/ product they are carrying and transporting.
- Places where there is a risk of colliding with obstacles or of falling must be permanently marked with a safety color and/or with signboards.
- Traffic routes must be permanently marked with a safety color.

6.2.1.3.2 Occasional signs

- Illuminated signs, acoustic signals and/or verbal communication must be used where the occasion requires signaling danger, to call persons to take a specific course of action and for the emergency evacuation of persons.
- Hand signals and/or verbal communication must be used where the occasion requires to guide persons carrying out hazardous or dangerous maneuvers.

6.2.1.3.3 Incoming Materials / Chemicals

- It shall be ensured that all original containers of hazardous chemicals or materials entering the department are properly labeled with the product name; Hazard warnings, including the target organ / physical effects; and Name and address of the manufacturer, distributor or supplier.
- Effective information and training shall be provided on hazardous chemicals or materials in the work area at the time of their initial assignment, and whenever a new physical or health hazard (the employees have not previously been trained about) is introduced into their work area.
- Safety Data Sheets (SDS) shall be made available and maintained as follows:
 - Original with the work area (HazCom file)
 - Copy with the Materials / Store Department (Backup HazCom file)
 - Copy with the HSE Department/ Section (Central HazCom file)
 - Copy with the Medical Rep. / Doctor (Emergency HazCom file)
- Each department shall develop & update its own HazCom Equipment Table and display it at area's Bulletin & Notice Board as per following format:

Area	Equipment Description	Chemical being Used	SDS #	H – F – R	Hazard
	1.				
	2.				
	3.				
	4.				

Controlled Copy Do Not Duplicate For Internal Use Only

6.2.1.3.4 Outgoing Product

- Laboratory IC shall prepare the Product Safety Data Sheets (PSDS) in consultation with the relevant stakeholders based upon the properties of the product to be delivered to the client.
- PSDS shall include the following contents:
 - a) Product and company identification
 - b) Composition/information on ingredients
 - c) Vulnerabilities (threats & opportunities) identification
 - d) First aid measures
 - e) Firefighting measures
 - f) Accidental release measures
 - g) Handling and storage
 - h) Exposure controls/personal protection
 - i) Physical and chemical properties
 - j) Stability and reactivity
 - k) Toxicological information
 - I) Ecological information
 - m) Disposal considerations
 - n) Transport information
 - o) Regulatory information
 - p) Other information
- HSE Section shall review the PSDS for its completeness especially in accordance with the regulatory requirements.
- Subsequently the Location Management shall approve it.
- The PSDS shall be disseminated / conveyed to the downstream customers including product transporters to timely & effectively respond to daily exposure situations as well as to emergency situations.
- The PSDS shall be reviewed six monthly and the new revision shall only become in effect once the properties of the product has changed in a significant manner.
- Product Safety Data Sheets (PSDS) shall be made available and maintained as follows:
 - Original with the work area (HazCom file)
 - Copy to the Product Transporter / Purchaser
 - Copy with the Commercial Department (Backup HazCom file)
 - Copy with the HSE Department/ Section (Central HazCom file)
 - Copy with the Medical Rep./ Doctor (Emergency HazCom file)

6.2.14 Communication through Standardized Color Coding

6.2.1.4.1 Pipeline Color Code Identification Band System and Labeling System:

- This shall be complied where the following apply:
 - Pipe contents are hazardous, or could generate hazardous conditions.
 - The pipe serves a safety purpose, as part of hazard prevention or emergency response.
 - Flow must be redirected, shut off, or adjusted to allow for maintenance or other expected work.
 - The pipe or its contents could affect the procedures followed during an emergency.
- Standardization shall be accomplished in all facilities as follows:-

The Band System:

- All process equipment and pipe work apart from Fire Fighting System shall be finished in either Light Grey or White along its entire length as the decorative color (the base color or ground color).
- The fluid contents of all flow-lines shall be identified by tapes which are appropriately colored; the nature of the pipe contents shall be identified by means of a Color Code Identification Band System (CCIB).
- Ground colors shall be provided on the full pipe section; whereas color band width to be 25 mm up to 50 mm.
- When double color bands exist on the pipeline, then a proportional width of 4:1 to the next band is provided.



Controlled Copy Do Not Duplicate For Internal Use Only

- These color bands are provided at suitable locations as:
 - At the beginning and termination points
 - At 25m intervals (up to 50m in case of headers)
 - At change in flow direction points and flow diversion locations.
 - At locations where the pipe enters the plant or exits from the boundary.
- Color Code Identification Band System (CCIB) is given below:

<u>Type of Fluid</u>	Identification Band Color
Water (Raw;Potable;Storm;Treated;Produced)	Green
Steam	Crimson Red
Firefighting	Signal Red
Oils (Combustible Liquids)	Dark Brown
Chemicals	Orange
Gases (Gaseous or Liquefied)	Yellow
Acids & Alkalis	Purple
Air (Utility; Service, Instrument)	Light Blue
Process Effluents (Drain; Vent; Flare)	Black

- The additional use of Colored Labels giving the full or abbreviated product description, temperature, pressure, and other details necessary to identify any potential hazard, together with the appropriate visual aids and hazard pictorial symbols, shall be applied where deem appropriate.
- In addition to being Color Coded, each process sub-system, pipeline and valve shall be individually identified by marking them in accordance with the Equipment Identification and Tag Numbering System.
- The line number and the flow direction shall be stenciled on each pipe section and pipeline together with the CCIB, to provide the pipe work with unique traceability.

Additional Considerations

- The following considerations shall be made to ensure that the pipe labels are visible to the workforce/ visitors:
 - The Frequency of Labels Labels need to be placed at least every 25-50' on the pipe so they are easy to see. It is also important to add a label if the pipe changes direction so that it is clearly visible.
 - ➤ Obstructions to the Label If a pipe goes through a wall or around a corner, labels should be placed on either side so that the color of the label can be seen from any angle.
 - Lighting While pipes are often in areas that don't get too much light such as under the floors or in the rafters, it is helpful to ensure a sufficient amount of light is reaching them so the colors and words can be seen on the labels. Larger fonts, simplified text, and high-contrast designs be emphasized for quick recognition, even in low-light conditions.
 - Near Access Points If there are designated access points to a pipe, it is important to have a label visible. This will help the maintenance team quickly determine what is in a pipe before working on it.
 - Near End Points At either end of the pipe, there should be a label so that the content inside can be quickly known.
 - Stronger Hazard Identification: There is an increased focus on highlighting flammable, toxic, corrosive, or high-pressure pipelines to meet updated safety and compliance requirements.
 - Standardized Arrow Placement: For better visibility, flow arrows be drawn on both sides of the label text, ensuring the direction of flow is clear from any angle.

The Labeling System

- The labels shall be placed on pipes:
 - Adjacent to all valves and flanges
 - Adjacent to all changes in pipe direction
 - On both sides of wall, floor or ceiling penetrations
 - Every 50 feet on straight runs of pipe (or every 25 feet in congested areas)
- A color code based on the type of hazard posed by a pipe's contents. The labeling color code shall be:
 - Water: White text on green text box
 - Steam: White text on crimson text box
 - Fire quenching fluids: White text on red text box
 - Combustible fluids: White text on brown text box



Controlled Copy Do Not Duplicate For Internal Use Only

Toxic and corrosive fluids: **Black** text on orange text box

Flammable fluids: **Black** text on yellow text box

Acidic fluids: White text on purple text box

Compressed air: White text on blue text box

Process effluents: White text on black text box

6.2.1.4.2 Color Coding for Maintenance of Lifting Gears

- Lifting equipment comprises lifting appliances (equipment performing the lifting), lifting accessories (devices that connect the load to the lifting appliance 'GEARS') and lifted equipment (e.g. containers, baskets, etc). All shall be marked with the Working Load Limit (WLL) and Safe Working Load (SWL).
- An equipment register, including maintenance records and evidence of certification to be available with Operator.

Following are some of the items used as gears in lifting activities;

Wire rope slings	Chains and chain slings	Man-made fibre slings	Shackles
Beam- and Plate clamps	Eye bolts & swivel rings	Hoist rings	Turnbuckles
Wedge sockets	Lifting harnesses	Drill pipe elevators	Casing elevators
Bail arms	Spreader beams	Hooks	Load cells
Pad eyes and bolts	Rigging screw	Pallet hook	Lodd Cells

- Color coding shall be an add-on for visual inspection and confirm the following aspects;
 - a) an inspection has been carried out;
 - b) whether or not inspection is current; and
 - c) to determine the inspection results by being able to link back from the physical evidence to the records.
- Location ICs shall ensure that all portable, circulating & fixed lifting equipment and accessories for lifting, after thorough examination, are color coded to give visual indication of their certification and fitness status:-

Color Code	Period
Green	Lifting accessories, which have been inspected and found fit for purpose should be color-coded for a maximum six months.
Yellow	Lifting accessories, which inspection is due after lapse of 06 months shall be stored separately and clearly marked/ color coded and returned for re-inspection, certification and color coding.
Red	Crimson red color to denote equipment "unsuitable for the job" shall be applied. The crimson red color code shall also be used for discarded or rejected lifting gears that need to be kept in material storage for non- prescribed period of time.

6.2.1.4.3 Assured Grounding Color Codes

All cords and current carrying conductors used with the portable power tools shall be protected by either a Ground Fault Circuit Interrupter (GFCI) or an Assured Grounding Program; Following Assured Grounding Color Code Calendar shall be used (each new year):

January	February	March
April	May	June
July	August	September
October	November	December

Note:- The colors in the form of "taped bands" shall be pasted on the wire near the plug.

6.2.1.4.4 Lockout Color Coding

Lockout and Tagout (LOTO) devices shall be singularly identified; shall be the only device(s) used for controlling energy; and shall not be used for other purposes.



Controlled Copy Do Not Duplicate For Internal Use Only

- Tags shall not be required if locks are otherwise "indelibly" marked so as to identify the person(s) to whom the lock belongs.
- For each Section/ Department, Locks shall be unique-color-coded to assist in identifying users.

Note: The authorized person applying a lock shall keep the key for that lock in his possession until the lock is removed. No employee should be able to open a lock attached by someone else.

6.2.1.5 Communication of Impacts, Objectives and Management Programs

Information about vulnerabilities and related impacts (risks), objectives, targets, and management programs shall be communicated to the relevant departments and sections generally through distribution of memos, minutes of meetings, reports and other such documents; applying colour coding schemes, labelling, during toolbox talks and through HSE System awareness/training sessions.

6.2.1.6 Safety Alerts

- Safety Alert shall provide advisory information and be issued after occurrence of an incident or when there is a current or emerging HSE issue that needs immediate corrective & preventive action.
- HSE Department shall notify all workforce members and concerned stakeholders regarding the description of associated dangers so that lessons be timely shared. It is encouraged that the Recipients of Safety Alert to share them further within their coworkers.

6.2.1.7 Feed Back on HSE System and HSE System Performance

- HSE improvement shall require collecting documents, information and data on vulnerabilities (threats & opportunities) and impacts, implementation of management programs, progress toward achieving objectives and targets, HSE performance status and results, compliance with legal and regulatory requirements, and other activities of the HSE System.
- This feedback information and data shall periodically be reported during the Location HSE Management Review Committee (MRC), and shall be used in making decisions regarding the HSE objectives, targets, and management programs.

6.2.1.8 Suggestion and Feedback from Personnel

- Personnel at all levels shall be encouraged to report problems and their concerns with HSE issues and the HSE System, and offer suggestions on how to improve HSE performance.
- They may communicate those HSE issues to their immediate departmental heads or directly to the HSE Department / Section.
- Departmental Heads shall be required to bring all relevant issues to the attention of the HSE Department / Section and during the Location HSE Management Review Committee (MRC) meetings.

6.2.1.9 HSE Awareness Events

- Annual HSE Awareness Event shall be arranged as a regular corporate feature.
- The objective of this location/ field-wide event shall be:
 - a) to promote best HSE practices and acknowledge the existing ones;
 - b) to reinforce HSE messages & increase employees awareness;
 - c) to promote a healthy lifestyle a benefit to the employees;
 - d) to provide better communication opportunities to employees on issues of work and safety; and
 - e) to enable learning through fun.
- HSE Awareness Event shall be organized as half, one or two day event depending upon the strength of the field and security conditions.

6.2.2 External Communication

■ The external communication channels used for communicating HSE



Controlled Copy Do Not Duplicate For Internal Use Only

information shall include:

niornation shall includ	
HSE Information	External Communication Channel
a) HSE Policy, Procedures & Work Instructions, Handbooks	 Service Orders/ Contracts Website / Newsletters / Inter Office Memos / Bulletin & Notice Boards Service level agreements (SLAs), contracts and pre-project HSE planning meetings On-site Induction STOP Cards Toolbox Talks
b) Identification & Management of HS vulnerabilities, impacts (Risk Register) and Objectives & Management Programs	 On-site Induction Signs / Labels / SDS/ PSDS PTW/ Energy Isolation Standardization through Color Coding Schemes Area Classification & Signs / Labels Minimum Approach Distance (Safe Distance Communication)
c) Hazardous Materio / Chemicals / Processes	On-site InductionSigns / Labels / SDS/ PSDSPTW/ Energy Isolation
d) External Environmental Complaint (Locals, Communities)	Application/ Email/ Memos
e) Legal Notices from Regulatory Bodies	Office Memos/ Notices/ Orders
f) Annual Returns and Reports (compliance obligation)	Prescribed Templates

- All communication from interested parties, whether written or verbal, received at site or any office shall be forwarded to HSE Department / Section.
- External Environmental Complaint Sheet (EECS) shall be established and made available in the reception / security office for interested parties to lodge their complaint, if any: EECS shall provide the following information:
 - a) Particulars (Name, Address, Contact No.) of the complainant
 - b) Type / Nature of Complaint
 - c) Summary of the Complaint
 - d) Time and Date of Entry
 - e) Mode by which complaint was communicated / registered
 - f) Any Reference of the Litigation given in the complaint
- HSE Department/ Section shall maintain documents related to external communication with the interested parties.
- Area Manager and Location IC shall review the complaint and try to resolve the matter at field level.
- © Critical issues shall be forwarded to GM HSE to determine which other departments should be informed or involved, what response should be given to the originator (if any), and whether any internal actions should be considered to address the issues raised in the communication.
- All inquiries from interested parties shall be responded in same manner on which they were logged.

6.2.2.1 External Communication of the HSE Policy

- The full text of HSE policy shall be available to the public at main entrance gate, both in English / Urdu and local language.
- The policy shall be displayed both inside and outside the main offices at appropriate places.
- Any requests for the HSE policy shall be responded to by mailing / emailing a copy of the same.
- All the same, HSE Policy shall be made available in company's official website for ready reference.





Controlled Copy Do Not Duplicate For Internal Use Only

6.2.2.2 External Communication of Significant Vulnerabilities and Impacts (Risks)

- Location HSE Management Review Committee (MRC) while reviewing the HSE System shall consider whether information on significant HSE vulnerabilities & related impacts is required to be communicated externally.
- The decision shall be recorded in the minutes of this review.
- In case it is decided to communicate the significant HSE vulnerabilities and related impacts to interested parties, HSE Department / Section shall make arrangements for external communication. The decision may be revised at any subsequent review / meeting.

6.2.2.3 External Communication during Emergencies

External communication processes, in emergency situations where regular updates are required to be delivered in a clear and unambiguous manner, shall include the identification of designated contact personnel from the location to allow for appropriate information to be communicated in a timely and consistent manner.

(Further information already defined in a) Emergency Preparedness & Response b) Crisis Management and c) HSE Protocol for Management of Project Contractors & Service Companies procedures)



Controlled Copy Do Not Duplicate For Internal Use Only



This PSDS is a detailed information bulletin of OGDCL's product describing, among other things, the physical and chemical properties, physical and health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures.

This information must be disseminated / conveyed to the downstream customer including product transporters to timely & effectively respond to daily exposure situations as well as to emergency situations.

<LOCATION NAME> <LOCATION ADDRESS> <LOCATION FAX> <LOCATION FEL> <LOCATION EMAIL>

I – PRODUCTIDENTIFICATION				
CHEMICALNAME	CHEMICAL NAME CHEMICAL FORMULA MOLECULAR WEIGHT			
Trade Name	SYNONYMS	CONTRACT REFERENCE #	_	

COMPONENT(S) CHEMICAL NAME	CAS REGISTRY NO	Concentration (by wt)	MSHA/OSHA PEL	ACGIHTLV TWA
	-		-	
	100		-	
				0
				31
	4			d.

*There are no esposure limits for crade oil		CGIH or OSHA. The I RDS IDENTIFIC		oe used only as a reference.	
Primary route(s) of exposure:	□Inhalation	□Skin	□Ingestion		
EYE.CONTACT:					
SKINCONTACT:					
SKIN ABSORPTION:					
INGESTION:					
INHALATION:					
MEDICAL CONDITIONS AGG	RAVATED BY EXPOS	URE			

IV - FIRST AID MEASURES				
Primary route(s) of exposure:	□Inhalation	□Skin	□Ingestion	
EYES:				
SKIN:				
INGESTION:				
INHALATION:				

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 1 of 4





Controlled Copy Do Not Duplicate For Internal Use Only



This PSDS is a detailed information bulletin of OGDCL's product describing, among other things, the physical and chemical properties, physical and health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures.

This information must be disseminated / conveyed to the downstream customer including product transporters to timely & effectively respond to daily exposure situations as well as to emergency situations.

<LOCATION NAME> <LOCATION ADDRESS>

<location fax=""> <location tel=""> <location email=""></location></location></location>	
SECOMETER	
	V - FIRE FIGHTING MEASURES
FLASHPOINT	FLAMMABLE LIMITS IN AIR
EXTINGUISHING AGENT	'
UNUSUAL FIRE AND EXPLOSION HAZA	ARD
	ACCIDENTAL RELEASEMEASURES
STEPS TO BETAKENIN CASE MATERIAL	IS RELEASED OR SPILLED
,	VII – HANDLING AND STORAGE
	SURE CONTROLS/PERSONAL PROTECTION
ENGINEERING CONTROLS	
EYE/FACE PROTECTION	
SKIN PROTECTION	
RESPIRATORY PROTECTION	
GENERAL HYGIENE CONSIDERATIONS	
k	
	IYSICAL AND CHEMICAL PROPERTIES
APPEARANCE AND ODOR	SPECIFIC GRAVITY
BOILING POINT	API Gravity
VAPOR PRESSURE	% VOLATILE, BY VOLUME
EVAPORATION RATE	SOLUBILITY IN WATER

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 2 of 4





Controlled Copy Do Not Duplicate For Internal Use Only



This PSDS is a detailed information bulletin of OGDCL's product describing, among other things, the physical and chemical properties, physical and health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures.

This information must be disseminated / conveyed to the downstream customers including product bransporters to timely & effectively respond to daily exposure situations as well as to emergency situations.

<LOCATION NAME> <LOCATION ADDRESS> <LOCATION FAX> <LOCATION FEL> <LOCATION EMAIL>

	X – STABILITY AND REACTIVITY
STABILITY	CONDITIONS TO A VOID
INCOMPATIBILITY (Materials to avoid	
HÁZÁRDÓUS DECÓMPÓSITIÓN PRO	DDUCTS
	I - TOXICOLOGICAL INFORMATION
Exposure Routes:	
Target Organs:	
Acute Effect:	
Chronic Effect/Carcinogenicity:	
	XII - ECOLOGICAL INFORMATION
	III DOODS IS IN CALL MOST
	XIII – DISPOSAL CONSIDERATIONS
WASTE DISPOSAL METHOD	
	MILE TRANSPORT RECONCISION
PROPER SHIPPING NAME	XIV - TRANSPORT INFORMATION
DOT HAZARD CLASSIFICATION	
PLACARD REQUIRED	
LABEL REQUIRED	
LADSE RESCUED	
	XV - REGULATORYINFORMATION
CLEAN WATER ACT (OIL SPILLS)	
SARA 311 CATEGORIES	

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

Page 3 of 4





Controlled Copy Do Not Duplicate For Internal Use Only



This PSDS is a detailed information bulletin of OGDCL's product describing, among other things, the physical and chemical properties, physical and health hazards, routes of exposure, precautions for safe handling and use, emergency and first-aid procedures, and control measures. This information must be disseminated / conveyed to the downstream customer including product transporters to timely & effectively respond to daily exposure situations as well as to emergency situations.

<LOCATION NAME>

- <LOCATION ADDRESS>
 <LOCATION FAX>
- <LOCATION TEL.>
- <LOCATION EMAIL>

XVI – OTHER INFORMATION

ACGIH: American Conference of Governmental Industrial Hygienists

CFR: US Code of Federal Regulations

[ARC: International Assented B.]

IARC: International Agency for Research on Cancer
NIOSH: National Institute for Occupational Safety and Health, US Department of Health and Human Services

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration, US Department of Labor PEL: Permissible Exposure Limit
SARA Title III: Title III of the Superfund Amendments and Reauthorization Act, 1986
TLV: Threshold Limit Value

TWA: Time-weighted Average FOR FURTHER INFORMATION CONTACT:

HSEQ Department, OGDCL House, Blue Area, Islamabad, Pakistan.

Disclaimer: OGDCL assumes no responsibility for injury or death to any person or persons caused by the product it reasonable safety procedures or conditions are not met as stated within the PSDS. We also assume no responsibility for injury or death to any person or persons caused by abnormal use of this product or mixing of this product even if reasonable safety precautions were followed. Furthermore, all third person parties assume the risk in their use of this product. The information contained herein is based on the information at the indicated date of preparation with best available knowledge.

OGF/XXX-HSE-011(00)

Prepared By	Reviewed By	Approved By
Signature Field I/C Laboratory	Signature Field I/C HSBQ	Signature Field / Plant Manager





OGF/xxx - HSE - 012(01)

Oil & Gas Development Company Limited **External Environmental Complaint Sheet (EECS)**

This form is to be used for complaints regarding environmental issues including dust, smoke, odor, noise issues, or any health complaint. After discussing the issue with the concerned community person(s), Location HSE Rep. shall write down as much detail as possible to allow conduct of a thorough investigation/ follow-up.

Ref. No.:	
Complainant's Full Name:	
Postal Address:	
Residential Address:	
Phone Number:	
Email:	
Nature of Complaint:	
Signature	Date
8) E	
Forward to (For action required):	

6.3 HSE Documented Information and Control

OGM/P-HSE-6.3(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

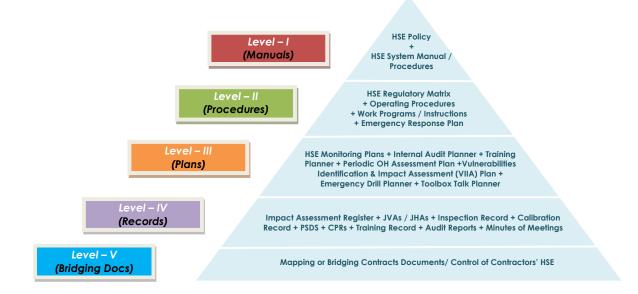
Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 014 Master List of Documents	Section / Department Rep.	HSE Rep.	Concerned Departmental IC
OGF – HSE – 015 List of External Documents	Section / Department Rep.	Location HSE IC	Location IC
OGF – HSE – 016 Document Change Request (Corporate)	Initiator	Manager/ Chief HSE	GM HSE
OGF – HSE – 016 Document Change Request (Field)	Initiator	Location HSE IC	Area Manager / Location IC
OGF – HSE – 017 Document Distribution Log	Section / Department Rep.	HSE Rep.	Concerned Departmental IC



Controlled Copy Do Not Duplicate For Internal Use Only

6.3.1 General

OGDCL's Integrated HSE Management System shall comprise of FIVE LEVELS as exhibited below:-



6.3.2 Document Numbering

OGDCL HSE Documents shall have a structured unique number based on variable codes, complete nomenclature of which can be understood by the following table:

ollowing rable.				
Document	Format	Example		
Control of System Manual Procedures	OGM/P-Location Name - Name of Department - Serial# (Revision #)	OGM/P-HSE-001 (00A) or OGM/P-DDK-HSE-001 (00A)		
Control of HSE Policy	OGM/Policy- Name of Department – Serial# (Revision #)	OGM/Policy-HSE-001 (001)		
Control of Regulatory Matrix	OGM/RM- Name of Department - Serial# (Revision #)	OGM/RM-HSE-001 (00A)		
Control of Forms	OGF/Location Name - Name of Department – Serial# (Revision #)	OGF/HSE-001 (00) or OGF/DDK- HSE-001A (00)		
Control of Work Instruction	OGW/Location Name - Name of Department- Serial# (Revision#)	OGW/HSE-001 (00) or OGW/DDK-HSE-001A (00)		
Control of Inspection & Maintenance Plan	OGI/Location Name -Name of Department- Serial# (Revision #)	OGI/ HSE-001 (00) or OGI/DDK-HSE-001A (00)		
Control of Checklist	OGC/Location Name -Name of Department- Serial# (Revision #)	OGC/HSE-001 (00) or OGC/DDK-HSE-001A (00)		

Where,

OG = OGDCL

M = Management System

OGM/P = Procedure (-Location abbreviation where required)

OGM/Policy = HSE Policy

OGM/RM = Regulatory Matrix

OGF = Form (-Location abbreviation where required)

OGW = Work Instruction (-Location abbreviation where required)

OGI = Inspection/Maintenance Program (-Location abbreviation where required)

OGC = OGDC Checklist (-Location abbreviation where required)

DDK = Dhodak Location

HSE= HSE Department / Section H.O.

001A= A three digit Serial Number of Procedure, Form, Work Instruction, Inspection and Maintenance Plan, Checklist (with Serial Alphabet only in case of additional relevant document to achieve continuity) (00A) = A two digit Revision Number for the Manual, Procedure, Form, Work Instruction, Inspection and Maintenance Plan, Checklist (with Serial Alphabet only in case of minor changes where approval of IC HSE is sufficient)

6.3.3 Document Approval & Issue

- After the preparation and numbering of documents, these shall be reviewed and approved by the competent authorities.
- The personnel / authorities responsible for initiating, reviewing and approving of various HSE documents are mentioned at the start of every individual procedure.
- These shall then be entered in the Master List of documents along with their revision number and retention period by the HSE Department / Section and





Controlled Copy Do Not Duplicate For Internal Use Only

then issued to the concerned personnel as per distribution list.

- A controlled document shall meet the following conditions:
 - a) It must be numbered or coded according to the defined numbering scheme
 - b) It must be reviewed and approved before issue
 - c) Changes to these documents must be authorized and controlled
- All the controlled documents shall be identified as "Controlled Copy, Do Not Duplicate" typed in red color (font seen in soft copy), on the left bottom or top corner on all pages of the document, and "For Internal Use Only" to avoid their unauthorized copying and usage.
- Uncontrolled documents or copies shall not contain any "controlled document" identification.

6.3.4 External Documents

- Following documents used in OGDCL shall be of external origin:
 - a) HSE standards and other standards / specifications
 - b) HSE related federal and provincial acts, laws and regulations or applicable guidelines
 - c) Technical manuals, machine manuals and process diagrams / drawings
- © Concerned Departmental Heads shall be responsible for controlling external documents related to their Department.
- Whereas HSE Department / Section shall be responsible for maintaining current copies of management systems related applicable Standards and current copies of Legislations / Acts / Regulations.
- The external origin documents shall not be required to be coded or approved.
- Related person enters the external origin document in the List of External Documents, shall stamp it "EXTERNAL DOCUMENT" with Red Ink and maintains distribution record of copies of external documents.

6.3.5 Changes/ Amendment In Documents

An HSE Management System document shall be reviewed as required but at least once every year and updated if required.

- When required, Departmental / Sectional Heads shall initiate changes in HSE management system document by filling in Document Change Request (DCR). The DCR shall at least include a description of change requested and the reason for change.
- The DCR signed by the concerned Departmental Head shall be sent to HSE Department / Section. HSE Head, in consultation with the concerned Departmental Heads, shall review the nature of change requested. It shall then be sent to the approving authority who approves/rejects the DCR.
- After the approval, HSE Department / Section shall incorporate the changes in the concerned document and describe the nature of change on the amendment sheet. The revision number of the document shall be incremented and the revised document shall get approval from the concerned approving authority.
- The revised document shall then be distributed to all the concerned persons in the distribution list and the obsolete documents retrieved. Obsolete documents shall either be destroyed or stamped "OBSOLETE" with Red Ink to properly identify it. One copy of obsolete document shall be maintained for record purposes with the HSE Department / Section.



Oil & Gas Development Company Limited

OGF - HSE - 018(01)

MASTER LIST OF RECORDS

	DESCRIPTION OF		RETENTION -		DISTRI	BUTION		
10	RECORD	RECORD ID#	PERIOD					
1			1					
-								
1								
-			-					
1								
-								

PREPARED BY	REVIEWED BY	APPROVED BY

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

1



Oil & Gas Development Company Limited

OGF - HSE - 015(00)

LIST OF EXTERNAL DOCUMENTS DEPARTMENT DISTRIBUTION VERSION / EDITION # REGULATORY BODY TITLE OF DOCUMENT

PREPARED BY	REVIEWED BY	APPROVED 8Y





Document Change Request

(Use DCR in case you recommend change(s) in any of the controlled HSE Document.)

Document Number:	Document Name:			
Revision:	Attached Document Reference:			
Recommended Changes:	*			
	*			
	w e			
Originator Signature:	Signature:			
Originator Name: Approved By Concerned Departmental Head:				
Date:	Date:			
To be completed by the HSE Section / Department				
Recommendation Accepted?	Reason for change			
	N (SEA) (COMP M 2007 S 50) (COMP) (COMP)			
Yes Yes w/ modification No				
Comments:				
	8			
Signature of HSE Representative:	Date:			
Approving Authority [Corporate → GM HSE; Location → Area	a Manager / PC/ OM/ FM / PM]			
	1			
Approved	☐ Not Approved			
	America con 1980 con con			
To be filled by HSE Section / Department	I B			
Document/Record Revision Number:	Document/Record Revision Date:			





Oil & Gas Development Company Limited

DOCUMENT DISTRIBUTION LOG

	OGF - HSE - 017(0
Location / Site:	

Distributed To	Copies	Signature & Date	Distributed To	Copies	Signature & Date
	Alle				
					2
72					
					(
*			6.	1	P. Control of the Con



6.4 Control of Records

OGM/P-HSE-6.4(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iffikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 018 Master List of Records (Field)	Section / Department Rep.	HSE Rep.	Concerned Departmental IC



Controlled Copy Do Not Duplicate For Internal Use Only

6.4.1 Filing and Indexing

Hardcopies of records shall be filed in cardboard or plastic files. These files shall be numbered and indexed for easy retrieval and safe storage.

Following labeling format shall be used for files:

File #:	
Department:	
File Title:	
Date Started:	
Date Closed:	
Maintained by:	
Location:	

File #: MMD-1
Department: MMD
File Title: Operational Control Procedures
Date Started: 1st January, 2005
Date Closed: 31st March, 2005
Maintained by: MMD Section
Location: DDK

6.4.2 Reference Numbering System

Following format shall be implemented at organizational and unit level for controlling audit records, CPRs, ECRs, MOMs, risk registers, and JVAs / JHAs:

Document	Format	Example
Control of Internal HSE Audit Noncompliance Report	HSE / Abbreviation of Location / Year – NCR###	HSE/DDK/2007-NCR001
Control of Corrective Action Request	HSE / Abbreviation of Location / Year – CPR###	HSE/DDK/2007-CPR003
Control of HSE MRC Minutes	HSE / Abbreviation of Location / Year – MRC###	HSE/DDK/2007-MRC002
Control of Risk Register	HSE / Abbreviation of Location / Year – IAR(##)	HSE/DDK/2007-IAR(00)
Control of Job Vulnerabilities / Hazard Analysis	HSE / Abbreviation of Location / Section – JVA###(##)	HSE/DDK/LAB- JVA001 (00)
Control of Engineering Control Request	HSE / Abbreviation of Location / Section – ECR###(##)	HSE/DDK/LAB- ECR001 (02)

Where,

HSE = HSE Domain

DDK = Dhodak Plant

2007= Year record is taken

NCR = Audit Noncompliance Report

CPR = Corrective and Preventive Action Request

MR = Management Reviews

RR= Impact Assessment Register

JVA / JHA = Job Vulnerabilities / Hazard Analysis

CCR= Change Control Requisition & and Pre-Startup Safety Review Completion Form

001 = Serial Number of the record

02 = Revision number

6.4.3 Record Approval & Issue

- After the preparation and numbering of records, these shall be reviewed and approved by the competent authorities.
- The personnel / authorities responsible for initiating, reviewing and approving of HSE records are mentioned at the start of every individual procedure.

6.4.4 Storage of Records

- The record files shall be stored in cabinets/ drawers, and concerned persons in the Sections shall be responsible for ensuring the security & safety of records in their custody.
- © Computer-maintained files shall be stored in directories or folders on the hard disk or main server following the parent-child directory setup.
- View/ Read, Write/ Edit/ Modify, & Delete/ Un-Delete rights of the computer records shall be specified.
- Back-ups & security/ protection from viruses, etc. of the computer records shall be ensured.





Controlled Copy Do Not Duplicate For Internal Use Only

6.4.5 Retention of Records

- The retention period of records shall be established for certain periods during which the record may be required for study or verification.
- After the retention period, the record shall be disposed off through appropriate means.
- Retention period shall be defined based on the following factors:
 - a) Frequency of record generation
 - b) Criticality of the record
 - c) Legal obligations
- Retention period for each record shall be defined in the Master List of Records maintained by HSE Department / Section

6.4.6 Disposition of Expired or Obsolete Records

- After the expiry of retention period of records, head of section shall review the validity and usefulness of records and segregate the record to be disposed.
- The record shall be disposed off by:
 - a) Shredding,
 - b) Selling off, or
 - c) Archiving in store room





Oil & Gas Development Company Limited

OGF - HSE - 018(01)

MASTER LIST OF RECORDS

SR	DESCRIPTION OF		DETENTION	DISTRIBUTION						
Ö	DESCRIPTION OF RECORD	RECORD ID#	PERIOD PERIOD							
1										
-										
1										
+										
1										

PREPARED BY	REVIEWED BY	APPROVED BY

Ref. Section 06 (Support) of OGDCL's Integrated HSE System Manual

.



Controlled Copy Do Not Duplicate For Internal Use Only

Reference Standards

ISO14001:2015 & ISO45001:2018

Clause 8.1: Operational Planning and Control. Clause 8.3: Outsourcing.

Clause 8.4: Procurement. Clause 8.5: Contractors.

Clause 8.2/8.6: Emergency Preparedness and Response.

PSM (22 Elements) Model

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 startup. 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.

This Section's Objectives

- Establish & enable HSE MS processes related to pollution and accident prevention and control how they operate
- Establish & enable hydrogen sulfide emergency preparedness and response framework

Associated Documents

- Departional Controls Plans; Procedures
- Operational Controls Work Instructions
- © Operational Controls –Maintenance Programs
- Operational Controls Calibration Plans
- Cold Work Permit
- Sour/Hot Work Permit
- Electrical Work Permit
- Confined Space/Vessel Entry Work Permit
- Radiography Work Permit
- Excavation & Civil Work Permit
- Morking at Height Permit
- Vehicle Entry Permit
- Energy Isolation/ De-Isolation Certificate■ Energy Isolation Log Sheet
- Safety System Defeat Certificate
- Explosives Handling Work PermitOnsite Waste Management Plan
- Section Waste Register
- Waste Consignment Note
- Waste Disposal Log
- Vehicle Inspection Checklist
- PPE Need Assessment Matrix
- Well(site) Handing Over Taking Over Checklist
- QC Checklist (Treatment & Restoration)
- Production site/ Well(site) Plugging and Abandonment (P&A) Checklist

Applicable Documents

- © OGDCL Safety Handbook For Oil & Gas Exploration Leases (Seismic Surveys)
- © OGDCL Safety Handbook For Oil & Gas Well Drilling and Servicing Operations
- © OGDCL Safety Handbook For Oil & Gas Development and Production Leases
- HSE Pledge Handbook For Contractors & Service Companies



Operation

Performance Evaluation

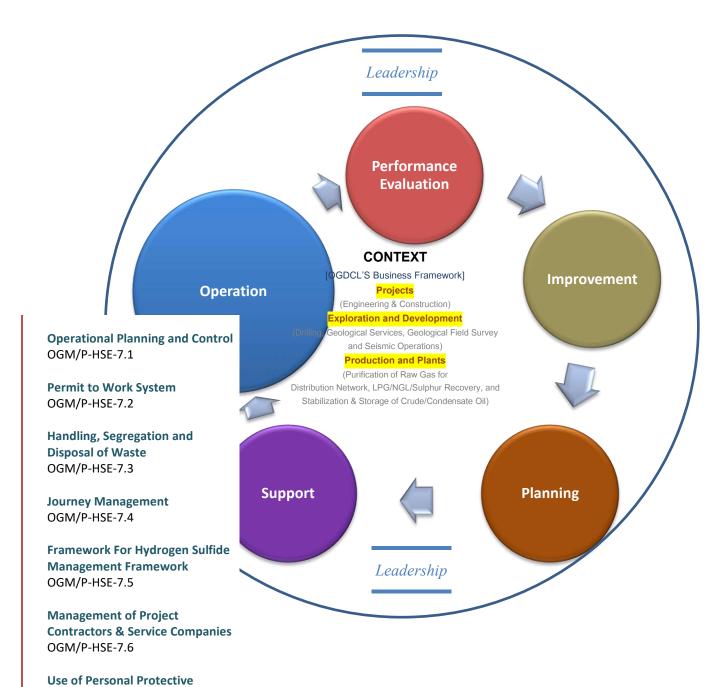
Improvement

Equipment OGM/P-HSE-7.7

OGM/P-HSE-7.8

Framework for Site Restoration

Controlled Copy Do Not Duplicate For Internal Use Only





7.1 Operational Planning and Control

OGM/P-HSE-7.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Added: PHA

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Approved by	
Operational Control Procedures	Concerned Section IC	Location IC	Area Manager/ Concerned GM	
Operational Control Work Instructions	Concerned Section Rep.	Concerned Section IC	Location IC	
Operational Control Maintenance Plans	Concerned Section IC	Location IC	Area Manager/ Concerned GM	
Operational Control Calibration Plans	Concerned Section Rep.	Concerned Section IC	Location IC	



Controlled Copy Do Not Duplicate For Internal Use Only

- © Consistent with a life cycle perspective, the management shall:
 - apply impact control hierarchy with the aid of any tool like Layers Of Protection Analysis (LOPA) for assessing the "adequacy of protection layers". The methodology helps to identify safeguards that meet the Independent Protection Layer (IPL) criteria,
 - establish controls as appropriate to ensure that its HSE requirement(s) are addressed in the design, processes, production, and dispatch of the products, considering each stage of its life cycle;
 - determine its HSE requirement(s) for the procurement of material, equipment and services as appropriate;
 - communicate its relevant HSE requirement(s) to external providers, including contractors and service companies;
 - consider the need to provide information about potential significant HSE impacts associated with the transportation or dispatch, use, end-of-life treatment and final disposal of materials, equipment, and products.
 - When processes are outsourced, or when services are supplied by (an) external provider(s), the management's ability to exert control or influence may vary from direct control to limited or no influence. When determining the type and extent of operational controls related to external providers, including contractors and service companies, the management shall consider one or more factors such as vulnerabilities, threats & opportunities and associated impacts related to the outsourced process or services and the compliance obligations. Subsequently the operational controls can be agreed upon during the signing of contract / agreement.
 - The documented information to the extent necessary to have confidence that the processes have been carried out as planned shall be maintained as follows:-

Coverage & Scope → ↓ Job/ Activity	Handling, Segregation and Disposal of Waste	Permit to Work System	Emergency Preparedness & Response	Specific SOPs (Pre- Startup, Shutdown, etc.)	*Specific Work Instructions	Specific Maintenance Programs (In-house)	Specific Calibration Plans (External)
	Mair	Func	tions				
Specific Seismic Job, Drilling Activity, Production Activity, Process/ Sub-Process			\square	✓	V	$\overline{\checkmark}$	V
Corollo	iry Fu	nctior	ns/ Ac	tivities			
Chemical (Material) Handling	$\overline{\mathbf{V}}$	V	\checkmark	V	\checkmark		
Excavation Work	V	V	✓	V	✓		
Working in Confined Space	V	V		V	\checkmark		
Work At Height	$\overline{\mathbf{V}}$	✓		\checkmark	$\overline{\checkmark}$		
Explosives Handling	$\overline{\mathbf{V}}$	✓	✓	V	V		
Controls for Mechanical Integrity	$\overline{\mathbf{V}}$	✓	✓	$\overline{\checkmark}$	$\overline{\checkmark}$	$\overline{\checkmark}$	$\overline{\checkmark}$
Noise/ Vibration Controls	V	✓	✓	V	V	\checkmark	V
Lifting and Hoisting Controls	$\overline{\mathbf{V}}$	V		V	\checkmark	\checkmark	$\overline{\checkmark}$
Electrical & Instrumentation Controls	$\overline{\mathbf{V}}$	✓	✓	V	V	V	$\overline{\checkmark}$
Power Management	$\overline{\mathbf{V}}$	V	✓	V	✓	✓	$\overline{\checkmark}$
Water Management	✓	✓	✓	✓	V	V	
Energy (Emissions/Flare/Vent) Mgt.	$\overline{\mathbf{V}}$	✓	✓	✓	✓	✓	$\overline{\checkmark}$
Effluents Management	<u> </u>	✓	V	V	V	$\overline{\checkmark}$	
Journey Management			I	$\overline{\mathbf{V}}$	I		

- SOPs shall be established by all Sections/ Departments where their absence could lead to deviation from HSE policy, objectives, or targets; or could cause significant HSE impact.
- **Work Instructions** shall be established by all Sections/ Departments to stipulate the operational criteria for carrying out operations having significant HSE aspects and impacts.
- Maintenance Programs shall be developed by concerned Sections/ Departments and implemented for equipment, machines and systems to ensure smooth, safe, energy-efficient and reliable operations.
- Calibration Plans shall be developed by concerned Sections/ Departments





Controlled Copy Do Not Duplicate For Internal Use Only

and implemented for equipment, machines and systems associated with significant HSE aspects and impacts (&emergencies).

It is noteworthy to mention that every person engaged in the operations and every other person who may be exposed to the risk of injury, poisoning or disease arising from the operations should be provided with appropriate **Personal Protective Equipment** (PPE); No person should be allowed to work in a field boundary unless he is wearing a suitable coverall, safety helmet, and safety shoes which should be provided by the Location Management.

Shutdown Levels: Following shutdown levels may be used after tailoring/ custom-designing as per requirements at each gas processing plant:

		Oli C	menis di eden		
Shutdown Levels			Initiation	Isolation	Blow down
Level 1 (F&G Failure)	Total Plant Shutdown with automatic depressurization	-	Manually (from the Control Room), Automatically from the F&G (confirmed fire) or Automatically on SD/F&G system power failure.	Total Plant Shutdown will include shutdown of all wellhead valves and isolation of the plant from all incoming and outgoing pipelines by closure of all shutdown valves.	This level of shutdown will result in an automatic plant blow down. If it is necessary, blow down of the Chiller Package, Propane Storage Vessel and Dehydration Inlet Coolers (shell side) will be activated manually from the MCR Common Services Panel.
Level 2 (Process Failure)	Total Plant Shutdown without automatic depressurization	-	Manually (from the Control Room), Automatically from process shutdowns (Instrument air failure, LP Flare KO Drum high liquid level and LP Flare KO Drum high pressure), Automatically from the F&G (confirmed gas detection) or Automatically from total main power generation failure.	Total Plant shutdown to include shutdown of all wellhead valves and isolation of the plant from all incoming and outgoing pipelines by closure of all shutdown valves without depressurization of gaseous streams.	Shutdown is Blow down, if required, will be manually initiated from the MCR Common Services Panel.
Level 3 (Train Failure)	Single Train Shutdown without automatic depressurization	-	Manually for a train, from the Control Room, Via local pushbuttons located within the process train or Automatically from process shutdowns.	Shutdown to include isolation of the relevant train from incoming and outgoing pipelines without depressurization of gaseous streams.	Blow down, if required, will be manually initiated from the Control Room's common services panel.
Level 4 (Equipment/ Package Failure)	Process Shutdown without automatic depressurization	-	Automatically from process shutdowns or Automatically by machine monitoring shutdowns.	In the event of a process shutdown, the remainder of the appropriate unit/ package will continue to operate and will only shutdown under cascade of the affected trip actions.	Blow down not required.

Process Hazard Analysis: Process hazard analysis (PHA) shall be carried out by employing techniques at an early stage in the design process and the actual changes or the changes that can reasonably be expected during the operations lifetime in a meeting/ workshop format. The PHA team shall be constituted as follows:

PHA Team	Chairman	Secretary/ Coordinator	Members
Process Risk Management Team	Experienced leader from an independent party	HSE Representative	- Process/ Project Representative - Discipline Engineers - Sector Expert

PHA shall be conducted after every five years with following objectives:

- To check, verify and validate the efficacy of process controls and barriers/ internal controls.
- To update documentation/ arrangements for achieving safe operating limits and ensure availability to O&M personnel.





Cthe energy Operation: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- To ensure placement of conspicuous labeling on equipment, storage vessels, containers, tanks and pipelines carrying or containing hydrocarbons or other hazardous material as per appropriate international standards.
- To ensure provision of an emergency response plan which includes means of escape; emergency response teams; appropriate safe refuge and assembly areas; and emergency response equipment for spillage containment, fires, explosions, burns, etc., and
- To communicate hazard information to employees (including using the analysis hazard review tables to improve operating procedures or develop troubleshooting guides)

<u>PHA Preparation Phase:</u> This phase of the PHA shall involve planning the meetings and workshops, collecting and reviewing background information, and preparing for leading and documenting the proceedings. The preparation phase shall be the responsibility of the team leader but the effort could be shared by the team scribe or others. Team members shall be allowed sufficient time to help collect and review process safety information (PSI) and procedures.

<u>PHA Workshop Phase:</u> During PHA team meetings and workshops, accident scenarios shall be anticipated, important hazards & data shall be identified and risks shall be judged, employing variety of techniques for the process area(s).

<u>PHA Report Phase:</u> PHA report, results, and supporting documentation shall be based upon the information collected during the PHA meeting. PHA report shall state (1) who the team was, (2) what process the team reviewed, (3) when the PHA meetings and workshops took place, (4) how the team performed the review, (5) what the results were and (6) what were the recommendations for reducing the risk._PHA Report shall be shared with the concerned HODs. Custodian of the unit shall develop Action Plan against the PHA recommendations and perform quarterly reviews, followed by progress sharing with concerned line management and HSEQ Department.



Controlled Copy Do Not Duplicate For Internal Use Only

7.2 Permit to Work (PTW) System

OGM/P-HSE-7.2(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

	2.161.1937.1131.123						
#	Description of Change						
1	Modified: New Logo & Tag Line						
2	Added: Explosives Handling Work Permit						
3	Modified: Authorization/ Job Completion as Permit Issue Authority, Relevant Section and Permit						
	Receiving Authority and otherwise in all Permits						
4	Added: Permit Issuing Authority will carry out risk assessment using the entity inscribed in the SSDC to						
	determine and decide about the validity of SSDC and its extension if required						
5	Modified: Unusual circumstances elaborated as an Emergency Level-2 or a project's testing/						
	commissioning activities						

Associated Documents Approval & Issue

7 330 clated Bocottlettis 7 Approvat & 1330 c							
Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by				
OGF – HSE – 019 Cold Work Permit	Issuing Authority	Receiving Authority, Job Performer	Receiving Authority				
OGF – HSE – 020 Hot / Sour Jobs Work Permit	Issuing Authority	Receiving Authority, HSE, Job Performer	Receiving Authority				
OGF – HSE – 021 Electrical Work Permit	Issuing Authority	Receiving Authority, Job Performer	Receiving Authority				
OGF – HSE – 022 Confined Space / Vessel Entry Work Permit	Issuing Authority	Receiving Authority, HSE, Job Performer	Receiving Authority				
OGF – HSE – 023 Radiography Work Permit	Issuing Authority	Receiving Authority, Job Performer	Receiving Authority				
OGF – HSE – 024 Excavation & Civil works Work Permit	Issuing Authority	Receiving Authority, Job Performer	Receiving Authority				
OGF – HSE – 025 Work at Height Work Permit	Issuing Authority	Receiving Authority, HSE, Job Performer	Receiving Authority				
OGF – HSE – 026 Vehicle Entry Permit	Section / Department Rep.	IC Shift	Location IC				
OGF – HSE – 027 Lock-out Tag-out (LOTO) Record	Electrical	Electrical	Electrical				
OGF – HSE – 028 Energy Isolation/ De-Isolation Certificate	IC Shift	IC Shift	IC Shift				
OGF – HSE – 029 Safety System Defeat Certificate	Receiving Authority	Isolating Authority	Area Authority				
OGF – HSE – 020A Explosives Handling Work Permit	Issuing Authority	Receiving Authority, Job Performer	Receiving Authority				



Controlled Copy Do Not Duplicate For Internal Use Only

7.2.1 General

- PTW System shall provide a system for the control of potentially hazardous jobs in order to ensure that various types of maintenance and inspection work are carried out in a safe manner and without impacts to the personnel and equipment.
- PTW System shall ensure proper understanding of the details of the job to be performed, vulnerabilities involved and various precautionary measures to be taken, before commencing the job, during the execution of the job and on the completion of the job.
- PTW System shall be applicable to all types of maintenance, repairs, modifications, construction, project activities, assembling and dismantling carried out by the employees of the company as well as by any contractors and service companies.

7.2.2 Types of Work Permits/ Certificates

Following types of work permits/ certificates shall generally be in use;

Permit Background Colour Cold Work Permit Blue Colour Sour/Hot Work permit Red Colou **Electrical Work Permit Green Colour** Confined Space/Vessel Entry Work Permit Grey Colour **Yellow Colour** Radiography Work Permit **Excavation & Civil Work Permit** Brown Colour Pink Colour Working at Height Permit Vehicle Entry Permit Purple Colour Energy Isolation/ De-Isolation Certificate Aqua Colour Safety System Defeat Certificate **Light Yellow Colour**

7.2.3 Role of Permit Issuing Authority & Receiving Authority

Concerned Dept. Head / Location IC in consultation with Location HSE
Representative shall decide the nominees suitable for issuing and receiving
work permits on the basis of training, skills, roles/ responsibilities and a
comprehensive evaluation of individuals' competency and understanding of
workplace. The authorization of various types of permits to be decided after
evaluation by the concerned Dept. Head / Location IC and Location HSE
Representative stating as follows:
"Mr was evaluated for the PTW Authorit y as Performing / Issuing Authority
for the Work Permits / Certificates. Based on the evaluation, he / she is Recommended for the
and Not-Recommended for
the,, & as PTW Authority."

A consolidated "List of Authorized Permit Issuing Authorities and Receiving Authorities" for various types of permits & certificates (duly signed by Location IC) shall be maintained by Location HSE Section in following format:

List of Authorized Permit Issuing Authorities and Receiving Authorities

	PERMIT ISSUING AUTHORITIES							
				Authorized F		r		
#	Date	Name, Designation	Section	Area	Permit Type	Isolation		
		PERMIT RE	CEIVING AUTHO	ORITIES				
				Authorized For				
#	Date	Name, Designation	Section	Area	Permit Type	Isolation		

- Before issuing the work permit, **Issuing Authority** will:
 - Ensures that the scope of work is clearly defined.
 - Determine the type(s) of permit(s) to be issued relevant to task.
 - Ensure fulfillment of mandatory requirement of job hazard analysis.





Controlled Copy Do Not Duplicate For Internal Use Only

- Physically inspect or delegate any competent person (in situation where his present responsibility does not allow leaving office) for inspection of site along with permit receiver to evaluate the physical conditions and control measures.
- Discuss mutually with the Receiving Authority on vulnerabilities involved in carrying out proposed activity and other activities in parallel in the area / close vicinity.
- Ensure that the necessary tags, lockouts, isolation procedure are fully implemented as required.

■ The Receiving Authority will:

- Carryout impact assessment for the identification of impacts associated in proposed activity and that control measures are adequately implemented and recorded.
- Ensure that the trained and experienced personnel perform the task.
- Communicate the existing vulnerabilities involved in proposed activity to all concerned staff in safe accomplishment of activity.
- Ensure that all workers for this particular job understand the safe procedure for carrying out the job.
- Ensure that the work site is left in safe condition upon completion of work. Carryout all housekeeping prior to handing over the site / permit closure.
- In case the activity is performed by the Contractor or Service Company, then he will:
 - Ensure that his representative at Location understands the PTW requirements.
 - Ensure that formal job hazard analysis has been completed with assistance from OGDCL representative.
 - Provide appropriate training to his staff on safe execution of work and that mandatory PPE are fully enforced at worksite.
 - * Act as Issuing Authority where long-term construction/ project activities are planned.
- HSE Representative shall not sign any work permit: however, in case he is required to sign a specific permit under unusual circumstances like an Emergency Level-2 or a project's testing/commissioning activities, it would only be an act of endorsement that Permit Issuing Authority and Permit Receiving Authority both have taken all applicable safety measures against the Checklist prior to execution of safety critical job.
- No maintenance, repairs, modifications, excavation, construction, radiography or confined space entry shall be carried out without a valid work permit by the employees or by any contractors and service companies.
- All entities / columns of PTW shall be filled. Fields which are not required shall be crossed out and nothing shall be left unfilled.
- Cutting and over writing in PTW shall render it invalid and a new form shall be filled. Alteration done in any entity / column of the PTW, after issuance of the permit / certificates, specifically in job description will make the permit/ certificate invalid.
- If during the course of its work, a confined space is encountered that has not been previously identified, the space must be immediately brought to the attention of the HSE representative, and entry to be delayed until HSE representative has examined the space.
- The record of all permits (hard copy) along with supporting documentation shall be maintained for 02 years
- Where applicable, locks and tags (standardized) shall be used to control the start-up of equipment that is being serviced or maintained. At no time any locks or tags to be overridden that are encountered during the performance of work.

7.2.4 Energy Isolation

For any work involving the need to prior-isolate plant and equipment to protect against hazards of the system or process, the positive isolation shall be





Controlled Copy Do Not Duplicate For Internal Use Only

preferred. This is used for all energy isolations (electrical, mechanical, process, pneumatic, hydraulic, chemical and thermal).

- Any isolation of energy systems; mechanical, electrical, process, hydraulic and others, shall not be allowed to proceed unless:
 - the method of isolation and discharge of stored energy are agreed and executed by an authorized person(s) in compliance with the applicable Lock-out Tag-out (LOTO) standards,
 - any stored energy is discharged,
 - a system of locks and tags is utilized at isolation points,
 - a test is conducted to ensure the isolation is effective, and
 - isolation effectiveness is periodically monitored.
- Location management in conjunction with Sectional ICs shall be responsible for implementing energy isolation system by ensuring following:
 - that extent of energy isolation shall be identified in the light of best practices jointly by Issuing and Performing Authorities.
 - that all energy isolation activity is effectively communicated to affected
 personnel and proper controls are maintained on energy isolations devices.
 - that all relevant personnel are trained on energy isolation.
- Electrical isolation, lockout, and use of hold tag procedures shall be used before and during any activity requiring personnel to work on or near denergized circuit parts or where there is danger of injury due to an unexpected startup of equipment (e.g., a motor-driven pump). The hierarchy of controls & types of lock out/ tag out devices is given below:

Device type	Details
Physical Restraint Devices	 -Used in conjunction with clasps, locks and tags. -Used to protect personnel and machinery in conjunction with tags.
Isolation Clasp	 -Used in conjunction with multiple locks and tags. -Each lock on a clasp represents an individual associated with the task.
Isolation Padlocks	-In energy isolation, the use of a padlock or similar device to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Where locks cannot be used, a prominent warning device, such as a tag and a means of attachment, is fastened to an energy isolating device to indicate that the energy isolating device and the equipment being controlled may not be operated until the tagout device is removed.

Other energy sources such as pressurized gas, process fluids, and hydraulic, pneumatic, thermal, chemical, and mechanical systems shall be isolated by valves, blinding, double block & bleed, or disconnecting.

7.2.5 PTW Exemption:

PTW shall not be applicable to routine & formally authorized minor jobs, and non-process areas / permit-free areas which may include:

Routine & Formally Authorized Minor Jobs

- Monitoring of plant parameters and visual inspection of any equipment
- Machine oil / grease make-up by operator
- Fused bulb replacement on alarm panel
- Plugging of electrical apparatus
- Painting, tagging and marking of lines / equipment etc.
- Small civil / masonry work without the involvement of excavation such as flooring, installation of safety boards, levelling of open plot, etc.

Non-Process Areas / Permit-Free Areas

- Vehicle maintenance workshop
- Maintenance workshop
- Warehouses
- Chemical / lube storage areas
- Waste yards
- Access roads and
- Roads in the camps area
- Permit Free Areas shall be reviewed and PTW Exemption List be maintained.





Controlled Copy Do Not Duplicate For Internal Use Only

- However, PTW for the following jobs (even including above mentioned areas) shall continue to be controlled by the designated "Issuing Authority" and "Area Authority":
 - Hot Work (Welding, grinding, cutting),
 - Excavation jobs beyond 0.5 meter,
 - Electrical and mechanical work on confined spaces, live circuits, & HVAC system, and where electrical and / or mechanical isolation is required,
 - Work on smoke detectors and fire water main,
 - Work at height, and
 - Heavy lifting operations
- PTW Exemption List shall consist of low risk routine activities; however the exempted jobs must be assessed, risk-ranked and controls put in place like written safety instructions / precautions before nominating them as candidate.
- List of exempted lists shall be reviewed on annual basis in the HSE MRC meetings.

7.2.6 Rules for Permit To Work (PTW) System:

- a) Site Inspection: The Issuing Authority shall ensure that site is visited by him or suitable delegate along with the Receiving Authority to determine the conditions and identifying vulnerabilities involved in proposed activity. The physical condition of equipment e.g., welding machine, tools etc. shall also be checked by the permit issuer or his delegate for appropriateness. If condition of surrounding work area are satisfactory and vulnerabilities are evaluated and controlled then the permit issuer shall issue the permit and if surrounding conditions of work area are not satisfactory for the work to proceed the work permit will not be issued until certain mitigation measures are taken.
- b) Gas Test (LEL, O2, CO & H2S): Gas test, if required as per the condition of the applicable work permit shall be conducted by the Issuing Authority / his delegate in presence of Receiving Authority prior to issuing the Work Permit, for likely presence of flammable / toxic gases / oxygen level at work site. Permit will be issued only if the results of gas test are satisfactory. Periodic testing during job execution is mandatory on frequency of 2 hours by Issuing Authority/ his delegate. However the duration may be reduced to a suitable frequency say 1 hr. by the Issuing Authority keeping in view the criticality of job. The frequency of gas testing for such activities must be specified while issuing permit and recorded on permit document. Calibration of gas testing equipment to be ensured prior to use by trained staff.
- c) Pre Job Safety Meeting For Hazard Awareness / Communication: It is the responsibility of Issuing Authority to brief the Receiving Authority the specific conditions existing in the work area, related vulnerabilities, special precaution required for the job, PPE requirement etc. The Receiving Authority will communicate the same to all workers involved in the job by conducting a separate briefing / toolbox talk prior to job execution. Any of Tool Box Talks conducted must be supported by the signatures of participants on backside of the Permit.
- d) **Permit Distribution and Display:** The Receiving Authority is responsible for ensuring that the display of permit at prominent location at the worksite (and in the Motor Control Center (MCC) in case of electrical isolation), and will remain there until completion of job. In case of extension / closure the receiver brings the copy of permit to issuer for extension / closure as per prevailing condition mentioned in this procedure.
- e) **Work Supervision:** Receiving Authority is responsible for ensuring that the workers comply with work permit system requirements during the entire activity. The Receiving Authority or his representative must remain at worksite till completion of job in all activities performed by company staff. In contractor executed activities, contractor's or service company's supervisor must remain at site to ensure full compliance of permit system.





Controlled Copy Do Not Duplicate For Internal Use Only

f) **Work Monitoring:** Concerned Dept. Head / Location IC, Issuing Authority, Location HSE Representative or any delegate (defined in the permit) may frequently visit the work area to monitor the conditions. For critical jobs visit frequency may be fixed to monitor the conditions or any suitable person may be deputed to remain at site all time till completion of job.

- g) **Simultaneous Activities:** Simultaneous activities are required to be identified at the time of issuing work permit, recorded in permit checklist and the same to be communicated to Receiving Authority for his information and necessary precautions during work execution. The Issuing Authority may designate a competent person to ensure that the interfaces between working parties are properly managed as per authorization on work permits.
- h) Work Permit Validity: Work permit is valid only for the time specified on the permit for which it is issued. Incomplete jobs within specified time period the permit requires revalidation / reissuance by the Issuing Authority. The maximum validity of a permit is One Shift, after which the permit is revalidated upon detailed inspection / checks. A permit is revalidated only once for another shift, after which the permit requires reissuance through reassessment / check for work area conditions. Permits shall also be revalidated if any of the following is observed during work:
 - Change in scope of work,
 - Significant change in the workgroup,
 - New hazard become apparent which may have significant impact and
 - Permit suspended due to an emergency or a lapse of two hours from the time Area Authority signed the permit.

In case there is a change in any of the PTW authorities, then all signatories have to endorse the permit. It will be the responsibility of the authority that has been replaced to get the signatures.

Blanket Work Permit: For any Cold Work and Line Break Job which is likely to continue more than 2 work shifts where project activities of similar nature are planned during ATA jobs and instances allowing work on a grouping of closely interrelated or similar pieces of equipment (e.g., groups of exchangers, pumps, vessels and connecting piping, etc.), blanket safe work permitting of crafts can be done with prior agreement and a Blanket Permit may be issued by concerned Dept. Head / Location IC after carrying out assessment / checks and other requirements of PTW system. The validity of permit is up to a maximum of 7 days and a new permit is to be issued afterwards. Concerned Dept. Head / Location IC may delegate responsibilities for the monitoring during execution of job to any suitable nominee in order validate the work permit requirements. The responsibility for conducting safety briefing, impact assessments lies with the Receiving Authority and that is timely informed to Issuing Authority/ his delegate for his information and record. Concerned Dept. Head/ Location IC may be approached for advice on critical jobs requiring decision making and approvals.

- i) **Work Delay / Stoppage:** If the work is delayed or stopped for over 2 hours for any reason other than safety consideration, the permit receiver must return the permit to Issuing Authority. Before restarting the job the Issuing Authority shall recheck the condition contained in initial permit and validate the initial permit.
- j) Work Suspension: The work in progress under the PTW System may be stopped / suspended by the Issuing Authority / Concerned Dept. Head / Location IC/ Location HSE Representative under following circumstances but not limited to:
 - Don observance of any major HSE Non-conformance
 - In event of Emergency
 - * A lapse of two hours from the time Area Authority signed the permit
 - For operational reasons to prevent interaction with another activity
 - Awaiting receipt of materials etc.
- k) **Handing Back:** Once the job is completed and the area is cleared, the work permit requires handing back. The Receiving Authority will return the hard copy of permit to Issuing Authority after signing it and providing status of job





Controlled Copy Do Not Duplicate For Internal Use Only

i.e. Complete / Incomplete. The Issuing Authority will then initiate the removal of isolation (if any), verify the work site condition returned to normal and close the permit. The Issuing Authority may carry out the test run of equipment prior to closing the work permit.

The work permit copies will then be exchanged i.e. the card copy will go to Issuing Authority and top page copy to be handed over to Receiving Authority receiver for record. The Issuing Authority will ensure on day to day basis that the relevant record of permits is maintained.

- I) **Permit to Work Documentation:** Permit to work documentation shall be subjected to a documentation control process including:
 - Unique reference numbers with traceability within each Dept. / Location
 - Version control
 - Work Permit Log
 - ◆ Controlled storage of closed out permits and associated documentation The open & closed permits to be properly segregated in Control Room with record maintained in Work Permit Log on daily basis. The closed permits and supporting certificates / documentation are then maintained in proper file folders. Each Dept. / Location will define the retention period for permit records based on the frequency of issuance.

Note: Maintenance Work Order (MWO) is raised by operations department for corrective/ breakdown maintenance. The MWO unique reference number may be reflected in permit for traceability.

- m) **Change of Circumstances/ Scope:** When circumstances/ scope is changed, work is stopped. Following are some of the conditions:
 - Change of Work Scope/ Circumstances: Where the work scope or circumstances change e.g. boundaries of intended job exceeding agreed scope etc., work shall immediately cease and the situation referred back to the Issuing Authority for review and advice. A revised JHA may be carried out to evaluate the change and its impacts.
 - Description Permit Status In emergency situation, permit shall be suspended until the facility has returned to its normal status. The permit shall be revalidated or reissued prior to work commencement.
 - n) **Precautions for Confined Space Entry:** A "Confined Space Entry Permit" shall be issued for personnel to enter into the confined space after the following precautions are satisfied:
 - The atmosphere inside the confined space has a normal oxygen content of 20.8% and it is free from toxic vapours and gases.

The personnel shall not enter the confined space if:

- Oxygen content is less than 19.5%.
- Oxygen content is greater than 23.5%.
- Presence of flammable vapours or gases at concentration above the 10% LFL (Lower flammable limit).
- Presence of toxic vapours and gases above the occupational exposure standard for a 10 minute exposure.

Personnel may enter the confined space wearing suitable and approved respiratory equipment if the presence of toxic vapours and gases below the Lower Threshold Limit Value (LTLV).

- O) Safety System Defeat Certificate (SSDC): Safety critical devices are those which are in place to prevent or mitigate the major process accidents. Safety System Critical Defeat Certificate shall be required whenever a safety critical device is to be inhibited and cross referenced in PTW. Permit Issuing Authority will carry out risk assessment using the entity inscribed in the SSDC to determine and decide about the validity of SSDC and its extension if required.
- p) **Training and Competence:** Personnel involved in issuing & receiving work permit are formally trained and competent on work permit system. The issuer and receiver should be aware of the following, but not limited to work permit conditions e.g. validity, requirement specific to type of permit, precautions measures; responsibilities of issuing and receiving authority; documentation requirement; and emergency procedures.





OIL & GAS DEVELOPMENT COMPANY LII	MITED
Ref. Section 07 (Operation) of OGDCI's Integrated HSE System Manual	OGF - HSE - 019(02)
COLD WORK PERMIT	WO No
Record TBT proceedings on back of the card copy	WP S.No
INITIATION	
Permit Begins Hours Date	
	*
30 A A A A A A A A A A A A A A A A A A A	*
Extended by This permit authorizes Mr	D:
of Section, to perform the following work	
orsection, to perform the following work	
At	
AL .	-
NOTE: Tick Respective one 'Job Type' HSE Function	on
	Maintenance
Emergency Shut Down Project/ New Job Productive	
Routine Process Activity Modification Annual Tur	n Around
SAFETY CHECKLIST	
Tick 'Yes' or 'No' or 'NA' as applicable	Yes No NA
1 Has the Tool Box Talk been conducted?	
2. Is the electrical power of equipment disconnected? 3. Have all valves been closed and tagged?	
3 have an varies need closed and tagged? 4 Is equipment depressurized / purged and flashed?	
5 Is equipment under pressure and hot?	
6 Is area condition sufficiently open to allow for adequate ventilation?	
7 Is the breaker locked and tagged?	
8 Is scaffolding arranged for safe execution of job? (Attach checklist)	
9 Is residual risk (s) in this job acceptable? 10 Are the barricading and warning signs in place?	H H H
11 Is JHA required and attached to complete this job?	H H H
12 Who will monitor the operating conditions?	_
13 Fire Fighting Arrangements:	
14 Personal Protective Equipment requirements	
Helmet Goggles Coverall Gas Mask/ Respirator	Apron Ear Muffs/Plugs
Safety Shoes/Gum Boots Dust Mask	Full Body Harness/ Safety Belt
Rubber/Cotton Gloves Face Shield	SCBA
15 Special Instructions	
Authorization >> Permit Issue Authority Relevant Section	Permit Receiving Authority
JOB COMPLETION	
This job has been completed and area is cleared for any unwanted material / housekeeping is good enough.	
Date/Time	
However the summary of "incidents" encountered during the job is given below: Asset Environment	
Asset Environment Fetal Non-Fetal First Aid Near Hits Damage Damage	
(Tick/Cross)	
Description:	
Signed by Checked by	Verified by
Permit Receiving Authority Relevant Section	Permit Issue Authority



OIL & GAS DEVELOPMENT COMPANY LIMITED	
Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual OGF	– HSE – 020(02)
SOUR/HOT WORK PERMIT WO NO	
Record TBT proceedings on back of the card copy WP S.No	
INITIATION	
Permit Begins Hours Date	
Permit Expires Hours Date	
Extended upto Hours Date	
Extended by	
This permit authorizes Mr of Section, to perform the following work	
orsection, to perform the following work	
At	
MOTE. Tiel Demesting one Hels Tonal	
NOTE: Tick Respective one 'Job Type' Corrective Maintenance Non Process Activity Preventive Maintenance	
☐ Emergency Shut Down ☐ Project/ New Job ☐ Productive Analysis	
Routine Process Activity Modification Annual Turn Around	
PERIODIC INSPECTION (To be carried out before and during the work)	
MEASUREMENT BY DATE	RESULT
% LEL %OXYGEN	
H ₂ S(ppm)	
SAFETY CHECKLIST	
Tick 'Yes' or 'No' or 'NA' as applicable 1 Has the Tool Box Talk been conducted?	NA
2 Is area provided with suitable access and egress?	Ī
3 Is area free of flammable / combustible materials?	
4 Is the Continuous gas detection present? 5 Is floor dry where electrical arc welding is used?	
6 Have operation maintenance and safety engineers conducted prior joint inspection?	i
7 Is scaffolding arranged for safe execution of job? (Attach checklist)	
8 Are barricading and warning signs displayed? 9 Is the equipment disconnected or completely isolated by blinding?	
10 Is the electric power of the equipment disconnected?	
11 Are electrical switches tagged?	
12 Welding / burning equipment to be checked before use	
13 Is the breaker blocked or tagged? 14 Is the equipment depressurized and flushed?	
15 Is adequate ventilation in and around the equipment made?	
16 Is wind direction suitable for hot work?	
17 Is adjacent area safe for spark? 18 Is fireextinguisher / fire blanket placed nearby?	H
19 Is JHA attached with the permit?	
20 Name of the fireman / Fire Watch assigned:	-
21 Equipment to be use in hot work: 22 Who will monitor the operating condition:	-
23 Fire Fighting arrangements:	
24 Personal Protective Equipment requirement	
Helmet Goggles Apron Coverall Gas Mask/ Respirator Ear Muffs/Plu	IBS
	ness/ Safety Belt
Rubber/Cotton Gloves Face Shield SCBA	
13 Special Instructions.	
Authorization -> Permit Issue Authority Relevant Section Permit Receiving	g Authority
JOB COMPLETION	
This job has been completed and area is cleared for any unwanted material / housekeeping is good enough. Date/Time	
However the summary of "incidents" encountered during the job is given below:-	
Asset Environment Fatal Non-Fatal First Aid Near Hits Damage Damage	
(Tick/Cross)	
Description:	
Signed by Checked by Verified by Permit Receiving Authority Relevant Section Permit Issue Authori	thr.
ALL WORK PERMIT AREAS ARE NON-SMOKING AREAS	oj.





OIL & GAS DEVELOPMENT COMPANY	LIMITED
Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual	QGF - HSE - 021(02)
ELECTRICAL WORK PERMIT	WO No
Record TBT proceedings on back of the card copy	
NITIATION	701 3.113
ermit Begins Hours Date	
ermit Expires Hours Date	
xtended upto Hours Date_	
Extended by	
his permit authorizes Mr	
f section, to perform the following work	
t	
NOTE: Tick Respective one 'Job Type' Corrective Maintenance Non Process Activity Preventive	tion e Maintenance
☐ Emergency Shut Down ☐ Project/ New Job ☐ Productive	
☐ Routine Process Activity ☐ Modification ☐ Annual Tu	
AFETY CHECKLIST	
Tick 'Yes' or 'No' or 'NA' as applicable	Yes No NA
1 Has the Tool Box Talk been conducted?	
2 Has the equipment been properly de-energized & tagged?	
3 Is the breaker locked and tagged?	
4 If not, have the circuit breaker output leads been disconnected & Tagged?	
5 Have you ensured that the equipment does not start from the local on/off switch? 6 Has the equipment where work is to be done identified by the	
Performing Technician?	
7 Will the Electrician work on live circuit?	<u> </u>
8 Has Explosivity in the area been checked out for working on live circuit?	
9 Has a stand by maintenance person been appointed for working on live circuit?	
10 Have you instructed the Electrician about the safe procedure of this job?	
11 Have you instructed the Electrician to use insulated electrical tools?	
12. Have the unit affected by the work been 'notified'?	
13 Is scaffolding arranged for safe execution of job? (Attach checklist)	
14 Is JHA required and attached to complete this job? 15 Who will monitor the operating conditions?	
15 Who will monitor the operating conditions? 16 Fire Fighting arrangements:	
17 Equipment to be use:	<u> </u>
18 Reference of Power Isolation Slip & LO/TO:	
19 Personal Protective Equipment requirement	
Helmet Goggles	Apron
Coverall Gas Mask/ Respirator	Ear Muffs/Plugs
Safety Shoes/Gum Boots Dust Mask	Full Body Harness/ Safety Belt
Rubber/Cotton Gloves Face Shield	SCBA
20 Special Instructions.	
Authorization > Permit Issue Authority Relevant Section	Permit Receiving Authority
Relevant Section	Supervisor/Performing Technician
DB COMPLETION	
nis job has been completed and area is cleared for any unwanted material / housekeeping is good enough.	
ate/Time	
owever the summary of "incidents" encountered during the job is given below:-	
Asset Damage Environment Fatal Non-Fatal First Aid Neer Hits	
(Tick/Cross)	
Description:	
West Iprom.	
Signed by Checked by	Verified by
Permit Receiving Authority Area Operator	Permit Issue Authority



OIL & GAS DEVELOPMENT COMPANY L	IMITED
Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual	OGF - HSE - 022(02)
CONFINED SPACE/ VESSEL ENTRY PERMIT	T
Record TBT proceedings on back of the card copy	WO No WP S.No
INITIATION	*** ***********************************
Permit Begins Hours Date	
Permit Expires Hours Date	
Extended upto Hours Date	
Extended by	
This permit authorizes Mr ofsection, to perform the following work	
orsection, to perform the following work	
At	*
NOTE: Tick Respective one 'Job Type'	on
	Maintenance
Emergency Shut Down 🗆 Project/ New Job 🗆 Productive	Analysis
Routine Process Activity Modification Annual Tu	rn Around
PERODIC INSPECTION: (To be carried out before and during the work)	
MEASUREMENT BYDATE	
TEST INTERVAL TIME RESULT TIME RESULT TIME RESULT TIME	RESULT TIME RESULT
% LEL %OXYGEN	
H ₂ S(ppm)	
SAFETY CHECKLIST	
Tick 'Yes' or 'No' or 'NA' as applicable	Yes No NA
1 Has the Tool Box Talk been conducted?	
2 Has Worker received safety training?	
3 Is electrically driven equipment disconnected?	
4 Are electrical switches tagged?	
5 is the breaker locked and tagged? 6 Are all lines disconnected or blinded?	
7 Are all valves closed and in-between bleeders opened?	
8 is the equipment depressurized, flushed and purged?	
9 Is the atmosphere around (including wind direction, explosive gas leakage) suitable for entry?	
10 is the person fit for entry?	
11 Is work site barricaded and warning signs posted?	
12 Is any sludge or rust present?	
13 Is the vessel cold enough to enter?	
14 Is adequate ventilation and lighting (24 V) arranged?	
15 Name of the Standby/Rescue/Fireman assigned	
16 Protective Equipment required?	
17 Is JHA required and attached to complete this job?	
18 Who will monitor the operating conditions?	
20 Personal Protective Equipment requirement	
Helmet Goggles	Apron
Coverall Gas Mask/ Respirator	Ear Muffs/Plugs
Safety Shoes/Gum Boots Dust Mask	Full Body Harness/ Safety Belt
Rubber/Cotton Gloves Face Shield	SCBA
21 Special Instructions.	
Authorization -> Permit issue Authority Relevant Section	Permit Receiving Authority
JOB COMPLETION	
This entry-job has been completed and area has been cleared. Date/Time	
However the summary of "incidents" encountered during the job is given below:-	
Asset Environment Fatal Non-Fatal First Aid Near Hits	
Damage Damage Patal Published Plist Aid Iveal His	1
Description:	
Signed by Checked by	Verified by
Permit Receiving Authority Relevant Section	Permit Issue Authority
ALL WORK PERMIT AREAS ARE NON-SMOKING A	REAS



CONFINED SPACE ENTRY LOG

Designated Attendant:

Relief Attendant(s): (1)

-3

-2

Entrant's Name	Company	ln	Out	In	Out	ln	Out	In	Out
1)									
2)									
3)									
4)							-		
5)									e.
6)									
7)									
8)									

Comments Regarding Confined Space or Entrants:





OIL & GAS DEVELOPMENT COMPANY LIMITED		
OGF Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Menual OGF	F – HSE – 023(02)	
Radiography Work Permit	WO No	
Record TBT proceedings on back of the card copy	WP S.No	
Permit Begins Hours Date Permit Expires Hours Date Extended upto Hours Date Extended by This permit authorizes Mr. Section, to perform the following work		
At		
NOTE: Tick Respective one 'Job Type' Corrective Maintenance Emergency Shut Down Routine Process Activity Modification HSE Function Preventive Maintenance Project/ New Job Productive Analysis Annual Turn Around	nce	
PERODIC INSPECTION (To be carried out before and during the work)		
Tick 'Yes' or 'No' or 'NA' as applicable 1 Has the Tool Box Talk been conducted? 2 Is the radiography sources adequate for the job? 3 Are all radiographers qualified "Registered" persons? 4 Are all radiographers wearing film badges? 5 Is audible warning system available? 6 Is radiation survey meter/dosimeter calibrated? 7 Is adequate lighting in place? 8 Has the radiation zone been posted? 9 Have radiation zone been barricaded/ cordoned off? 10 Is flashing light / beacon in place? 11 Is scaffolding arranged for safe execution of job? (Attach checklist) 12 Is JHA required and attached to complete this job? 13 Who will monitor the operating conditions? 14 Name of the stand by person assigned: 15 Fire Fighting arrangements: 16 Personal Protective Equipment requirement Helmet Goggles Gas Mask/ Respirator Safety Shoes/Gum Boots Heat/Cotton Gloves Face Shield 17 Special Instructions.	Apron Ear Muffs/Plugs Full Body Harness/ Be SCBA	
Authorization > Permit Issue Authority Relevant Section Permit	Receiving Authority	Ÿ
JOB COMPLETION		
This job has been completed and area is clear for any unwanted material/housekeeping is good enough. Date/Time However the summary of "Incidents" encountered during the job is given below:- Asset Environment Futal Non-Futal First Aid Near Hits (Tick/Cross) Description:		
	ied by ue Authority	

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



OIL & GAS DEVELOPMENT COMPANY	LIMITE	D	
Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual	1	OGF – HSE – C	024(01)
Excavation & Civil Work Permit		WO No	
Record TBT proceedings on back of the card copy		WP S.No	
INITIATION			
Permit Begins Hours Date			
Permit Expires Hours Date			
Extended upto Hours Date			
Extended by			
This permit authorizes Mr			 :
ofsection, to perform the following work			
At			
AL			
NOTE: Tick Respective one 'Job Type'			
☐ Corrective Maintenance ☐ Non Process Activity ☐ Preventive ☐ Emergency Shut Down ☐ Project/ New Job ☐ Productive	e Maintena e Analysis	nce	
☐ Routine Process Activity ☐ Modification ☐ Annual Tu			
PERODIC INSPECTION (To be carried out before and during the work)			
MEASUREMENT BY DATE			
TEST INTERVAL TIME RESULT TIME RESULT TIME RESULT TIME % LEL	RESULT	TIME	RESULT
%OXYGEN H,S(ppm)			
SAFETY CHECKLIST			
Tick 'Yes' or 'No' or 'NA' as applicable	Yes	No	NA
1 Has the Tool Box Talk been conducted?		무	
2. Is there any electrical or cable under ground? 3. Is the underground cable de-energized?		H	
4 Are electric switches / breakers locked & tagged?			
5 Are there any underground interment lines?			
6 Are underground pipeline(s) under pressure? 7 Are the instrument cable de-energized and disconnected?	H	H	
8 Are there any gas pipelines, water lines or any other line underground?	ä	ă	
9 Are pipelines underground emptied / isolated and blinded?			
10 Is power driven equipment permitted for chipping & grinding etc? 11 Is showering required?			
12 Is scaffolding arranged for safe execution of job? (Attach checklist)	ä	H	
13 Are the barricading and warning signs in place?			
14 Is JHA required and attached to complete this job?			
15: Who will monitor the operating conditions?			
17 Personal Protective Equipment requirement			
Helmet Goggles Coverall Gas Mask/ Respirator		Apron	L.u.
Coverall Gas Mask/ Respirator Safety Shoes/Gum Boots Dust Mask	H	Ear Muffs/P Full Body Ha	
Heat/Cotton Gloves Face Shield		SCBA	
18 Special Instructions.			
Authorization > Permit Issue Authority Relevant Section	P	ermit Receiv	ing Authority
JOB COMPLETION			
This job has been completed and area is cleared for any unwanted material / housekeeping is good enough.			
Date/Time			
Asset Environment Fatal Non-Fatal First Aid Near Hits			
Damage Damage CTick/Cross)			
Description:			
	J		
Signed by Checked by	Verif	ied by	28
Permit Receiving Authority Relevant Section	Perr	nit Issue Auth	ority 1



OIL & GAS	DEVELOPMENT COMPANY	Y LIMITED		
Ref. Section 07 (Operation) of OGDCL's	Integrated HSE System Menual	OGF - HSE - 025(01)		
WOR	RKING AT HEIGHT PERMIT	WO No		
Record TBT proceedings on back of t	he card copy	WP S.No		
NITIATION				
Permit Begins	Hours Date			
Permit Expires	Hours Date			
xtended upto	Hours Date			
	Extended by			
his permit authorizes Mr	2000/07/21 5/02/6/17/5 5/19/25/			
of Section, to perform the	following work			
Mt				
NOTE: Tick Respective one 'Job Type'	☐ HSE Fund	ction		
	송 (1) 2011년 (1) 전 10 2012년 (1) 10 10 10 10 10 10 10 10 10 10 10 10 10	ve Maintenance		
	Project/ New Job Production	200.000,000,000,000,000,000,000,000,000,		
Routine Process Activity	Modification	urn Around		
CHECKLIST				
Tick 'Yes' or 'No' or 'NA' as applicable		Yes No NA		
1 Has the Tool Box Talk been conducted	•			
2 is Area below been deared?				
3 Are the personnel performing job train				
4 Are emergency arrangements adequate				
5 Is scaffolding arranged for safe execution	T () T ()			
6 is residual risk (s) in this job acceptable				
7 Are the barricading and warning signs i				
8 is JHA required and attached to comple				
9 Who will monitor the operating condit	ions?			
10 Equipment to be used:				
11 Height in feet:		 9		
12 Associated Permits:	50005	<u></u> 00		
13 Personal Protective Equipment require Helmet	Goggles	Apron		
Coverall	Gas Mask/ Respirator	Ear Muffs/Plugs		
Safety Shoes/Gum Boots		Full Body Harness/ Safety Belt		
Rubber/Cotton Gloves	Face Shield	SCBA		
14 Special Instructions.				
Authorization > Permit is		Permit Receiving Authority		
Slyft Engineer/Proc	duction Engineer KC / Shift Engineer	Supervisor/Performing Technician		
OB COMPLETION				
Vork at height has been completed and area is cleared fo	or any unwanted material / housekeeping is good eno	ough.		
lowever the summary of "accidents" encountered during				
owever the summary of "accidents" encountered during		1		
lowever the summary of "accidents" encountered during Asset Environment Ournege Duringer (Tick/Cross)				
Damage Damage		-		
lowever the summary of "accidents" encountered during Asset Environment Ournege Duringer (Tick/Cross)				
owever the summary of "accidents" encountered during Asset Environment Ournige Duringe				
lowever the summary of "accidents" encountered during Asset Environment Ournege Duringer (Tick/Cross)				
lowever the summary of "accidents" encountered during Asset Environment Ournege Duringer (Tick/Cross)		Verified by		



ection 1 - Toolbox Talk	Control of the Contro			MATERIAL PROPERTY.	
		The following must be consider			
bjectives of the work		Equipment / tools		Additional PPE	
pecific plans, methods and	guidelines	Hazardous equipr	ment	Previous lessons learne	
esponsibilities		Materials		Feedback / questions fo	
anpower and skill		Communications	paths / protocols	Applicable OGDCL Life	saving Golden Rule(s)
	to do in case of emergency)	Manual handling			
ork environment / site cond		Work preparation			
	recautions and mitigations	Isolations / Permi	1 40 - 100 -	 	
ive the conditions changed		Performing the wo	onk		
as the activity changed onflicting activities		Reinstatement Weather			
inflicting activities		weather		1 1	
j. Job Hazard Analysis (JH	11.000				
	n that I have received and fully und			eritation and the second	
Name:	Signature:	Name:	Signature:	Name:	Signature:
		-			
ection 3 - Conducted					
	e Toolbox Telk with the Work Part	y and other involved persons.	I have taken part in the To	polbox Telk with the Work Party ar	nd other involved persons to
	e Toolbox Talk with the Work Part	y and other involved persons.	I have taken part in the To address specific Operatio	olbox Telk with the Work Perty ar	nd other involved persons to
onfirm I have conducted th			address specific Operation	ns related matters.	
onfirm I have conducted th	e Toolbox Talk with the Work Part Signature:	y and other involved persons. Date / Time:			nd other involved persons to Date / Time:
ection 3 - Conducted to confirm I have conducted the erforming Authority Name:			address specific Operation	ns related matters.	



Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual OGF- HSE - 026(02)
OQ)(the energy Oil & Gas Development Company
Location:
Vehicle Entry Permit Date:
Validity
Time In Time out
Driver's Name
Vehicle Number OGDCL / Private
Type of Vehicle:
Purpose:
Vehicle Inspected by
'Tick' for OK, 'Cross' for Not-OK
No Leakage Tyres Condition Spark Arrestor
Battery Connection (Covered & Tight) Gas Test Performed
Remarks
Signed by Checked by Verified by Permit Issue Authority Relevant Section Permit Receiving Authority
Close-Out
The job associated with the Vehicle-Entry Permit has been completed and area is cleared for any unwanted material / housekeeping is good enough.
Signed by Checked by Verified by Permit Receiving Authority Relevant Section Permit Issue Authority
Important Instructions:
 All Vehicle Permits to be closed out after the job is completed. Permit copy should always be with the vehicle's driver while inside the plant/well site. Only diesel powered engine is allowed in the plant (gasoline powered is not allowed). Vehicles must follow the designated routes only. Speed limit should be strictly followed. Fire Extinguisher & First Aid Kit must remain available within the vehicle.





OGF - HSE - 027(01)

OIL AND GAS DEVELOPMENT COMPANY LTD. **ENERGY ISOLATION LOG SHEET**

					Energy Isolation Deta	ails		Energy Isolation/	
#	Equipment/ Safety System Name	Isolation Device/ Method	Location	(Quantity + Number + Location)	Date and Time of attachment/ defeat (with person name)	Date and Time of detachment/ defeat removal (with person name)	Work Permit Ref.	Defeat Certificate/ Other Ref.	Remarks
-									
=									
	3								
_									
_	_		_						
		-							
				Ĭ.					
	0)								
_	-				-				
-	-		_		-	3		-	
-			_						
	0	9							
_									
_									
_			_						

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual

Page 1 of 1





Ref. Section 07 (Operation) of OGDCL's Integrated HSE System	n Manual OGF – H	ISE - 028(02)
OQ)(the energy OIL & GAS DEVELOP	MENT COMPANY LIMITED	
	Certificate No:	
ENERGY ISOLATION/ D	E-ISOLATION CERTIIFCATI	E
ISO	OLATION	
Date of issue		hrs
This AUTHORIZES Location	Section to <u>isolate</u> the <i>energy source</i>	of (unit)
appropriate locks, tags, blinds, spades, etc	. specified hereby as	7110
		•
Isolating Authority/	In-Charge Shift	
DE-I	SOLATION	
It is CERTIFIED that the <i>energy source</i> of <u>de-isolated</u> at <u>hrs date</u>	(unit)l and all above mention	nas been ed locks,
tags, blinds, spades, etc. have been disreg		•
Isolating Authority/ I	n-Charge Shift	



	Ref. Section 07 (Operati	ion) of OGDCL's Integrated HSE System Ma	nual	OGF - HSE - 029(0
06)(SAFETY SYST	EM DEFEAT CERTIFICATI		
			Certificate No.	
tecord TST proceedings on kack of the conf copy nitiation	,			
SSDC Begins Ho				
Oefeat related HSE Hazards / Ris				
Vulnerabiffies (Hazards/Threafs) Risk (Clamage Expected) Probabiffy Consequence Risk Rating				
Controls Ho Extended Upto Ho Ex	ours Date			
Section 1 - Description of Defeat	8		i i	
Location / Installation:			Original Associated Work Permit No.:	
System/ Equipment to be Defeated:			Work Continuing on Permit No.	
Tag No.:			Loop Drawing /	YES/NO
Reason of Safety System / Safety	E		Cause & Effects Attached	TEOTINO
Name:	Signature:	Date / Time: Name:	Signature:	Date / Time:
Section 3a - Details of Defeat ² (by	v Isolating Authority') - Inh	ibit/Override/Isolation		
Section 3b - Details of Safeguard	is (Precautions and Mitigati	ions) while System/Equipment is Defeate	ed	
1. Isolating Authority for the application and 2. Where applicable, isolation points to be to		es is typically the Control Room Operator or an Instrur	nent Technician	
Section 4 - Implementation of De 4a. I hereby approve the defeat as		Section 6 - Remo	oval of Defeat orise removal of the defeat as described in S	ection 3
Approving Authority(Incharge of Proces		Date / Time: Issuing Authority No		Date / Time:
I hereby authorise the defeat as de- Issuing Authority Name:	scribed in Section 3 Signature	Date / Time:		
4b. I hereby certify that the defeat h	nas been applied as describe	d in Section 3 6b. I hereby certif	y that the defeat has been removed	
Isolating Authority [®] Name	Signature:	Date / Time: Isolating Authority*	Name: Signature:	Date / Time
4c. I hereby certify that the defeat is	s in place	6c. I hereby confi initial state	rm that the defeat has been removed and sit	e has been returned to its
Area Authority Name	Signature:	Date / Time: Area Authority Nam	e: Signature:	Date / Time:



Controlled Copy Do Not Duplicate For Internal Use Only

Work Permit Serial No.



OIL & GAS DEVELOPMENT COMPANY LIMITED

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual

OGF - HSE - 020A(01)

EXPLOSIVES HANDLING WORK PERMIT

🙎 WORK IS "NOT TO COMMENCE" UNTIL ALL SECTIONS OF THIS PTW ARE COMPLETED AND AGREED.

	itiation				
B4	Cartas	Date	Time	Du	ration (Hours)
Permit i Permit E					
	details:	-1			
-5/2/2/2	Visite de la Contra				
Description of exp. detonators in					
Task location &	MARKATAN PROPERTY.				
aximum number of cont					
	rmitted:				
rk Party/ Team (De	tails of personnel	nominated to carry o	ut the job / handle the ex	plosives)	
Role	OGDCL/	Name, Desig	and the second second	on(s)/ License(s)	Training(s)
	Contractor				
			7		
I. 0 F					
is & Equipment (L	ist all tools and ed. 2.	quipment authorized 3.	for entry into the explosiv	res handling / usage 4.	area)
	6.	7	<u> </u>	8.	
	10.	1		12.	
ecial Instructions:					
		Name		Designation	Section
ermit Issued (Authorized	n By:				
Signa	ture:		Date &	Time:	
derstand that it is my res is in progress. I have uct each and every non	sponsibility to super received the toolb ninated person of t	ervise the work's qui lox talk (TBT)/ pre-jo the agenda contents	at the team nominated as ality and safety through to be safety meeting's agen . I will record the proceed placed upon me. No add	o its completion and ida relating to the ti lings on back of this	l remain on site wh ask and undertake permit (card) copy
V has been authorized a		impleuon date & ume	piaced upon me. No add	mional work will be i	amed out unura n
		Name		Designation	Section
Permit Received	d By:				
Signa	ture:		Date &	Time:	
Party (OGDCL/ contract The task authorized un	npleted and area of personnel) have der this permit ha	is cleared for any e left the site along as been suspende	unwanted material & ho with all tools. d. We understand that b n put in place and equip	efore any further v ment/ systems hav	vork can continue re been locked off
	=			Signature (Permit	leculos Authorito
		UMMARY OF INCIDE	NTS ENCOUNTERED	Date & Time:	issuing Additionary)
Signature (Permit Receivi Date & Time:		UMMARY OF INCIDE Fatal	NTS ENCOUNTERED		Near Hits





Work Permit Serial No.



OIL & GAS DEVELOPMENT COMPANY LIMITED

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual

OGF - HSE - 020A(01)

EXPLOSIVES HANDLING WORK PERMIT

Section 1 - Toolbox Talk Co	ansiderations (tick)				
CELIDIT 1 - TOOLDON TEIN CO	THE RESERVE OF THE PERSON NAMED IN COLUMN 1	he fellowing much be accorded	ered prior to commencing the w	e de	
bjectives of the work	el el			Additional PPE	
THE PERSON NAMED IN COLUMN TO A STATE OF THE PERSON NAMED IN COLUMN TO A STATE	4.10	Equipment / too		Previous lessons learner	
pecific plans, methods and gui- tesponsibilities	gelines	Hazardous equi Materials	pment	Feedback / questions for	
Manpower and skill			s paths / protocols	Applicable OGDCL Lifes	
Access and evacuation (what to	do in some of an eventure it	Manual handling		Applicable CODCL Lifes	sving Golden Rule(s)
Vork environment / site condition		Work preparation		++	
Risk assessment: hazards, prec			nits / Certificates	++	
lave the conditions changed	autoris and finingations	Performing the		++	
laye the conditions changed		Reinstatement	roin.	++	
Conflicting activities		Weather			
John Ictally activates		AACGIIICI			
Section 2 - Work Party Atte By signing this form, I confirm th	ndance Record at I have received and fully unde	erstood the information conta	ined in and referenced during th	e Toelbox Talk.	
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
Name:	Signature:	Name:	Signature	Name:	Signature:
Name:	Signature:	Name:	Signature:	Name:	Signature:
ection 3 - Conducted					
ection 3 - Conducted	Signature:		I have taken part in the To	bolloox Talk with the Work Party and	
ection 3 - Conducted				bolloox Talk with the Work Party and	
ection 3 - Conducted			I have taken part in the To	bolloox Talk with the Work Party and	
ection 3 - Conducted	polibox Talk with the Werk Party	and other involved persons.	I have taken pert in the To address specific Operatio	bolbox Talk with the Work Party and	other involved persons te
ection 3 - Conducted	polibox Talk with the Werk Party	and other involved persons.	I have taken pert in the To address specific Operatio	bolbox Talk with the Work Party and	other involved persons te

ALL WORK PERMIT AREAS ARE NON-SMOKING AREAS





7.3 Handling, Segregation and Disposal of Waste

OGM/P-HSE-7.3(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1.	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 030 Onsite Waste Management Plan	Location HSE IC	Location HSE MRC	Location IC
OGF – HSE – 031 Section Waste Register	Concerned Section Rep.	Concerned Section IC	Concerned Section IC
OGF – HSE – 032 Waste Consignment Note	Concerned Section IC	Material Store IC	Concerned Section IC Material Store IC
OGF – HSE – 033 Waste Disposal Log	Material Store Rep.	Material Store IC	Material Store IC



Controlled Copy Do Not Duplicate For Internal Use Only

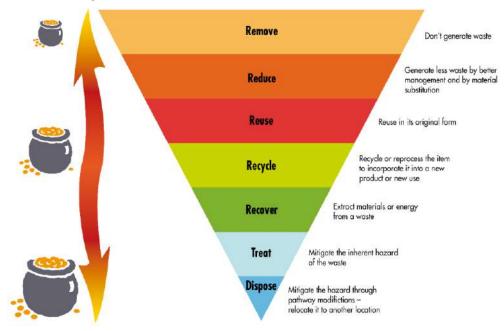
7.3.1 Waste Management Planning

- Waste is classified as Hazardous and Nonhazardous by identifying the physical, chemical and toxicological properties. This information may be found via Safety Data Sheets (SDS), manufacturer's information, process knowledge, historic information or lab analysis. A system to categorize wastes streams according to their health and environmental vulnerabilities is then be developed.
- Location HSE Section shall develop an On-Site Waste Management Plan based on this procedure.
- To properly address each segregated wastes, the most suitable Disposal Method; Frequency of Disposal; and Disposal Responsibility shall be determined by documenting where the acceptability of each disposal option for the different ecological domains shall be determined by virtue of evaluation which shall include: environmental considerations; location; engineering limitations; regulatory restrictions; operating feasibility; economics; potential long-term liability; etc.
- Designated drums, containers, bins, etc. with specific labels shall be placed as Collection Method for the Waste Generating Areas. Color coding of drums, containers, bins, etc. for various types of wastes is to be as follows:

<u>Waste Type</u>	Bin Color
Hazardous Waste	Red Color
Food/Paper/Wood Waste (Organic Waste)	Green Color
Plastic Waste	Yellow Color

7.3.2 Waste Management Methods

■ OGDCL understands the capabilities and limitations of different Waste Management Options for the various types of wastes generated in order to make cost-effective Waste Management Decisions that are protective of human health and the environment. As a general matter, OGDCL has a Waste Management Hierarchy (as recommended by EPA), with a preference for reuse and recycling options.



Source Reduction Methods: Source reduction means eliminating or decreasing, to the extent practical, the volume or relative toxicity of wastes generated by using alternate materials, processes or procedures. Since the opportunities to achieve significant wastes volume reductions for some wastes are limited as their volumes are primarily a function of activity level and age or state of reservoir depletion. For example, the proportion of discharged produced water typically increases as the reservoir is depleted. Also, the volume of drilling mud generated is generally a function of the number of wells drilled and their depth. Nevertheless, OGDCL makes use of opportunities for





Controlled Copy Do Not Duplicate For Internal Use Only

source reduction and efforts are made to exploit them. For example, use of proper solids control equipment reduces the volume of mud discharged.

- OGDCL also believes in process modification which is possible through more effective use of mechanical components, such as more effective drill bits, rather than chemical additions. Gravel packs and screens significantly reduce the volume of formation solids/ sludge produced. Improved controls aid OGDCL to minimize mud changes, engine oil changes and solvent usage.
- Substitution of products that result in the generation of less toxic wastes is preferred. For example, biocides, corrosion inhibitors, coagulants, cleaners, solvents, dispersants, emulsion breakers, scale inhibitors, viscosifiers and weighting agents are selected with potential environmental impacts and disposal needs in mind. Some examples are the selection of mud and additives that do not contain significant levels of biologically available heavy metals or toxic compounds, and the use of mineral oils in place of diesel oil for stuck drill pipe.
- Other efforts include efficient planning so that all commercial chemical products are used on the site or returned unused to the vendors; consideration of bulk chemical purchases to eliminate drums; and use of drains and sumps to collect and segregate spills.
- Typical examples of cost-effective waste management options are tabulated below:

			WAS	STE MAN	IAGEME	NT OPTIC	SNC		
WASTE	WASTE CLASSIFICATION	REUSE	RECYCLE	DEEP WELL/ LINED PIT	SURFACE TREATMENT/ LANDFILL	INCINERATION	RETURN TO VENDOR	OTHER (MENTION)	REMARKS
Adsorbent & Desiccants (Like MG-3, MG-5, Activated Carbon, Ceramic Balls, Silica gel etc.)	Hazardous					Yes			
Batteries (Dry and wet batteries; one time use or rechargeable)	Hazardous		Yes						Battery acid to be neutralized before offsite departure To be returned to vendor
Batteries Cell	Hazardous					Yes			
Catalysts	Hazardous					Yes			
Chemical Waste (expired chemicals, laboratory chemicals, cleaning chemicals etc.)	Hazardous					Yes			To be returned to vendor where possible





Clinical Waste	Hazardous				Yes			Legal requirements to
Cili lical Wasie								be complied with
Construction &	Non-			Yes				
Demolish waste	Hazardous							
Contaminated	Hazardous				Yes			
Debris & Soil								
Dip Slides	Hazardous				Yes			
Drilling Pit Waste	Hazardous	Yes	Yes	Yes				In Case OBM bioremediation shall be considered.
Empty Chemical Drums (Plastic + Metal)	Hazardous	Yes						Drums to be punctured before handing over to waste contractor.
Electronic	Hazardous					Yes		Buyback option for the users.
Waste								
Filter Backwash Liquids	Hazardous		Yes					
Filters (lube oil,	Hazardous				Yes			
air, fuel & raw gas, chemical treatment and water filter etc.)								
Food Waste	Non- Hazardous			Yes				
Garbage -	Non- Hazardous			Yes				
Domestic Waste	nazaraous							
Gas Cylinders	Non- Hazardous						Yes	Cylinders to be punctured before handing over to scrap recycler
Glass waste- Window panes, Bottles, Jars	Non- Hazardous	Yes						To be incinerated in case of contamination with hazardous substance



Controlled Copy Do Not Duplicate For Internal Use Only

Glass waste-	Hazardous	Yes						
Tube Rods,								
Lamps , Bulbs								
and Energy								
Savers								
Hydrotest	Hazardous			Yes				
Fluids								
Insulation	Hazardous				Yes			
Paint	Hazardous				Yes			
Associated								
Waste								
Paper and	Non-	Yes						
Cardboard	Hazardous							
Waste								
Pressurized	Hazardous	Yes						To be punctured
Containers								before disposal
Printer	Hazardous					Yes		Return to Vendor
Cartridges								
Produced	Non-			Yes				
Sand	Hazardous							
Produced	Hazardous		Yes					
Water								
Radioactive	Hazardous						Yes	To be disposed
Waste								through Pakistan Atomic Energy
								Commission
								according to legal requirements
Rags - Oily	Hazardous				Yes			Togoliomomis
Rainwater	Non-			Yes				
Drainage	Hazardous							
Refractory	Hazardous				Yes			
Materials								
Rubber &	Non-	Yes						
Plastic Waste	Hazardous							
Scrap Metal	Non-	Yes						Contaminated meta
ocrap moral	Hazardous							to be
								decontaminated before disposal
Sludge - Tank	Hazardous				Yes			
& Vessel								
Bottoms								
Sludge -	Hazardous			Yes				
Water								
Treatment								
Tetra packs	Non-	Yes						
Waste Oil -	Hazardous Hazardous	Yes						
Diesel and								
condensate								
Waste Oil -	Hazardous	Yes						
Lubricating								
oils								
Well	Hazardous		Yes					
Workover			. 50					
Fluids								
10103								

7.3.3 Modus Operandi

#	Activities	Responsible Person	Related Document
1	Proper placement of generated wastes in a designated place / (wastes drum / bin).	Actual Waste Generating Section	Recording of wastes into the Section's Waste Register
2	Inform to Camp Maintenance Section / Housekeeping Supervisor in case of Common Scrap Item	Actual Waste Generating Section	Recording of wastes into the Section's Waste Register
	Inform to Material Management Section in case of Valued / Hazardous Salvage Waste.		





Controlled Copy Do Not Duplicate For Internal Use Only

3	Segregation and shifting of Valued / Hazardous Salvage Waste into the Designated Salvage Waste Yard.	Actual Waste Generating Section	Waste Consignment Note
4	Weighing of wastes / note down its quantity and other necessary information.	Housekeeping Supervisor (for Common Scrap Waste)	Common Scrap Waste Disposal Log (by Housekeeping Supervisor)
		Material Management Section (for Valued / Hazardous Salvage Waste)	Waste Consignment Note
5	Placement of Valued / Hazardous Waste into the designated section of Salvage Waste Yard.	Material Management Section	Approved Waste Segregation / Placement Plan (developed by Material Management Section)
6	Disposal of Common Scrap Waste as per the Onsite Waste Management Plan.	Local Waste Picker through Field Level Committee	Common Scrap Waste Disposal Log (by Housekeeping Supervisor)
7	Disposal of Valued / Hazardous Salvage Waste as per the Onsite Waste Management Plan.	Auction → Material Management Approved 3 rd party contractor → HSE	Salvage Waste Disposal Log (by Material Management Section / HSE)
8	Checking compliance.	HSE Audit Team	HSE Inspection Report / Audit Report/ Disposal Certificates

7.3.4 Safe Disposal of Waste

- In Transfer waste from Designated Scrap Yard to Contractor's Waste Yard should be using preferably Contractor's own vehicle (or approved subcontracted vehicles), licensed for this purpose. Modes of transport and routes from the waste generation site to the Contractor Waste Yard should be selected to reduce risks of release.
- All waste consignments leaving the Contractor Waste Yard to licensed and approved Waste Treatment & Disposal Facility shall be tracked using Waste Treatment Certificates. The treatment certificates should contain the following information:
 - Waste type(s) and sources
 - o Consignment reference number
 - o Form (e.g. solid, liquid, sludge)
 - o Treatment / disposal method
 - o Quantities and units collected
 - Date and time of collection and disposal
 - o Flue gas / ash analysis where applicable
 - The Waste Management Contractors shall provide treatment and disposal certificates to respective sites.
- Waste disposal record (evidence like Lab. Reports and Waste Treatment Certificates) shall be maintained by Location Material Management (original) and HSE Department / Section (copy).





Controlled Copy Do Not Duplicate For Internal Use Only

OIL AND GAS DEVELOPMENT COMPANY LTD. **On-Site Waste Management Plan**

OGF/XXX - HSE - 030(01)

OGF/XXX - HSE - 030(01)

Part-I: Hazardous Wastes

							Dispo	osal Me	thod				
Nature of Waste	Segregation	Collection Method for the Wastes Generating Section	Responsibility to Collect and Drop in the Designated Scrap Yard	Designat ed Scrap Yard	Reuse	Recycle	Deep well / lined pit	Surface treatment /	Incineration	Return to vendor	Other	Frequency of Disposal	Disposal Responsibilit
										,			
								7					
			15.										
	Prepared by Location HSE InCha	rge		Revie Location	ewed by h HSE M	RC		_				Approved Location Int	i by Charge

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual

OIL AND GAS DEVELOPMENT COMPANY LTD. **On-Site Waste Management Plan**

Part-II: Non-Hazardous Wastes

							Dispo	osal Me	thod				
Nature of Waste	Segregation	Collection Method for the Wastes Generating Section	Responsibility to Collect and Drop in the Designated Scrap Yard	Designat ed Scrap Yard	Reuse	Recycle	Deep well / lined pit	Surface treatment /	Incineration	Return to vendor	Other	Frequency of Disposal	Disposal Responsibility
										23			
	ti.												
	Prepared by Location HSE InCha	rge		Revie Location	ewed by h HSE M	RC				_		Approved Location Int	i by Charge

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual









Oil & Gas Development Company Limited

OGF/XXX - P&P - 031(01)

Section Waste Register

Secti	Section: Location:						
Date	Waste Type	Category (Hazardous/ Non-Hazardous)	Quantity Collected	Temporary Storage Location	Instructions, if any	Initials	Handed over to Materials Store on (date)
					ip.		
-					-		
	*	 				-	+
					-		
	8						
					î.		
	-						-
		4			25		-
	2		2		(C		2
					()-		
		-					-

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual







OGF/XXX - MMD - 032(01)

Oil & Gas Development Company Limited **Waste Consignment Note**

		1
The Waste being removed/ shifte	d from: (specify area)	
Waste Nomenclature:		
Quantity of Waste:	CAN \$450 ALC TO \$13\$50 (MAGAS)	
Nature of Waste: (hazardous/ no		
Physical Form (gas, liquid, solid, j		
MSDS Handed Over with the was		
Bin/ Container Type, Number and	l Size? (if available)	
How going to be transported?		
Any other details to be mentioned	d:	
I certify that I today collected the consignment and that the above mentioned details are correct and I have been advised of any specific handling requirements.	I certify that the above mentioned information is complete and is correct, that the carrier was advised of the appropriate precautionary measures. All of the waste is packaged and labeled correctly and the carrier has been advised of any special handling requirements.	I have received the above mentioned waste in safe condition, except (if any).
Carrier's Certificate (Transporter)	Consignor's Certificate (Waste generating Section)	Consignee's Certificate (Material Management/ Store)
Sign: Date:	Sign: Date:	Sign: Date:

Ref. Section 07 (Operation) of OGDCL's Integrated HSE System Manual





Oil & Gas Development Company Limited

OGF/XXX - MMD - 033(01)

Waste Disposal Log

Sectio	n:		Location:								
#	Waste Type	Category (Hazardous/ Non-Hazardous)	"Quantity" Handed Over For Disposal	Handed Over To Which "Contractor"	Handing Over "Date"	Disposal Technique (to be opted)	Signature of Store Rep.				
- 6											
		+				-					
_				-							
T (f											
_											
		+			-	-					

Ref. Section 09 (Operation) of OGDCL's Integrated HSE System Manual





Controlled Copy Do Not Duplicate For Internal Use Only

7.4 Journey Management

OGM/P-HSE-7.4(2) Revision Number 2

Original Issue: March 02, 2018
This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:

Babar Iftikhar

General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1.	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF/TPT-001	InCharge Transport	Security Rep.	IC Admin./
Journey Management Plan	(TPT)	HSE Rep.	Location IC
OGC/TPT-001	Daily: Driver	Daily: TPT Rep.	Daily: TPT Rep.
Vehicle Inspection Checklist	Yearly: Maint. Rep.	Yearly: InCharge TPT	Yearly: InCharge Maint.



Controlled Copy Do Not Duplicate For Internal Use Only

7.4.1 Purpose

The purpose of this procedure is to ensure that safe travelling conditions are provided to OGDCL employees, contractors and visitors by mitigating the hazards and associated risks regarding the work related road travel.

7.4.2 Scope

- A routine or non-routine journey for the purpose of this procedure is a work related road travel that is covered by the list below:
 - ◆ Movement between an oil & gas installation* to other oil & gas installation.
 - Movement between an office building** to other office building.
 - Movement between an oil & gas installation to an office building.
 - Inter or Intra field/ block/ lease/ concession movement.
 - Movement for any business matter out of oil & gas installation/ field/ block/ lease/ concession/ city (e.g. meeting, fact-finding/ inquiry, audit/ inspection, conference/ workshop/ training, etc.).
 - Movement for general matters (e.g. surveillance, operational or mess purchasing, pick & drop (on-duty/ days-off/ shift-duty), etc.)
 - Movement in remote locations that lacks proper infrastructure and emergency support (e.g. seismic parties, drilling rigs, EFPs, FGCPs, etc.).
 - Movement during any emergency/ operational breakdown at wellsite, pipeline, metering station, or other connected unit/ sub-unit.
 - ♠ Movement for any support services to district management, local community, etc.
 - Movement of foreign technical teams, consultants & delegations.
 - Movement in the security sensitive areas (as notified from time to time by Security Deptt.)

*Oil & gas installation = OGDCL Field/ Rig/ Party/ Stores/ Logistics Base/ G&R Lab.

7.4.3 Responsibility

- Implementation of this procedure at an oil & gas installation → Respective Location InCharge through nominated InCharge Transport (TPT)
- Implementation of this procedure at an office building → Respective InCharge Admin. through designated InCharge Transport (TPT)

7.4.4 Journey Planning

- A journey shall require prior approval of respective HOD/ Location InCharge.
- HOD/ Location InCharge shall consider all viable options e.g., tele or video conferencing before endorsing a Travel Requisition to avoid unnecessary journeys.
- InCharge Transport (TPT) shall ensure that journeys are planned and carried out in ways that minimize exposure to hazards and associated risks using Journey Management Plan.
- For all routine journeys, Journey Management Plan shall be readily available in vehicles with predetermined risks especially considering below hazardous situations;
 - where paved roads are not available/off road driving conditions.
 - routes with security threats, dangerous intersections, sharp turns, landslide areas, slippery conditions, and/ or blind-spots.
 - areas with potentially limited cellular phone coverage.
 - indistinct stopovers.
 - environmentally protected areas, wildlife sanctuaries, etc.
 - transportation of heavy/ fragile/ hazardous material or equipment.
 - night travel or any other high rated risk aspect.
- However for the non-routine journeys, *Journey Management Plan* shall be chalked out on situational basis, accordingly.
- Following operational controls shall be ensured according to the identified hazards and underlying risks:



^{**}Office building = OGDCL Head office, Regional offices, Medical centers, Training center.



Cthe energy Operation: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- safety & security briefing.
- security escort*** (frontier corps/ rangers/ guards).
- communication system (cellular phone; radio set, etc.).
- route (gps) maps (especially for non-routine journeys).
- first aid kit.
- fire extinguisher.
- flashlight/ torch.
- warning triangle.
- vehicular checks (as per Checklist attached).
- special requirements (e.g. under-run protection; rollover protection devices).
- others (like reversing alarm system for heavy vehicles).
- While assigning duties, InCharge Transport (TPT) shall ensure following about driver(s):
 - physical & mental fitness.
 - good energy levels/ food intake.
 - not overloaded/ fatigued with any recent hours of work.
 - slept sufficiently before the trip & owing natural alertness cycle.
- InCharge Transport (TPT) shall plan a journey considering human risk factor by opting daytime driving and avoiding bad weather.
- No journey shall be allowed from sunset to sunrise (If inevitable, driving at these sensitive times shall be made conditional with respective HOD's permission).
- HOD (Security) and Security Rep./ Regional Security Officer (RSO) must be intimated regarding night time travels so that exclusive security measures like security escort be arranged and the concerned Law Enforcement Agencies (LEAs) be informed accordingly.
- In case of low visibility particularly during foggy, rainy or stormy conditions, journey shall not be allowed (If inevitable, driving under these circumstances shall be made conditional with respective HOD's permission).
- For the security sensitive journeys, intermediate radio contact feedback stations shall be configured by Security Deptt. to monitor the ongoing safety of the convoy and a Journey Coordinator be appointed.
- However, Location InCharge/ InCharge Admin./ InCharge Transport (TPT) shall ensure that vehicle(s) have base communication systems configured so that the vehicle(s)/ convoy remain in communication with the destination point uninterruptedly.
 - *** Security Escort
 - Frontier Corps (FC) Baluchistan shall provide escort for the journeys in Baluchistan Province.
 - Frontier Corps (FC) Khyber Pakhtunkhwa shall provide escort for the journeys in sensitive areas of Khyber Pakhtunkhwa Province.
 - In case of expatriates' movement, journeys shall be carried out in bullet proof vehicles with the escort of Frontier Corps (FC)/ Rangers and Police.

7.4.5 Journey Execution

- A formal pre-trip briefing shall be held with driver(s) which includes discussion of route, identified hazards/ risks and operational controls.
- Drivers shall always carry out a basic physical check of their vehicles before a journey using the following table:
 - Petrol: Is there enough fuel for the planned journey?
 - O il: oil level ok? And no obvious leaks?
 - Water: If water-cooled, is the radiator level correct? Is there enough water in the washer reservoir and do the wiper blades effectively clean the windscreen?
 - Electrics: Are all the lights working and does the battery start the engine with ease?
 - Rubber: Are all tyres in good condition with sufficient depth of tread and correctly inflated?

Note:- Vehicles must be inspected on the prescribed Checklist on daily basis for physical inspection and annual basis as vehicle fitness check and record of these inspections be retained for a minimum period of 01 year.

- Drivers shall not move their vehicles until occupants are wearing seat belts.
- Drivers shall not operate a vehicle while under influence of alcohol, drugs, or medication that could impair their ability to safely drive.





Controlled Copy Do Not Duplicate For Internal Use Only

- Drivers shall not be allowed to drive more than the time permissible under the law.
- However more than 10-hour driving in a 24-hour day shall not be allowed in any case.
- A break of at least 15 minutes shall be required every 2 hours of driving preferably at authorized rest areas.
- In addition, driving must be stopped and a break taken when a driver is fatigued/ not feeling well and InCharge Transport (TPT) be informed.
- Drivers must comply with the applicable legal and regulatory requirements for driving and never exceed the posted speed limits or drive at an unsafe speed for the prevailing road conditions (Maximum speed limit within OGDCL's fenced-installations shall be 15 km/hr).
- While driving, drivers shall not use cellular phones or operate navigation system/ multimedia/ electronic devices and refrain from smoking. If communication is really required, the vehicle shall be pulled over at safe location.
- Unauthorized passengers (hitchhikers) shall not be carried in vehicles, except in case of emergency or requisition by local authorities.
- No passenger shall be ever carried in cargo loading area of the vehicle or allowed to hang with the door.
- In case of security personnel at rear side of the vehicle for security escort, proper fixed seats must be provided.
- In case of rash driving or violation of traffic rules, it shall be the responsibility of the senior-most travelling employee to advise driver to drive carefully.
- HOD/ Location InCharge/ InCharge Transport (TPT) must be intimated regarding the behavior of driver on first available opportunity.
- In case, an alternate route to be opted, driver shall inform InCharge Transport (TPT)/ Journey Coordinator.
- In case, deviation from the original routes (planned/ alternate) is to be opted, driver shall take permission from InCharge Transport (TPT)/ Location InCharge.
- Upon reaching the destiny, driver shall report completion of the trip to InCharge Transport (TPT)/ Journey Coordinator.
- If a driver does not reach/ check-in at the designated destination on the estimated time, InCharge Transport (TPT) shall contact the driver and passenger(s), and in case of no contact, shall inform Security Rep. to take up the matter according to the situation.

7.4.6 Incident/ Emergency Handling During A Journey

- There shall be a laminated sticker or low-gauge metal plate posted on the dashboard or at other noticeable place either at front or rear windshield of a vehicle mentioning the names and contact numbers to whom may be informed in case of an incident or emergency.
- If vehicle encounters an accident or emergency situation, following must be done:
 - Respective HOD/ Location InCharge/ InCharge Transport (TPT) be reported immediately.
 - Emergency services be contacted, if required.
 - Any injured person be provided assistance/ first aid (if possible) until arrival of an ambulance.
 - Emergency service provider may be assisted as required.
 - Vehicle be moved away from the roadway and secured, if possible.
 - Driver and passengers to remain at the incident scene until advised by the police (if relevant).
- Subsequently, the concerned regulatory authorities shall be intimated accordingly and formal incident investigation carried out as per prevailing procedure.





Controlled Copy Do Not Duplicate For Internal Use Only

7.4.7 Drivers Qualification, Competence, Fitness and Monitoring

- Only approved drivers shall be eligible to drive company-owned or hired/ rented vehicles.
- Approved drivers shall be those who are appropriately licensed, trained, assessed and medically fit.
- Location InCharge/ InCharge Transport (TPT) shall be responsible for maintaining and communicating an updated list of approved drivers.
- The approved driver must have the following qualification at the minimum:
 - Medically fitness as per trade test (e.g. tests for diabetes, eyesight, colorblind, vertigo, etc.).
 - Valid driving license relevant to the class of vehicle.
 - Must be at least of 21 years of age.
 - Minimum 3 years driving experience (preferably of major cities/ facilities/ organizations).
 - Driven similar type of vehicles before.
- Drivers driving OGDCL-owned or hired vehicles shall undergo mandatory defensive driving course.
- For the newly hired drivers for OGDCL-owned vehicles, defensive driving course shall be organized by HSEQ Deptt. having following topics:
 - Review of applicable policies & standards.
 - Defensive driving techniques.
 - Journey planning/management (including alertness & fatigue management).
 - Effects of medication & substance abuse.
 - Pre-trip checks & requirements (including restraint/ safety systems).
 - Skill versus changing driving vulnerabilities (hazards & risks).
- Refresher defensive driving training sessions shall be arranged as per annual training plan and drivers who had encountered accident(s) or near hits shall be included specially.
- Frequency of refresher's defensive driving trainings shall be three years.
- Records of trainings shall be maintained by TPT and HSEQ Deptt..
- It shall be the contractual obligation of Contractors to impart defensive driving trainings to drivers of hired/rented vehicles whereas compliance of this condition shall be ensured by InCharge TPT/ Location InCharge.
- Based on risk assessment and/ or local regulations, Location InCharge/ InCharge Admin. may consider installation of dashcams, an In-Vehicle-Monitoring-System (IVMS) or Vehicle Data Recorder (VDR) to acquire journey data (against a driver identification # or key) to be analyzed for driver's performance (like speed, acceleration/ deceleration, kilometers driven, driver overall hours, etc.).
- With the installation of IVMS, data management system shall be implemented to ensure data is properly analyzed and feedback is provided to drivers for bringing improvement and safety in their driving skills.





Oil & Gas Development Company Limited

OGF/XXX-TPT-001(00)

JOURNEY MANAGEMENT PLAN TPT Section

GENERAL														
JOURNEY FROM							JOURNEY TO							
RISK ASESSME	NT							<u> </u>						
PLANNED (PRIOR	RITY)	ROL	JTE											
			distances to the	ards/		sks	Risk	Calc	ulatio			Operatio	nal	7
Route (From -	10)			eats		mage ected)	Probability	Conse	quen		Risk lating	Control	s	
-						-								7
9											-			-
														_
				-										\exists
V	value de									- XV				
ALTERNATE ROU	TE		and the same		Di.	sks	Dick	Calc	ulatio	n		VA000-1110-1111-11-11	en enco	\neg
Route (From -	To)			ards/ reats	(Dai	mage	Probability	un tonin server	quen		Risk	Operatio Control		
			560	eats	Expe	ected)	Probability	CUIIS	quen	R	ating	Control	•	=
-							+							\dashv
														_
CTOROVERC (D				C440 / 144	\TE 1		T. IODY 755 DEC	T 4 D		0.	•			===
STOPOVERS (R STOPOVER TI		100	SE/	CAMP/ MC				IAN	EAJ		CHORT	/ OVERNITO	UT (
STOPOVER II	ILE	_	i e	DI.			N (ADDRESS) RIORITY) ROUTE			1	SHUKI	/ OVERNIG	піз	SIA
		_		FL	AIVIVI	CD (P	RIORITI) ROUTE	0);		т				
		\dashv								\rightarrow				
		_								-				
			-		AL	TERM	NATE ROUTE			186				
		Т			2.7277					T				_
		_												
PLANNING CHE	CKLI	$\overline{}$		OPERATIO		$\overline{}$	ITROLS			_			_	
		Y	NA		Y	NA		Y	NA			A008-001-	Y	N/
Safety & Security Briefing				First Aid Kit			Drinking Water			113300	rity Es			
W. S. 1987		-	_		_	-		_				Rangers)	+	₩
Cellular Phones (T way Communication)	WO-			Radio Set			Protective Ciothing				ection (Rollover device		
		\dashv	_	Fire	-	 						sandy/	+	+
Emergency Toeing	, Kit			Extinguisher			Route Map (GPS)				rt terra			
Flashlight/ Torch				Warning			Vehicle Fitness/			Othe	r		T	T
				Triangle	\perp	_	Checks						_	
For all routine journeys,				t Man chall be rea	dily ave	ilablo		cc	NTA	CT NUI	MBERS			_
in vehicles with predetern	mined ris	ks es	peciall	y considering haza	rdous	illable	Location InCharg	je						
situations; ✓ where paved roads are							InCharge Admin.	S						
 routes with security the landslide areas, slipper; 					ums,		Cost some country and converse	_						_
✓ areas with potentially li ✓ indistinct stopovers.							InCharge TPT.	75						
✓ environmentally protect ✓ transportation of heavy	ted areas	, wild	llife sa	nctuaries, etc.	ment.		HSE Rep.							
✓ night travel or any othe However for the non-rout	er high ra	ted ri	isk asp	ect.		Lho	Security Rep.							_
chalked out on situationa				ry management ri	an enan	De								
Note: Please attach the	e planne	d (pr	iority)	as well as alten	nate no	ute ma	p on the back of this for	rm if a	railable	9,				
<u> </u>										_				
Inititated t				Reviewe			Checker					orsed/ Appro		
InCharge T	PI			Security	кер.		HSE R	ep.				InCharge Adı		



09)(the same ye

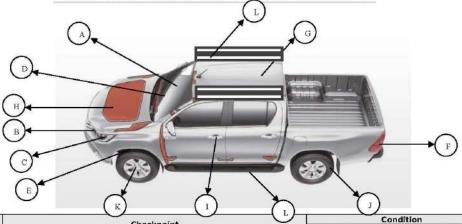
TPT Section

Oil & Gas Development Company Ltd. Location: _

OGC/TPT-001(00)

Monitoring Frequency: Daily (Physical Inspection)[

VEHICLE INSPECTION CHECKLIST Annual (Fitness Check)



Sr.	Checkpoint		Condition		
31.	Спескропт	1000	Good	Fair	Defective
1.	Steering	A			7
2.	Antilock Breaking System / Foot Paddle / Handbrake				This can be a second
3.	Air Bags (esp. at driver's end)				
4.	Parking / Headlights	В			- 8
5.	Hazards & Indicator Lights	С			5
6.	Hom				
7.	Windscreen / Washers / Wipers	D			T.
8.	Shock Absorbers	E			
9.	Suspension				
10.	Speedometer / RPM Meter				
11.	Battery (Connectors Greased / Clamped / Properly Fixed / No Rust)				
12.	Visual General Wiring Codition	7 1			7
13.	Spare Fuses (Available)				-
14.	Brake / Rear Lights & Hi / Low Beams	F			8
15.	Cabin Light				6
16.	Electric Cables & Wiring	1 8			- 8
17.	Starting Performance				
18.	Fluid Level				
19.	Exhaust Manifold & Silencer Condition (Leaks / Hole / Loose Fitting)				
20.	Visual Hoses / Belt & Pipe Condition				
21.	Visual Radiator Condition				
22.	Air Condition & Heating System				
23.	Gears Conditions				7
24.	Selt Belts				
25.	Central Locking Sysetm				
26.	Body's Visual Condition	G			-
27.	Engine's Apparent Condition	Н			8
28.	Doors / Lock / Handle Condition	I			-8
29.	Tyres / Spare Tyre Condition	1			
30.	Wheel Aligment	K			
31.	Under-run Protection; Rollover Protection Devices	L			
32.	Head Restraints				
33.	Reversing alarm system (for heavy vehicles)				

Remarks:

Inititated by	Reviewed by	Verified/ Approved by
Daily: Driver	Daily: TPT Rep.	Daily: TPT Rep.



7.5 Framework for Hydrogen Sulfide (H₂S) Management

OGM/P-HSE-7.5(1) Revision Number 1

Original Issue: November 28, 2019 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record/ Appendix	Initiated by	Reviewed by	Checked/ Verified / Approved by
H ₂ S Detection Equipment (Location &Quantities) for Drilling Rigs	Manager HSE	GM HSE	MD/ CEO



Controlled Copy Do Not Duplicate For Internal Use Only

7.5.1 Purpose

Hyrdogen Sulfide (H₂S) is one of the most toxic gas and at a concentration of 100 ppm is considered to be immediately dangerous to life and health (IDLH) by National Institute of Occupational Safety and Health (NIOSH). H₂S is so dangerous because the level (concentration) that can kill is much lower than that of many other toxic gases. Therefore, the purpose of this procedure is to provide a basic framework for hydrogen sulfide management for all OGDCL operation facilities.

7.5.2 Hydrogen Sulfide(H₂S) Emergency Management during Rig Operations

- H₂S potential risk assessment shall be conducted jointly by Exploration and Petroserv Directorates prior to commencement of drilling operations.
- Each proposed well shall be categorized either as sweet or sour depending upon expectancy of encountering H₂S during the drilling operation.
- Where the well is categorized as sour, following steps shall be taken by Petroserv Directorate:
 - Drilling Rig's Emergency Response Plan (ERP) shall be updated as per guidelines provided in this document.
 - H₂S detection equipment (sensors, alarms, monitors) shall be made available in quantities as per Appendix-A, before commencement of work.
 - Continuous supply of compressed air through Breathing Air Manifolds connected with Cascade Breathing Air Supply System shall be made available at rig floor, derrick, cellar, shale shaker, trip tank/ degasser, and choke manifold (to be made operational when H₂S is encountered).
 - 30/60-Minute Self Contained Breathing Apparatus (SCBA) units shall be made available at emergency response post, muster points, rig floor, dog house, mud cabin and data unit.
 - 10/15-Minute Emergency Escape Breathing Apparatus (EEBA) shall be made available at OM office, HSE cabin, rig floor, dog house, mud cabin, rig maintenance office/ workshops, power control cabin, engine driver cabin, admin room, and data unit.
- Subsequently, the Operations team shall take following steps during drilling:
 - Number of personnel on the drilling rig shall be restricted to a minimum when entering H₂S gas bearing zones, especially during testing or coring.
 - Drilling crew must carry personnel H₂S monitors while working at or around the rig.
 - Two suitable muster points shall be made available keeping in view the wind pattern to avoid exposure in the event of emergency involving release of H₂S.
 - Rig crew must practice "wind consciousness" to know where the wind indicators are; make the habit to check regularly and always be prepared to quickly move upwind or crosswind.
 - All personnel shall receive safety induction prior to start of work and have knowledge of the location of the Muster Points.
 - The rig crew shall be made to participate in the H₂S rescue mockup drills and practice wearing and using breathing apparatus.
 - Periodic inspection shall be undertaken to assure that all safety / emergency equipment and gadgets are properly stored, maintained and fully operational. Drilling crew must make a habit to check the H₂S alarms as during daytime alarm lights can be difficult to see.
 - Safe operating conditions shall be maintained and alert shall be made for any changes in conditions especially when approaching suspected gas bearing zones or during well testing.
 - Each team working in the hazardous zone shall have the requisite number of Advanced First Aiders.
 - Mechanism of community evacuation in case of emergency must be incorporated into Drilling Rig's Emergency Response Plan (ERP).
- H₂SEmergency Conditions can be subdivided into three conditions:

Condition-I: Caution (When H ₂ S concentration is more than zero but less than 10ppm)	 Continuous Yellow Light flash over rig with no alarm Be alert for a condition change Keep emergency Breathing Apparatus (BA) like EEBA and SCBA nearby and ready in case H₂S levels increase beyond 10ppm
Condition-II: Potential Danger to Life and Health (When H ₂ S concentration is 10ppm to 15 ppm)	 Red Light flashover rig with no alarm All Rig site personnel shall be advised of the change in the condition level Use the buddy system (i.e. work in pairs) to prevent anyone from entering or being left in an area alone Condition-II will remain in effect until the H₂S concentration drops below 10ppm and the yellow flashing light deactivates or Condition III develops





Controlled Copy Do Not Duplicate For Internal Use Only

Condition-III: Extreme Danger

(When H₂S concentration is greater than 15 ppm)

- ∞ Red Light Flash over Rig with continuous alarm
- All non-essential personnel will mask-up and proceed to the upwind muster point
- A list of key personnel shall be compiled and included in Site Emergency Procedure who shall remain on site.
- All non-essential personnel or all personnel, as appropriate, shall be evacuated
- The "buddy" system (working in pairs) will be used to prevent anyone from entering or being left in an area alone, even wearing SCBA
- Do not remove masks until absolutely certain the air is safe to breath. Replenish air supply from cascade system as needed.
- If a sudden gas release occurs without warning, you should:
 - Hold your breath but do not inhale to do so and don BA (EEBA and SCBA). If a BA set is not readily available hold your breath and move rapidly upwind or cross wind muster point. Don BA ASAP. Don't panic.
 - If H₂S gas comes to surface, it is to be burned at the flare if possible. Check for SO₂ inboard of the flare. Do not assume the area is safe after the gas is ignited. Additions of scavengers to the mud should be made as deemed prudent.
- When circulation with less than 10ppm H₂S can be achieved and the detector readings show less than 10 ppm (alarms not activated) the condition level will revert to condition I or II depending on the operation and drilling zone.
- After consulting H.O., Operation Manager shall be responsible for igniting the well in the event of severe well control problems. This decision should be made only as last resort in situations where it is clear that;
 - Human life and property are endangered.
 - There is no hope of controlling the gas release under the prevailing conditions at the well.
 - If the well is ignited, the burning H₂S will be converted to sulphur dioxide (SO₂), which is also highly toxic and heavier than air. Do not assume that area is safe after the well is ignited.
 - If the well must have to be ignited, the primary method will be with a flare gun.

Note:-

- Air Manifolds of Cascade Breathing Air Supply System shall be used for working in an H2S drilling environment.
- Emergency Escape Breathing Apparatus (EEBA) shall be used for "evacuation" only and neither for search and rescue operation, nor for working in an H2S environment.
- Self-Contained Breathing Apparatus (SCBA) shall be used for "rescue" and "search" operation only.

7.5.3 Hydrogen Sulfide (H₂S) Emergency Management during Plant Operations

7.5.3.1 H₂S Hazards

- An evaluation of gas processing facilities shall be carried out to determine if fixed H₂S detection and alarm systems are needed. This evaluation should consider the likelihood of H₂S gas accumulating in high concentrations in enclosed workplaces, where workers may be unknowingly exposed.
- Individual response to exposures may vary according to frequency of exposure, duration of exposure, intensity of exposure, age, fitness & health and personal susceptibilities. Therefore, all personnel must receive safety induction prior to start of work and have knowledge of the location of the Muster Points. The field personnel shall be made to participate in the H₂S rescue mockup drills and practice wearing and using breathing apparatus.
- Since concentration of H_2S in process stream when release into atmosphere is diluted in ratio of 100:1, based on this rule facilities are categorised as:

Classification Concentration in the Feed Gas
Sweet facility 0 to 49 ppm

Low Risk Sour facility

High Risk Sour facility

50 to 49 ppm

+500 ppm





Controlled Copy Do Not Duplicate For Internal Use Only

7.5.3.2 Detection and Protective Measures:

Low Risk Sour Facilit	v: (50 to 499 ppm)
LOW KISK SOUL I GCIIII	7. (30 IO 7// DDIII)

H2S Detection:

- → Hydrogen Sulfide Risk assessment of the facility shall be conducted
 to identify locations of Hydrogen Sulfide Fixed Gas Detectors.
- ∞ Fixed Gas Detector Reading shall be made available in plant control room and shall activate plant emergency alarm in case of H_2S detection > 10 ppm.

H2S Protection:

- $^{\infty}$ If H₂S level has a tendency to fluctuate, strict access control to plant and wellhead facilities shall be incorporated into location management system and no person shall be allowed to enter or leave plant and wellhead area without personal H₂S detectors.
- ∞ Two suitable muster points shall be made available at all wellheads and plant facilities keeping in view the wind pattern to avoid exposure in the event of emergency involving release of H2S.
- ∞ Wind Socks shall be installed and maintained at all prominent locations.
- ∞ All employees shall be imparted with H₂S training as part of induction including Competencies in H₂S, breathing apparatus, sour work practices.
- ∞ Company personnel, contractors shall be made aware of the hazard and the appropriate actions to escape or shelter from a credible H₂S release.
- ∞ Facilities shall have Emergency Response Procedures (ERPs) which specifically address the sour aspects of the operation and steps to be taken in case of loss of containment.
- ∞ Sour equipment shall be properly isolated and made safe prior to breaking of containment. When returning to service, proper assembly, tightening, purging and leak testing shall be carried out to ensure integrity.
- ∞ Sampling of sour fluids will be strictly controlled and managed, using engineered sample points, breathing apparatus and the buddy system.

High Risk Sour Facility: (+500 ppm)

H₂S Detection:

- ∞ All employees shall be required to carry personnel H₂S Monitors when entering plant or wellhead facilities.
- ∞ Fixed H₂S Detector must be installed at all high risk sour wellhead and plant locations. The number and location of fixed Gas detectors shall be ascertained after Risk Assessment by competent personnel.
- ∞ Fixed Gas Detector's real-time readings shall be made available in plant control room and shall activate plant emergency alarm in case of H₂S detection > 10 ppm.
- ∞ The Plant shall be configured to automatically blow down to flare in case H₂S is released due to leakage / loss of containment in excess of 50 ppm.
- Due to community risk, pipelines from wellheads must have some adequate mechanism of leak detections which should activate well shutdown and blow down of pipelines to flare in case a leak is detected.

H₂S Protection:

- Sufficient number of 5/10 minute Emergency Escape Breathing Apparatus (EEBA) sets shall be made available to all personnel who shall enter plant/ wellhead facilities so that in case, safe evacuation is made.
- Sufficient number of 30 minute Self Contained Breathing Apparatus (SCBA) sets shall be made available to all emergency personnel who have the potential for exposure to H₂S during rescue and search operations in the event of loss of containment or the failure of flare systems that may combust fluids containing H₂S.
- Strict access control to plant and wellhead facilities shall be incorporated into location management system and no person shall be allowed to enter or leave plant and wellhead area without personal H₂S detectors and 5/10 minute EEBA.





Controlled Copy Do Not Duplicate For Internal Use Only

- ™ Two suitable muster points shall be made available at all wellheads and plant facilities keeping in view the wind pattern to avoid exposure in the event of emergency involving release of H2S.
- ∞ Wind Socks shall be installed and maintained at all prominent locations.
- ∞ All employees shall be imparted with H₂S training as part of induction including competencies in H₂S breathing apparatus, sour work practices.
- ∞ Company personnel, contractors shall be made aware of the hazard and the appropriate actions to escape or shelter from a credible H₂S release.
- ∞ Facilities shall have Emergency Response Procedures (ERP's) which
 specifically address the sour aspects of the operation. Emergency
 drills shall be conducted regularly to keep personnel trained on the
 ERP's.
- ∞ Each team working in the hazardous zone must have the requisite number of Advanced First Aiders.
- Mechanism of community evacuation in case of emergency must be incorporated into Location's Emergency Response Plan.
- Sour equipment shall be properly isolated and made safe prior to breaking of containment. When returning to service, proper assembly, tightening, purging and leak testing be carried out to ensure integrity.
- ∞ Sampling of sour fluids will be strictly controlled and managed, using engineered sample points, breathing apparatus and the buddy system.
- ∞ Risk assessments shall be done for sour activities, and the job procedures, hazards and controls shall be identified to ensure the work is done safely.
- → High Risk H₂S Areas shall be specified and access to High Risk H₂S
 designated areas shall only be allowed provided the following
 have been adhered to:
 - Permit Issuing/ Area Authority has completed a gas test of the area and the recorded results indicate < 5 ppm of H₂S in air.
 - Valid Permit to Work has been issued, authorized by the Responsible Supervisor, validated by the Area Authority and specifying clearly the reasons for entry.
 - Persons entering the restricted area have the correct safety equipment for that area which shall include personal H₂S monitors and EEBA.
 - All persons entering the restricted area are fully conversant with the 'Buddy' system and aware of the escape routes and Muster Points.
 - For long time working in an H2S environment in the plant facility, Supplied Air Breathing Apparatus (SABA) shall be used.
 - All persons entering the restricted area have completed and signed the Entry logbook i.e. Name, Department, Entry Pass Number and Time In.

Note:-

- Supplied Air Breathing Apparatus (SABA) shall be used for long time working in an H2S environment in the plant facility. Two compressors shall be made available for filling of the SABA cylinders.
- Emergency Escape Breathing Apparatus (EEBA) shall be used for "evacuation" only and neither for search and rescue operation, nor for working in an H2S environment.
 Self-Contained Breathing Apparatus (SCBA) shall be used for "rescue" and "search" operation only.

7.5.4 Treatment After H₂S Exposure

- \blacksquare Treatment of life threatening H_2S exposure, characterized by loss of consciousness and associated respiratory failure, shall be aimed at:
 - Maintaining respiration by first aid measures. Oxygen resuscitator must be used as soon as possible.
 - Ireatments of local irritant effects of H₂S gas on the eyes and mucous membranes of respiratory tract by supportive measures and medical treatment, by field medic.
 - Enhancing detoxification by administration of antidotes, by field medic.





Controlled Copy Do Not Duplicate For Internal Use Only

- Immediately remove victim from the hazardous area to fresh air while wearing SCBA and using the buddy system (i.e. 2 people, 1 rescuing, 1 in standby in safe area). Immediately call field medical officer, advanced first aiders. Check mouth of victim (false teeth, chewing gum, etc.) and clear if needed. If he is breathing, maintain at rest and administer O₂ if available. If breathing has ceased or is labored, start artificial respiration to clear lungs of contaminated air. Prior to applying mouth to mouth respiration, try to expel gas from victim's lungs by pressing down the chest, to prevent rescuer himself from being exposed by breathed H₂S. Apply O₂ resuscitator as soon as available on site to support respiration, once the victim resumes breathing spontaneously.
- If it is impossible to move victim to fresh air, apply resuscitator immediately after checking victim's mouth as above. The role of oxygen in the treatment of H₂S poisoning is essential: this is the fastest method for counteracting the effects of H₂S inhalation. Keep then victim at rest and prevent the victim from becoming cold. Then evacuate the victim, if necessary.
- If eye contamination has occurred, flush with clear water for up to 10 minutes.
- Treatment to enhance detoxification exists but requires extreme care & high medical knowledge and therefore be carried out by a qualified medical practitioner.
- First Aid and medical equipment shall include:
 - Oxygen resuscitator and inhalator
 - Eve wash solution
 - Usual first aid equipment



Appendix A

H₂S Detection Equipment (Location &Quantities) for Drilling Rigs

Personal H ₂ S Monitor Minimum 15 (actua		determined	ł & provic	led after risk	: assessm	ent)
Fixed H ₂ S Gas Senso	rs					
RIG FLOOR MUD TANKS TRIP TANK	x 1 S	CELLAR SHAKERS CHOKE		x 1 WAS	TE PIT	x 1
FLARE PIT	x 1	RIG SITE CAN	ИP	x 1 TOTA	L	10
Fixed LEL Gas Sensor	S					
RIG FLOOR	x 1 (CELLAR	X1CI	HOKE	x 1	
MUD TANKS	x 1 S	SHAKERS	x 1 TC	TAL	05	
H ₂ S Alarms						
RIG FLOOR STAIRS	x 1 F	RIG FLOOR	x 1			
MUD TANKS	x 1 S	SHAKERS	x 1			
ENGINE ROOM		MINI CAMP	x 2			
GENERATOR		MAIN GATE	x 1			
LEL Alarms	1	OTAL	09			
SHAKERS	v 1 5	RIG FLOOR	x 3			
SHARLING	_	KIOTLOOK	X 5			
Multi Gas Detectors	(H ₂ S, C	O, LEL, O ₂)				
HSE OFFICE			x 2			
Wind Socks						
RIG FLOOR	Х	WATER PI	IT	x 1		
MUD CABIN	X	1 MUSTER F	POINT B	x 1		
MUSTER POINT A		1 NEAR FLA		x 1		
NEAR FUEL TANKS	X	TOTAL		07		



7.6 Management of Contractors, Subcontractors & Service Companies

OGM/P-HSE-7.6(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
Supplier's/ Contractor's Performance Evaluation	End User	HSE Rep.	Concerned HOD



Controlled Copy Do Not Duplicate For Internal Use Only

7.6.1 Purpose

The purpose of this procedure is to give guidance for best practice in the HSE management of contractors through a defined structure, content and documentation. The ultimate goal is to identify and manage HSEQ risks related to contracted activities and services appropriately.

7.6.2 Contract Modes

(Ref. IOGP Report 423 "HSE management - guidelines for working together in a contract environment")

Contract Mode 1: "The contractor provides people, processes and/or equipment for the execution of the contract under the oversight, instructions and HSE-MS of the client (OGDCL).

The contractor has a management system to provide assurance that the personnel for whom it is responsible are qualified and fit for the work and that the processes, tools, materials and equipment they provide are properly maintained and suitable for the contract. This mode requires the contractor reports HSE performance data, including events and incidents, to the client.

Typically, this could apply to scopes of minor modification or maintenance/ turnaround work on a client owned and/or operated site."

Contract Mode 2: "The contractor provides people, processes, equipment and/or facilities for the execution of the contract, as a main rule, under its own HSE-MS, providing the necessary instructions and oversight and verifying the proper functioning of its HSE-MS.

This mode requires interfacing or bridging with the client's HSE-MS and also reporting HSE performance data including events and incidents to the client. The client is responsible for assuring the overall effectiveness of the HSE management controls put in place by the contractor, including its interface with Subcontractors, and ensuring that both the client's and the contractor's HSE-MS are compatible.

This could apply to scopes of work on either contractor, client or third party owned/operated sites. The location will typically drive the level of interfacing and bridging required based on risk".

Contract Mode 3: "The contractor provides people, process, equipment, and/or facilities for the execution of the contract under its own oversight, instruction, and HSE-MS that requires no interfacing or bridging with the client's HSE-MS and is not required to report HSE performance data including events and incidents to the client. However, this does not exclude the possibility that the client may wish to guide and influence HSE performance under this type of contract; may provide product quality or environmental specifications, quality control and acceptance testing, etc.; and/or may insist that the contractor comply with a code of conduct which addresses human rights, labor rights, corruption, etc.

Typically, this could apply to scopes of work on contractor owned/operated sites or third party sites, and include examples such as:

- manufacturing of products produced for the open market, which client purchases (e.g. vehicles)
- manufacturing of components in a factory together with the manufacture of components for other customers
- construction at contractor sites shared by other customers
- delivery of good or products to client locations by a contractor who is in business to deliver to many other companies
- activities in shared port facilities, in particular the 'international' port areas before customs clearance
- activities of military or law enforcement agencies, over which client cannot exercise control.

Other Mode 3 contractors provide services that can have HSE implications to client such that their service performance and management still require assessing prior to use and ongoing monitoring by client.

Examples include:

- any type of non-dedicated medical services, clinic or hospital
- catering supplied vendors
- hotels and other leased housing or office space
- taxi companies
- public transport including airlines."





Controlled Copy Do Not Duplicate For Internal Use Only

7.6.3 Contract HSE Risk Determination

- Each contract must be assessed to determine the HSE risk. This is accomplished by evaluating the activities that are covered in the contract work scope and performed by that contractor. The activity with the highest level of HSE risk determines the overall HSE risk of the contract. OGDCL shall not classify the contractor as an HSE risk but rather assesses their HSE MS and ability to manage that risk. Following provides further guidance on the assignment of contract HSE risk:
 - + High or medium contract HSE risk is determined only for activities undertaken by "Reporting Contractors" (Mode 1 or 2 contracts).
 - **Incidents:** Contract HSE risk is concerned with hazards & associated risks leading to incidents during the performance of the contract. Consequential risks through bad design or materials are addressed through the technical specification of the contract.
 - Exposure through the location/ transportation: Some activities are not hazardous in themselves but become hazardous because of exposure through the location or transportation. In such cases, OGDCL shall allocate the contract HSE Risk to the contract that can affect the risk. In other words, only the contractor performing the activities and not those simply exposed to the hazard.
 - Competence: Competence of contractors and subcontractors is critical. Even low contract HSE risk activities can lead to incidents (immediate or delayed) if the competence of the workers involved is not adequate. The contract HSE Risk categorization is based on the assumption that the work will be done by competent workers that are properly trained to perform their assigned tasks.
 - Sublet: Many contracts allow further subletting the work, either in totality, between worksites or in mobilization activities. Where these activities are explicitly included within the scope of the contract and they are undertaken by a "Reporting Contractor", the contract cannot have low contract HSE Risk.

7.6.4 HSE Cognizant Procurement Cycle

■ OGDCL shall deploy a rigorous HSEQ compliant procurement philosophy based on following HSE Cognizant Procurement Cycle and it is reasonably believed that a properly spelled out contract can help to understand the expectations of OGDCL from contractor and anticipated deliverables by contractor:-

Step No.	Phase	Target	OGDCL	Contractor
Step I	Indent Preparation	Specifications to manage hazards related to the work shall be identified as scope & depth that OGDCL management needs to involve in next phases.	User's/ Indenting Department shall work with IRC and initiate the risk assessment and takes into account Technical, HSE and other domain's input if needed to finalize the specifications.	N/A
Step 2	Advertisement	TOR/ SOW shall be finalized and advertised. Confirmation of major hazards with outline targets criteria and methods for control.	Supply Chain Management (SCM) shall prepare bid documents and finalize advertisement for tendering.	Respond to advertisement: Discuss HSE responsibilities and staffing internally.





	Tender Period	Preparation of Technical, Commercial, Quality Control and HSE Plans.	User's/ Indenting Department shall work with SCM, HSE and Technical domain, respond to clarification requests. The typical activities shall be to meet with contractor reps, site visits, communicate OGDCL's HSE System to contractors, etc.	Prepare HSE Plan along with the bid: Clarification requests, Meetings, Site Visits.
Step 3	Evaluation and Contract Award	Confirmation that contractor HSE Plan meets OGDCL criteria. Agreement with contractor on methods to be used, performance measurement criteria and audit/review strategy.	User's/ Indenting Department shall ensure that HSE requirements be included in the contract. Typical activities shall be to evaluate bids, raise clarifications on contractor's HSE Plan and finalize Contract.	Respond to clarifications / meetings.
	Mobilization	Confirmation that contractor's HSE Plan has achieved pre-execution targets.	User's/ Indenting Department shall be responsible for this phase. The typical activities may include pre-mobilization meeting, confirmation of contractor's HSE Plan, activities supervision, pre-execution audit.	Kick-off meeting, Confirm HSE Plan activities, Supervision, Induction, Training, Meetings, Inspections, Pre-execution status achievement.
Step 4	Kick-off	Assurance and verification that contractor systems are performing in line with contractor's HSE Plan.	User's/ Indenting Department shall be responsible. The typical activities may include kick-off meetings, communicate HSE requirements with fields supervisors, confirm the preparation of people and equipment are line to contract requirements, etc.	Supervision, Inspection, Induction, Training/Drills, Toolbox-Talks, performance review systems.
Step 5	Work in progress	Management of work activities, Milestone Review.	Location management shall be responsible. The typical activities may include routine walk through, site inspection/observation, investigation of incidents, auditing etc.	Supervision, routine HSE management, such as HSE meeting, inspections, c&p actions tracking, investigation of incidents, auditing, etc.
Step 6	Evaluation/ Close-out	Analysis and feedback of OGDCL and Contractor HSE Performance.	User's/ Indenting Department and Unit Management shall be responsible. The typical activities shall include Close- out meeting, communicate to contractor, feedback for future contract HSE Plans/Contract clauses.	Close-out report and feedback (to own management).





Controlled Copy Do Not Duplicate For Internal Use Only

7.6.5 Contractor Management

- OGDCL shall strive to ensure safety of contractor in line with OGDCL approved HSEQ Policy. The contractors shall be selected against HSEQ requirements.
- The company shall essentially include HSEQ requirements in the Service Order/ Contract/PO.
- Line management shall ensure through rigorous supervision that all contractor comply with HSEQ requirements during their period of engagement.
- During the project or services, Contractors shall be assessed for their HSEQ performance. Following KPIs will be communicated prior to execution of contract and shall be assessed periodically;
 - ♦ No. of HSE Inspections
 - Do. of Hazards Reported (UB/UC) & actions taken within assigned time
 - No. of HSE Meetings
 - No. of Toolbox held
 - No. of JVA/ JHA Meetings
 - No. of Emergency Drill
 - No. of Near-miss Reported & actions taken within assigned time
 - No. of Trainings
- © Concerned Department/ Section shall use Supplier's/ Contractor's Performance Evaluation template to gauge the HSEQ performance of Contractor time to time and outcome shall be discussed in regular review meetings.

Meetings with Contractors:

- Formal meetings shall be convened with contractors with intent to ensure that the contractor is aware of the expectations on behaviors in the execution of the work; a pragmatic understanding of OGDCL commitment to HSEQ is imparted to contractor; all applicable requirements are conveyed to contractor; a list of highlighted areas for improvement in the HSE Plan and agree on actions to remove deficiencies is shared; and performance monitoring is defined based on the capability of the contractor, the activity risk level and concurrence on the reporting requirements & KPIs.
- Meetings at 3 Stages shall be planned as a) Pre-Job Meeting/Kick-off Meeting;b) Regular Review Meeting and c) Close-Out Meeting.
 - a. Pre-Job Meeting/ Kick-Off Meetings: These are carried out to explain OGDCL HSEQ commitment and expectations from Contractors with regard to HSEQ. The agenda shall include;
 - * Scope of work and review of associated major hazards specific to contract.
 - Review of high risk activities & control management; confirmation of workers' competence; this includes both OGDCL and Contractor workers who are exposed to workplace hazards as defined in the scope of work.
 - Review of arrangements for sub-contractors.
 - Review of Contractor HSEQ Plan and/or Bridging Document and confirmation that roles and responsibilities have been clearly defined and understood as tabulated below:

<u>#</u>	<u>Title</u>	Specific Requirement
1.	HSE Policy	Contractors and Service Companies shall be held responsible, as a minimum, for compliance with the OGDCL's HSE Policy, in addition to all governmental regulations applicable to the scope of work being performed.
2.	HSE Field Team	Contractors and Service Companies shall be solely responsible for means and methods and for jobsite HSE by assigning appropriate strength of qualified Location HSE Coordinators, Supervisors and Medical Staff with specific duties at the project site, full time, from the first day.
3.	HSE Roles & Responsibilities	Contractors and Service Companies shall ensure that all personnel assigned on the project can safely perform the essential functions of their job assignment. Contractor shall ensure that personnel maintain the appropriate standards of HSE in connection with the work that is being performed.
4.	HSE Planning	Contractors and Service Companies shall submit, before the start of project, the detailed documents as follows:





Controlled Copy Do Not Duplicate For Internal Use Only

		 i. HSE Risk Assessment Plan ii. Health Monitoring Plan iii. Safety Monitoring Plan iv. Environmental Monitoring Plan v. Emergency Preparedness and Response Plan vi. Waste Management & Disposal Plan
5.	Toolbox Talk Program	Contractors and Service Companies shall develop and ensure project- wide Toolbox Talk Program as a series of numbered discussion topics on Safety, Health and Environmental matters as daily HSE briefings by its operational teams.
6.	Work Permit	Contracts and Service Companies shall strictly follow the Work-to- Permit System and shall provide plan of activities in advance, submit THAs/JHAs where required and engage only certified staff for the hot jobs.
7.	Safety Critical Equipment	Contractors and Service Companies shall ensure that the equipment (especially to be used on site for lifting and hoisting purposes) is certified from the third party and operators have proper permits / licenses.
8.	PPE	Contractor shall acquire and maintain adequate PPE and other/related safety gadgets of an approved type as required for the performance of the work to be safely performed.
9.	Hazard Communication	Contractors and Service Companies shall ensure proper labeling at all the pertinent safety risk areas with appropriate warning signs and instructions. It shall also be ensured that all original containers of hazardous chemicals or materials entering the project site to be properly labeled with the hazard warnings and related information.
10.	Incident Reporting	Contractors and Service Companies shall immediately report to OGDCL representative all significant and important incidents involving fatality, injury, illness, environmental impacts, near hits, and/or hazardous situations.
11.	Accident Investigation	Contractors and Service Companies shall investigate and report all accidents regardless of their nature so that the cause and means of prevention can be determined to prevent a reoccurrence.
12.	Environmental Procedures	Contractors and Service Companies shall immediately clean up the trash, spills, food waste, etc. and spills of chemicals, oils, whereas potentially hazardous wastes to be immediately reported to OGDCL representative.
13.	Waste Management	Contractors and Service Companies shall place designated drums, containers, bins, etc with specific labels as Collection Method for each waste-type and further ensure safe disposal of the hazardous waste.
14.	ERP	Contractors and Service Companies shall provide orientation on Emergency Preparedness and Response Procedure to its project team and ensure that its personnel are well aware of what procedures are in practice and who is to notify in the event of any emergency.
15.	HSE Performance Reports	Contractors and Service Companies shall submit to OGDCL representative an HSE Performance Review Report on fortnight basis.
16.	Workforce's Record	Contractors and Service Companies shall issue security pass for the staff engaged and provide a) copy of attested identity cards, b) employment cards, c) HSE training cards and c) health assessment cards of its project's approved staff to OGDCL.
17.	Surveillance Audits	OGDCL's representative shall visit the project site on sporadic basis to monitor the actual level of compliance on the HSE matters. All High risk contracts shall be audited based on pre-established HSE Criteria Checklist. HSE Audit shall be led by the concerned Department/Sectional Rep. along with HSE Rep. as audit team member.

- Mutual consensus on Contractor's auditing schedule (as applicable)
- Interaction of OGDCL and Contractor's emergency plans (security, pandemic disease, evacuation)
- b. Regular Review Meetings: It is preferable for the meetings to be held on site. The recommended minimum frequency for high risk contracts is fortnightly, respectively Monthly for medium risk contracts and Quarterly for low risk contracts. A formal agenda shall be set and minutes recorded. The agenda includes;
 - Details regarding Contractor's latest works and the way he ensured compliance with the legislative and OGDCL requirements
 - Review of gaps identified during Supplier's/ Contractor's Performance Evaluation and performance against agreed HSEQ KPIs including identified non-compliance issues, actions and improvement requirements





Cthe energy Operation: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

- Progress in implementing the HSEQ Plan formally assessed and approved and any deviations from the HSEQ Plan
- Verification of actions agreed during previous meetings/ discussions or inspections
- Near misses/ incidents reports
- Request of details regarding Contractor's latest HSEQ trainings, toolbox talks, self-audits and inspections – regular (acc. to schedule) and random
- Upcoming works that require special safety measures and any project specific HSEQ issues
- Share best practices & lessons learned and reinforce HSEQ importance within OGDCL and the expectation that Contractors share the same commitment (as applicable)
- **c.** Close-out Meetings: Items to be discussed during close-out meetings may include, without limitation:
 - Quality of HSEQ plan and its relevance to the overall contract performance, stipulating what was learned and how future, similar contracts should be structured
 - * Positive aspects of learning and how they can be applied in the future
 - Analysis of Contractor's HSEQ performance, against both the HSEQ plan and KPIs, for mutual improvement
 - Critical HSEQ documentation and records associated with the contract
 - Recognition of excellent HSEQ performance areas and review of identified non-compliance issues
 - Final remarks about Supplier's/ Contractor's Performance and performance against agreed HSEQ KPIs in context of future relationship



7.7 Use of Personal Protective Equipment

OGM/P-HSE-7.7(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Modified: Specifications of Coverall and Color Scheme of Coverall & Helmets

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
PPE Need Assessment Matrix	Sectional IC	HSE Rep.	Location IC



Controlled Copy Do Not Duplicate For Internal Use Only

7.7.1 Purpose of PPE

- The purpose of PPE shall be to protect the OGDCL employees, contractors, service companies and visitors from exposure to workplace hazards.
- PPE shall not be a substitute for the effective engineering or administrative controls and must be worn for personal protection ensuring that safety arrangements are in place.
- Compliance of PPE procedure shall be monitored by Location Management and HSE in a vigilant way and any non-compliance may result in initiation of disciplinary/ punitive action under Section-8.4.2 Dealing with Violations of Procedure titled Reward, Recognition & Penalties.

7.7.2 Types of PPE

- Category A: The Basic PPE shall include a) Coverall/ Dangri, b) Warm Jacket/ Leather Jacket, c) Safety Shoes, d) Safety Glasses, e) Hard Hat, f) Ear Muffs and g) Cotton Gloves.
- Category B: The Specific PPE shall include a) Gloves (Leather, Chemical Resistant, and Latex), b) Face Shields (Welding Shields and Goggles), c) Flame Resistant Clothes, d) Long Safety Shoes, e) Gas Mask, f) Chemical Apron and f) Safety Harness.
- Category C: The Emergency PPE shall include complete Turnout Gear / Fire Kit (Fire Suit), SCBA/30 min., Air-Purifying Respirator (APR), and Safety Vests / Clothing with Reflective Material designed for high nighttime visibility.

7.7.3 PPE Matrix

- Considering practical guidelines for assessing the hazardous situations that are likely to arise under foreseeable work activity conditions and to match employee PPE to the identified hazards, each Location shall develop PPE Matrix for its individual Sections, based upon following:
- (1) Impact; (2) Penetration; (3) Compression (roll-over); (4) Chemical; (5) Heat/Cold; (6) Harmful dust; (7) Light (optical) radiation; (8) Drowning; (9) Falling.
- PPE Matrix shall be documented by each Section in the tabular format given below and reviewed on an annual basis:

Task or work functions that are performe d by the Sectional workforce members	Safety glasses	Hard hat/Helmet	Safety vest/ harness	Coverall	Muff / plugs	Chemical goggle	Gum boot	Leather (gloves.) / Insulating (gloves.)	Chemical Resistance Gloves	Latex (gloves.)	Face shield	Chemical apron	Welding goggles	Welding face cover	Welding gloves	Flame resistant cloth	Safety toed shoes	Dielectric safety shoes	Chainsaw chaps	Gas mask	Dust mask	SCBA	Air purifying (HEPA)	Others: (cotton gloves, etc.)
1.																								
2.																								
3.																								
4.																								
5.																								
6.																								

- Personal factors can impact the effectiveness of PPE or be a hazard in their own right and therefore be avoided/ managed with care as much as possible. Typically, these are as follows:
 - Rings, arm bangles, jewelry or similar ornaments shall not be worn.
 - Low profile 'sleeper' ear studs (one per ear) are acceptable
 - Watches shall have breakable non-metallic bands.
 - Long hair shall be tied back or enclosed in a hair net
 - Persons who may have to use breathing apparatus or face-fitting respiratory protection devices (e.g. areas having a risk of H₂S gas) shall





Controlled Copy Do Not Duplicate For Internal Use Only

not have beards and be clean shaven at start of shift. Moustaches that are neatly trimmed and do not interfere with correct functioning of respiratory PPE are permitted.

The above list is not exhaustive and there may be other personal factors that should be taken into account on an individual basis. Some disabilities or impairments may have to be treated sensitively and in confidence.

7.7.4 Protection Mechanism

7.7.4.1 Head Protection

- Hard hats, or safety helmets, which meet the requirements of EN397, shall be worn in all designated work areas as outlined in the Location (Sectional) PPE Matrix. Hard hats shall be made of plastic and designed to hold chin straps. Chin straps shall be worn when working at heights.
- The selection of the helmets shall be made with the intention a) to reduce the force of impact of falling objects, b) to reduce the force of impact resulting from a blow which may be received off center or to the top of the head and c) to reduce the danger of contact with exposed high-voltage electrical conductors.
- Metal hard hats do not meet the standards for electrical resistance and therefore shall not be permitted.
- Hard hats shall be checked monthly for signs of damage, and replaced immediately if the hard hat becomes brittle, cracked or is otherwise damaged. Suspensions and shells shall be replaced per the manufacturer's recommendation. It is recommended that suspensions be replaced at least annually and shells be replaced every 3 to 5 years.

7.7.4.2 Eye Protection

Safety glasses, with side impact protection, or goggles shall be worn in all designated work areas as outlined in the Location (Sectional) PPE Matrix. Glasses shall be designed and constructed to meet EN166-1F (or equivalent). Besides, eye protection shall be selected as required by the job risk assessment and Permit to Work for the following levels:

Level One: High Impact --> Impact Goggles and Full-face Mask

- Shot blasting Power nail or staple drivers

- Water blasting Chipping paint, scale, rust, slag etc.

- Chipping metal Use of high-speed metal saw

- Use of grinding, abrasive Driving out/cutting out of rivets, spins, bolts

disc/ wheel cutters

- Use of compressed air for cleaning casing or tubulars
- Coiling or working with wires involving exposure to strands. Cutting of wires or metal straps
- Plasma cutting, use of arc welding or Oxy-acetylene
- Machining and drilling of metals

Level Two: Splashing of Materials --> Chemical Goggles and/ or Face Mask

- Handling open vessels of acids, alkalis, corrosive or hazardous material
- Handling chemical containers, drum sacks, pallets or packaging
- Work on pump tanks with previous hazardous chemical contents
- Wash-down gun use

Level Three: Low Impact --> Safety Glasses with Side Shields

- Movement around the worksite
- Tasks that do not involve those activities in Level one or Level two.
- Where regular prescription glasses are required to be worn, over protection such as over glasses or goggles shall be used.
- Both clear and tinted lenses shall be made available, with tinted lenses provided for protection against UV light damage. Tinted lenses shall not be used during hours of darkness.
- It is the individual's personal responsibility to maintain eye protection in a safe condition. Antifogging compounds for safety glasses/ lenses shall be available





Controlled Copy Do Not Duplicate For Internal Use Only

to be used to maintain clear vision when work conditions are impacted.

- Contact lenses are permitted, but their use shall not interfere with or be compromised by the work activity. Contact lenses do not provide eye protection and the wearer may have increased risk of eye injury from exposure to dusts and chemical vapors. Eye protection shall be worn in addition to the contact lenses.
- Special lenses are required when oxygen fuel cutting. Goggles are required when working with chemicals or in dusty conditions.

7.7.4.3 Face Protection

- During work activities that involve grinding, chipping, and buffing, or where material could separate and become a projectile, a face shield shall be worn in conjunction with safety glasses/ goggles as defined by the job hazard analysis.
- Personnel working with chemicals, degreasers, detergents, or equipment that contains a hazardous or pressurized liquid or gas (e.g. wet cell batteries) shall wear non-vented, splash proof goggles. For exposure to hot or corrosive materials, a face shield shall be worn over the goggles.
- A welding hood, with non-glass visor, shall be worn over standard safety glasses when welding. Personnel engaged in sandblasting, water blasting or spray painting shall wear eye protection under the face shield or air supplied hood to protect the eyes and face from known hazards.

7.7.4.4 Hearing Protection

- Hearing protection shall be worn in all designated high noise areas. Hearing protection shall meet the requirements EN352-1 for earmuffs and EN352-2 for or ear plugs. Types of hearing protection will depend on the job hazard analysis and must meet personalized fit testing requirements.
- A quantitative noise survey shall be completed around all machinery and equipment located at the site to document sound level readings and identify areas that require hearing protection. The assessment shall include both permanent and temporary equipment.
- Signs shall be posted at each work location where continuous noise levels are at 80 dB (A) or greater over an 8 hour time-weighted average. Various forms of hearing protections shall be made available, such as disposable/ reusable ear plugs or hard hat mounted ear protectors, and shall be worn in posted areas. Hearing protection shall also be worn during operations that generate noise in excess of 80 dB (A).

7.7.4.5 Protective Clothing

- Flame Resistant Clothing is required for all employees, contractors and visitors involved in a) production, plant & process operations and maintenance, b) exploratory (seismic & drilling) operations, services and maintenance, c) workover jobs/ live well servicing, d) well testing, e) handling of energized equipment, f) high voltage switching operations & maintenance, g) erection/modification of project facilities (that are located at a production facility) and h) activities assessed as hazardous during risk assessment.
- Flame Resistant Clothing is NOT required for workforce members working in field/ site offices (performing desk jobs), seismic operations, routine civil works & support services, logistics, material stores and project facilities (that are not located at a production facility).
- Flame Resistant Clothing shall comply with the following requirements:
 - Thermal protection: if the protective material is worn over another layer of fabric, the protective fabric shall exhibit an average Thermal Protective Performance (TPP) value of 4, before and after washing.
 - Flame Resistant Clothing materials shall comply with EN ISO 11612 or equivalent.
 - Reflective strips shall be visible across the arms, at a minimum, of each garment and conform to the ANSI/ ISEA 107-1999 Level 2 standards (or





O) (the energy Operation: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

equivalent).

- Arc Flash Suits shall be required when working on or near electrical equipment where there's a potential for an arc flash event, specifically when the incident energy level is 1.2 Cal/cm² or 5.0 J/cm² (threshold value of incident energy for the 2nd degree burn of human skin) or greater or as per the Arc Flash Study recommendations, where conducted.
- All Flame Resistant Clothing and non-Flame Resistant Clothing shall be worn and maintained accordingly:
 - Personnel shall wear Flame Resistant Clothing as the outer-most garments except when other personal protective clothing is required (e.g. Chemical resistant suits, welder's leather, personal flotation devices, increased visibility vests).
 - Personnel should not wear synthetic blends such as nylon, polyester, rayon, polyethylene, etc. under the protective clothing. Natural fibers such as cottons or wools should be worn underneath.
 - Only long sleeved Flame Resistant Clothing shall be worn in designated Flame Resistant Clothing areas/jobs.
 - Flame Resistant Clothing shall be worn in such a manner as to completely cover the torso, arms and legs (sleeves rolled down & body fully zipped or buttoned up).
 - Clothing should be laundered, repaired and taken out-of-service per the manufacturer's recommendations.

Specifications of Coverall

Scheme: 02-piece shirt-trousers for Officers; 01-piece Dangri for Staff

Material: 88% Cotton 12% Nylon blend Pre-shrunk Flame Retardant Treatment (FRT) (as per actual requirement)

Fabric: Vat-dyed mercerized

Feature: Anti-Static

Weight: 180 - 200 gm/ m²

Stitching: Double-chain with Nomex® or Kevlar® or similar quality thre durability having 14 stitches per inch

Formation:

- As depicted from the sample pictures
 Reinforced stress points (pockets, seams,
- knee area)
- Left sleeve pocket with pen pocket divider, small flap with hook-and-loop fastener (velcro quality)

 Two 5" x 6-1/2" chest pockets with concealed zip closure

 Tool pocket on right leg/ knee (back side)
- . ID card holder loop on chest right side

- To card noider loop on chest right side above right front chest pocket
 Two radio loops
 Two back/ hip pockets
 Two side pockets with exterior-to-interior access

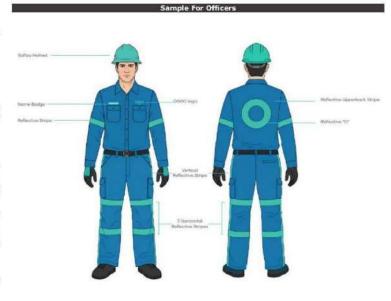
Reflector: 2" (50mm) wide white reflective FR striping/ reflective tape around arms, legs and over the shoulders ANSI/ ISEA 107-1999 Class 2 or EN 20471 standard or equivalent

- Comfort Features:
 Breathable fabric with moisture-wicking
- property Underarm ventilation mesh
- Elastic waist for flexibility

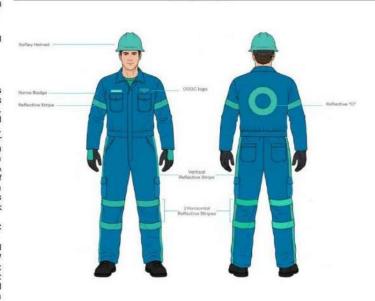
- Special (where required):

 The wearing of Flame Resistant Clothing is required for all employees, contractors and visitors involved in a) production, and visitors involved in a) production, plant & process operations and maintenance, b) drilling operations, services and maintenance, c) work-over jobs/ live well servicing, d) well testing, e) handling of energized equipment, f) high voltage switching operations & maintenance, g) erection/ modification of project facilities (that are located at a production facility) and h) activities assessed as hazardous during risk assessment.

 Flame Resistant Clothing materials must comply with EN ISO 11612 or equivalent.
- comply with EN ISO 11612 or equivalent. Flame Resistant Clothing is NOT required for workforce members working in field/ site offices (performing desk jobs), seismic operations, routine civil works & support services, logistics, material stores and project facilities (that are not located at a production facility).



Sample For Staff



Rain/ winter gear worn over Flame Resistant Clothing can negate the effectiveness of the protective layer, especially if the material melts in a flash fire. Flame Resistant Rain/ Winter Gear is recommended where available.



Controlled Copy Do Not Duplicate For Internal Use Only

7.7.4.6 Hand Protection

- All personnel shall wear gloves on the work site. Exceptions to this requirement, such as performing tasks that require additional finger dexterity, shall be approved by a supervisor and captured on the job hazard assessment or through the PTW system.
- Personnel shall use hand protection when performing work, not limited to, exposing the hands to absorption of harmful substances, cuts or lacerations, abrasions, punctures, vibrations, chemical burns, thermal burns and other harmful extremes in temperature.
- The use of fit for purpose protective gloves is mandatory when welding, oxygen fuel cutting, grinding, blasting, working with chemicals and when performing specific electrical functions or using hand tools.
- Electrical safety gloves shall be used for low/ medium voltage area activities (where exposure to live connection is likely), based on the NFPA 70E guidelines (or equivalent).
- Leather gloves are required when rigging or handling materials.
- Gloves shall be free of holes and defects.
- The selection of hand protection shall be based on the specific task being performed, conditions present, and duration of exposure, potential hazards identified and performance characteristics of the glove material.

7.7.4.7 Foot Protection

- Safety-toed boots are required in all designated work areas outside the site office. Footwear shall meet the requirements of Safety footwear to EN ISO 20345 or equivalent.
- In medium voltage areas, safety shoes need an "EH" rating, meaning Electrical Hazard, to provide insulation and protect against electrical shock. These shoes are designed to withstand voltages up to 18,000 volts for at least one minute, offering protection when working on live or near live electrical equipment, typically tested according to standards like ASTM F2413-11 (or equivalent).
- Protective footwear shall have leather or rubber uppers that extend above the ankle, an oil resistant sole, and a distinctive heel (raised 3/8 to ½ inch across the entire heel) for climbing stairs and ladders.
- Lace up or pull on styles are accepted, however lace up boots provide better ankle support and are therefore preferred.
- Chemical resistant foot protection is required when handling or working with hazardous or corrosive materials.
- Exceptions to this requirement, such as use of safety shoes by short-term visitors, shall be approved by the Location IC.

7.7.4.8 Personal Fall Protection

- Personal fall protection shall be worn in all designated areas and as required by the job risk assessment and Permit to Work. Fall protection shall be worn where there is a risk of falling from a height of 2 meters or more (including work areas within 2 meters of an open edge where there is the potential to fall 2 meters or more) or as detailed by the job risk assessment.
- The components of the personal fall protection system include:
 - An engineered and appropriately rated anchor point.
 - Automatic and/or self-locking connecting mechanisms.
 - A lanyard with deceleration capability.
 - A full body harness.
- All fall protection equipment shall be inspected before each use and maintained according to the manufacturer's recommendations. A register of fall protection equipment shall be maintained, including records of inspections for new and replacement equipment.

7.7.4.9 Respiratory Protection

Respiratory protection shall be worn in all designated areas and as outlined by Location HSE Matrix. Respiratory protection shall meet the requirements





Controlled Copy Do Not Duplicate For Internal Use Only

outlined in OSHA 29 CFR Part 1910.134 – Respiratory Protection (or equivalent). The PPE Matrix must address the following work environments:

- Firefighting or confined spaces when there is a risk of insufficient oxygen.
- Protection against H2S or other hazardous atmospheres.
- Protection against dusts, mists, vapours, gases or particulates.
- When dealing with chemicals, check the SDS for specific guidance on respiratory protection requirements. Where there is a risk of inhaling low levels of non-toxic dusts, disposable dust masks shall be required.

7.7.5 Color Code for Coverall, Dress code and Hard Hat (Safety Helmet):

Standardization in colors as tabulated below shall be for coverall, dress code and hard hat (safety helmet) and is required for all employees, contractors and visitors involved in a) production, plant & process operations and maintenance, b) exploratory (seismic & drilling) operations, services and maintenance, c) work-over jobs/ live well servicing, d) well testing, e) handling of energized equipment, f) high voltage switching operations & maintenance, g) erection/ modification of project facilities (that are located at a production facility) and h) activities assessed as hazardous during risk assessment.

Color of Coverall for use in Operating Fields/ Sites

Petro Blue (Hex#005F6A)	OGDCL Officers
Red (Hex#FF0000)	Firefighting Crew
Blue Grey (Hex#708090)	OGDCL staff members; laborers (other than Officers)
	Contractors shall comply as per their own company's policy

Dress Code for Head Office/ Office Buildings

Olive Green	Maintenance Staff (Plumber, Electrician, Carpenters etc)
Red	Fire Chief
Dark Green	Fireman/ Fire Supervisor
Head Chef	White
Black	Assistant Cook
Black Trouser with Blue Lining Shirt	Cooking/ Serving Staff
Light Blue	Janitors
Blue	HVAC

Note: No personnel shall wear loose dress and that of inferior quality fabric.

Color of **Safety Helmet** for working in PPE required areas

Pantone	OGDCL Officers
Yellow	OGDCL Staff
White	HSE Reps. (Engineers/ Officers)
Red	Firefighting Crew
Blue	Employees of Contractors / Sub-contractors working at site
Brown	Welders or workers taking up high heat or high voltage jobs
Grey	All types of Guests/ Visitors

7.7.6 Issuance of PPE

- The **Basic PPE** (Category A) shall be provided to all OGDCL employees irrespective of their designation as per entitlement in the existing policy. OGDCL shall provide the **Basic PPE** to contractors, service companies and visitors at operational sites for their stay period only.
- Five units of each **Specific PPE** (Category B) shall be allotted for two-year-basis to Sectional Heads at all OGDCL operational sites and they shall be liable to maintain this inventory.
- Sectional heads shall issue the Specific PPE (Category B) to the employee(s) only against the PPE requirements mentioned in the Work Permit to safely





Controlled Copy Do Not Duplicate For Internal Use Only

execute the job.

- Five units of **Emergency PPE** (Category C) shall be allotted to each Fire Section at OGDCL operational sites and they shall be liable to maintain this inventory.
- OGDCL shall not be liable to pay any PPE allowance or associated amount to its employees: however, washing allowance shall be provided as per prevailing policy.

7.7.7 Cleaning and Maintenance

- All PPE shall be maintained, cared and stored as required in the manufacturer, supplier or user instructions or as the training requires.
- For the purposes of compliance, PPE shall be inspected, cleaned, and maintained at regular intervals so the requisite protection is ensured.

7.7.8 Disposal

■ The contaminated PPE which cannot be decontaminated shall be disposed of in a manner that protects employees from exposure to hazards.





Controlled Copy Do Not Duplicate For Internal Use Only

7.8 Framework for Site Restoration

OGM/P-HSE-7.8(2) Revision Number 2

Original Issue: January 20, 2021 This Issue: November 21, 2025

Updated By:

MUHAMMAD MUBASHIR ABBAS

Manager HSEQ-ERM/Chief Risk Officer, OGDCL

Checked By:
Babar Iffikhar Warriach
Manager InCharge HSEQ, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

	#	Description of Change
	1	Modified: New Logo & Tag Line
	2	Modified: Criterion to declare hazardous/ non-hazardous wastewater
ſ	3	Modified: Production site/ Well(site) Plugging and Abandonment (P&A) Checklist

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 033A Well(site) Handing Over Taking Over Checklist	Field HSE Rep.	Drilling Services/ Production Rep.	Location IC
OGF – HSE – 033B QC Checklist (Treatment & Restoration)	Field HSE Rep.	Drilling Services/ Production/ P&P Rep.	Location IC
OGF – HSE – 033c Production site/ Well(site) Plugging and Abandonment (P&A) Checklist	C&ESS/ PE&FD	Drilling Services/ Production/ P&P Rep.	Location IC



Controlled Copy Do Not Duplicate For Internal Use Only

7.8.1 General

Upon completion of drilling/ testing/ workover/ plugging and abandonment of a well/ abandonment of a production site, and where management, DGPC, local authorities and landowner agrees the facilities have no future use, custodians of the generated-waste shall restore the site to its previous condition as defined in this procedure.

Note-1: An abandoned well may be used as a disposal well to dispose off the produced water/ wastewater/ mud in the well by selecting a suitable formation below the aquifer in consultation with Reservoir Department.

7.8.2 Primary Responsibility Towards Treatment & Restoration of Pits

- Treatment and restoration of *drilling pits* shall be the primary responsibility of **Drilling Services** as custodian of the generated-waste.
- Treatment and restoration of *produced water pits* shall be the primary responsibility of **Production Deptt.** as custodian of the generated-waste.
- ◆ Treatment and restoration of pits associated with a Gas Processing and LPG Recovery Plant shall be the primary responsibility of P&P Deptt. as custodian of the generated-waste.

Note-2: After successful completion of a well/ workover, each well(site) shall be handed over to Production Deptt. once all requisite HSE aspects, especially related to wastes including pits, have been duly addressed as mentioned in the Well(Isite) Handing Over Taking Over Checklist.

7.8.3 Assessment/ Categorization of Pits

- Pit wastes usually contains both solid and liquid components. Constituents and characteristics of environmental concern may include salts, hydrocarbons, pH value, and heavy metals (chemicals & biologically available).
- The constituents have the possibility of impacting soil and water quality, therefore all pits which have no operational requirement shall be restored.
- HSEQ Department shall take the lead to carry out laboratory analysis of each pit in the light of EPA regulatory requirements through concerned Department (e.g. QC-Lab.) and based upon results, categorize a pit as nonhazardous or hazardous, considering the financial prudence aspect, based on following:
 - o If a single parameter exceeds the permissible limit, the pit be categorized as <u>non-hazardous</u>, except for oil & grease content, in that case (or more parameters exceed the permissible limit), the pit be categorized as <u>hazardous</u>.
- However, hazardous pits with substantial hydrocarbon content and/ or oily sludge may be auctioned as per company rules and subsequently the pit shall be restored accordingly as defined in this procedure.

7.8.4 Pits Restoration Process

7.8.4.1 Nonhazardous Pits

- Restoration requisition shall be initiated by Drilling Services/ Production/ P&P Deptt. as the case may be and forwarded to C&ESS Deptt.
- Restoration shall be carried out by C&ESS Deptt. either employing its own resources or outsourcing the job to waste management contractor.
- In case of outsourcing, TORs/ Invitation-to-Bid (ITB) document shall be prepared by C&ESS Deptt. having inputs from the concerned Departments and perform technical evaluation of the bids accordingly.

7.8.4.2 Hazardous Pits

- Drilling Services/ Production/ P&P Deptt. may outsource the t<u>reatment</u> job to waste management contractor as per requirement.
- The <u>restoration</u> part may either be referred to C&ESS Deptt. or Drilling Services/ Production/ P&P Deptt. may outsource it directly to the waste management contractor along with the <u>treatment</u> part.
- TORs/Invitation-to-Bid (ITB) document shall be prepared by Drilling Services/ Production/ P&P Deptt. having inputs from HSEQ Deptt. in the light of EPA regulatory requirements for the <u>treatment</u> job and technical evaluation of the bids shall be carried out accordingly.





Controlled Copy Do Not Duplicate For Internal Use Only

7.8.4.3 Execution and Quality Control

- Drilling Services/ Production/ P&P Dept. shall ensure that the restoration is executed as per TORs in consultation with HSEQ Deptt..
- Laboratory results of the treated water/ cuttings/ soil samples shall be benchmarked against the permissible limits defined by regulatory body(ies) or best industrial practice(s) and may be compared with surrounding undisturbed soil, where required.
- QC Checklist presenting overview of restoration of hazardous pits shall be developed by HSEQ Deptt.; and the same shall be filled&signed by HSEQ and Drilling Services/ Production/ P&P Reps.

7.8.4.4 Budget Allocation and Invoicing

■ Budget allocation, verification and processing of invoices shall be the responsibility of Drilling Services, Production, P&P and C&ESS Department.

RACI Chart							
Task/ Deliverable	C&ESS	Drilling Services	Production/ P&P	HSEQ	CSR		
Initiation/ Custodianship	I	R&A	R&A	С	I		
Budget Allocation/ A.F.E.	R&A	R&A	R&A	I	I		
Assessment/ Categorization	I	I	I	R&A	I		
T.O.R./ I.T.B.	R&A	R&A	R&A	С	I		
Technical Evaluation	R&A	R&A	R&A	С	I		
Job Execution/ Coordination	R&A	R&A	R&A	С	I		
QC/Lab. Analysis/Progress Reporting	R&A	R&A	R&A	С	I		
Conflict Resolution	R&A	I	I	I	R&A		
Invoice Verification	R&A	R&A	R&A				
Endorsement from RB* (if required)	l I	R&A	R&A	С	1		

^{*}RB = Regulatory Body

In case of Nonhazardous Pits In case of Hazardous Pits

In case of Both Pits



Note:

R = Responsible: Doing The Decision; This Departmental role is responsible for getting the decision and starting the task or deliverable.

A = Accountable: Owning The Task; This Departmental role is responsible to ensure execution and completion of the task or deliverable.

C = Consulted: Assisting, as subject matter expert; This Departmental role is responsible to provide information useful to completing the task or deliverable.

I = Informed: Keeping Aware; This Departmental role is just kept up-to-date on the task or deliverable (as it can be affected by the outcome).

7.8.5 Restoration of Production site/ Well(site) after Plugging & Abandoning (P&A)

7.8.5.1 Restoration of Soil

- Area shall be jointly visited by Representatives of a) Drilling Services/ Production/P&P, b) Land Management/CSR, c) C&ESS and d) HSEQ Deptt. and any contaminated soil within and around the wellsite fence boundary shall be marked.
- Laboratory analysis of the soil shall be the responsibility of concerned Departments.
- C&ESS Deptt. shall remove the contaminated soil (if any) and where required handover it to waste management contractor/ bioremediation facility for treatment and backfill the area with clean/ treated soil.

7.8.5.2 Surface Facilities Removal

- Following surface facilities from the wellsite shall be removed by Production/ PE&FD;
 - o Oil, gas and water supply lines
 - Solar arrays & batteries for solar panels
 - Wellhead control panels
 - Skid mounted separator
 - Surface piping/ pipe racks/ pig launcher
 - Cables/ cable trays
 - o Chemical injection tank
 - Every sort of instrumentation
 - o Any other





Controlled Copy Do Not Duplicate For Internal Use Only

7.8.5.3 Cellar Area

© Civil construction in the cellar may be dismantled and cellar backfilled with soil with the consultation of Drilling Services/ Production Deptt.

7.8.5.4 Septic Tank and Soak Pit

Septic tank shall be broken and after neutralizing the material, the septic tank/ soak pit shall be leveled with clean soil having an extra 1 meter layer.

7.8.5.5 Flow Line

All the surface and underground flow lines and other facilities shall be removed entirely from end to end by Production/ PE&FD Deptt.

7.8.5.6 Fence and Civil Construction

- Fence including main gate, mesh/ barbed/ razor/ concertina wire and anti-snake sheet around the well-site shall be removed by C&ESS Deptt..
- Civil construction like accommodation facilities, barracks, secondary containment for diesel/ chemicals and foundations may be removed by C&ESS Deptt.
- All concrete structures e.g. pads/ flow line supports, etc. at wellsite shall be removed by C&ESS Deptt.

7.8.5.7 Water Source/ Tubewell

Decision on the dismantling or usage/ handing over of water sources like tubewell(s) may be made by RC/ CSR Officer/ Land Management Section in consultation with landowner(s)/ local administration.

Note:-3 After successful plugging & abandonment (P&A) of a production site/ well(site), the site shall be handed over to the landowner/ custodian once all the requisite aspects have been duly addressed as mentioned in the Production site/ Well(site) Plugging and Abandonment (P&A) Checklist.

7.8.6 Conflict Resolution

- Handling of locals' related complaints arising from the waste management services as well as their redressal shall be the responsibility of CSR Deptt.
- Hiring of legal counsel in case litigation arises from the waste related matters shall be the responsibility of Legal Services Deptt.
- The Land Management Section, CSR Department shall acquire the NOC at the time of de-hiring of land, following the completion of all prerequisites such as pit restoration, removal of fencing, and dismantling of rig foundation, among others.
- Endorsement of restoration of hazardous pit from regulatory authority(ies) shall be acquired, where required.





000	OGC/HSE-33A(01)			
	Well(site) Handing Over/ Taking Over (Chec	<u>(list</u>	
Nom	enclature of Well(site):			Date:
#	DESCRIPTION	Yes	No	RESPONSIBILITY
8	Dismantling / removal of unnecessary auxiliaries from the well(site)	ŧ		Drilling/ Production

#	DESCRIPTION	Yes	No	RESPONSIBILITY
01	Dismantling/ removal of unnecessary auxiliaries from the well(site) have been ensured in a safe manner.			Drilling/ Production
02	Installation/ condition of Xmas Tree and provision of necessary auxiliary equipment at safe distance have been ensured.			Drilling/ Production
03	Installation/ condition of H2S/ HC detectors and fire protection fusible plugs have been ensured.			Drilling/ Production
04	WBM/ OBM drill cuttings have been removed and safely disposed.			Drilling/ C&ESS
05	Pits with "no" future use have been treated/ safely restored and rehabilitated.			Drilling/ C&ESS
06	Pits with future use have been treated/ maintained, decanted and properly fenced.			Drilling/ C&ESS
07	All chemicals and associated areas have been safely cleaned and cleared.		(2) ()	Drilling/ Production
08	All temporary installations have been safely removed.			Drilling/ C&ESS
9	Wellhead cellar pit has been decanted and properly cleaned.			Drilling
10	Wellhead area has been fenced as per requirement.	5	i: 6	C&ESS
11	Proper safety signboards have been configured at appropriate places.			Drilling/ Production

Drilling Services/ Production Rep.

<u>Checked &Verified by:</u> Field HSE Rep. OM/ PM/ FM Prepared & Initiated by: **Endorsed by**

It is hereby endorsed that all of the above requisite HSE aspects have been duly checked and found properly addressed and in compliance before handing over/ taking over of the well(site).

Handed Over By: (Sign & stamp) Taken Over By: (Sign & stamp)





30	Oil Gas Development Company Limited Location:			OGC/-HSE-33B(01
	HSEQ artment QC Checklist for Treatment/ Restoration	of	<u>Pit</u>	Frequency:
Nom	enclature of Pit:		Da	ate:
#	DESCRIPTION	Y	N	REMARKS
01	Are the equipment/ materials/ chemicals available at site adequate and appropriate to carry out treatment/ safe disposal of wastewater and site restoration?			
02	Are the contractor's workforce available at site adequate and competent to perform the assigned tasks as per TORs or scope of work?			
03	Are the "treatment" methodologies conform/ meet TORs & scope of work for treatment/ safe disposal of wastewater?			
04	Are the "restoration" methodologies conform/ meet TORs & scope of work for rehabilitation/ restoration of hazardous pits?			
05	Is Joint Sampling carried out during the pretreatment/ pre-restoration phase by environmental monitoring laboratory to conduct tests for parameters as mentioned in scope of work? Are the desired lab reports kept in record?			
06	Is Joint Sampling carried out during post-treatment/ post-restoration phase by environmental monitoring laboratory to conduct tests against the regulatory requirements/ best industrial practices? Are the desired lab reports kept in record?			
07	Are photographs taken "before" treatment of wastewater/ restoration of pits for record and reference?			
08	Are photographs taken during and upon completion of the wastewater treatment/ pit restoration preferably on daily basis for submission of progress reports to H.O. and also for record?			
09	Is progress like visual/ physical inspection on wastewater treatment/ pit restoration process found satisfactory?			
10	Has RC/ CSR Officer/ Land Management Section acquired NOC(s) from the landowner(s)?			
11	Has the regulatory body(ies) (where required) endorsed the treatment process in a formal manner?			

Field HSE Rep.

Prepared & Initiated by:

Drilling Services/ Production/ P&P Rep.

Checked &Verified by:

OM/ PM/ FM **Endorsed by**





S. C.	Oil Gas Development Company Limited	
	Locations	

OGC/HSE-33C(00)

Production site/ Well(site) Plugging and Abandonment (P&A) Checklist

Nomenclature of Well(site):	Date:

#	DESCRIPTION	Yes	No	RESPONSIBILITY
01	Surface facilities have been removed safely including:			Production/ PE&FD
a.	Oil, gas and water supply lines			Production/ PE&FD
b.	Solar arrays & batteries for solar panels			Production/ PE&FD
с.	Wellhead control panels			Production/ PE&FD
d.	Skid mounted separator			Production/ PE&FD
e.	Surface piping/ pipe racks/ pig launcher			Production/ PE&FD
f.	Cables/ cable trays			Production/ PE&FD
g.	Chemical injection tank			Production/ PE&FD
h.	Every sort of instrumentation			Production/ PE&FD
Í.	any other			Production/ PE&FD
02	Civil construction like accommodation facilities, barracks, secondary containment for diesel/ chemicals and foundations dismantled?			C&ESS
03	Concrete structures e.g. pads/ flow line supports, etc. removed?			C&ESS
04	Cellar backfilled with soil?			C&ESS
05	Wastewater pit(s) treated /restored/ rehabilitated?			Drilling/ Production/ C&ESS
06	Septic tank(s) and Soak Pit(s) tank neutralized and backfilled with soil having 1 meter extra layer?			C&ESS
80	All the underground flow lines removed?			Production/ PE&FD/ C&ESS
09	Fence including main gate, mesh/ barbed/ razor/ concertina wire and anti-snake sheet removed?			C&ESS

Page 1 of 2



Controlled Copy Do Not Duplicate For Internal Use Only

	C&ESS/ PE&FD Rep. Prepared & Initiated by	Drilling Services/ Production/ P&P Rep. Checked &Verified by	OM/ PM/ FM Endorsed by
			22.000 (100.000)
3	Regularity authority(ies) end required)?	dorsed site restoration (if	Production/ P&P/ HSEQ
+	Recorded to such suit (F. N.	January 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1: 1:	Drilling Services/
63	NOC obtained from land ow	ners?	C&ESS/ CSR
	Issue resolved with the loca	s (if any)?	C&ESS/ CSR
	handing over of water source	the dismantling or usage/ es like tube well(s)?	C&ESS/ CSR

Handed Over By: (Sign & stamp)

Taken Over By: (Sign & stamp)

Page 2 of 2



Reference Standards

ISO14001:2015 & ISO45001:2018

Section 9.1: Monitoring, Measurement, Analysis and

Evaluation.

Section 9.2: Internal Audit.

Section 9.3: Management Review.

PSM (22 Elements) Model

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.

Performance Evaluation

Preamble

Terms & Definitions

Context

Leadership

Planning

Support

Operation

Improvement

This Section's Objectives

- Hazards identification and reporting.
- Determine & assess HSE System performance and compliance.
- Monitor OGDCL's HSE System.
- Establish internal audit methods, schedules, and requirements.
- Conduct HSE System conformance audits and document results.
- Review organization's HSE System.

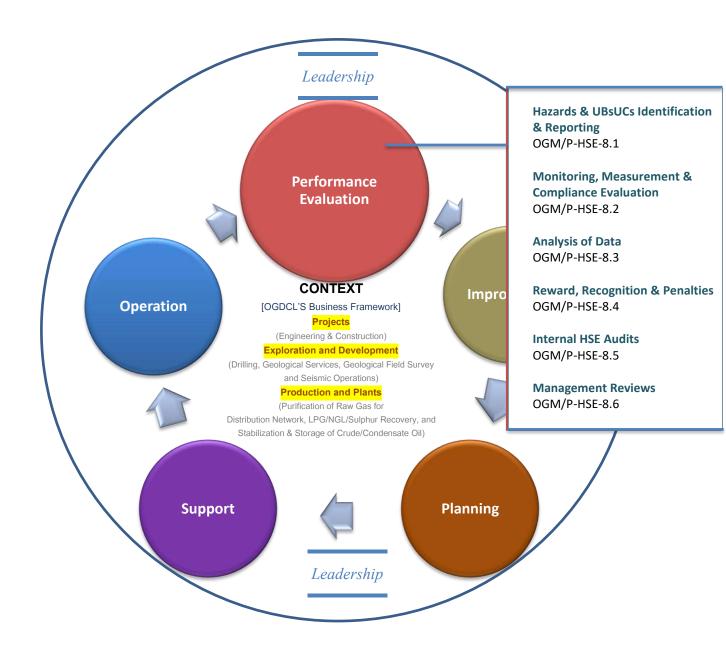
Associated Documents

- STOP Cards
- Safety Monitoring Plan
- Environmental Monitoring Plan
- 🗎 Occupational Health Assessment (Trade / Fitness Test) Plan
- HSE Monthly Report
- List of Internal (Qualified) HSE Auditors
- Annual Internal HSE Audit Planner
- 🗎 Internal HSE Audit Checklist
- Internal HSE Audit Summary ReportInternal HSE Audit Non-Conformity Report (NCR)
- Agenda of Location HSE MRC Meeting

Applicable Documents

-- Nil -





8.1 Hazards & UBsUCs Identification & Reporting

OGM/P-HSE-8.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
STOP Card	Any Employee	Location HSE Rep.	Location IC
STOP Analysis	Location HSE Rep.	Location HSE IC	Area Manager / Location IC/ GM HSE



8.1.1 Introduction

- To eliminate incidents and injuries, hazards need to be identified and managed. The foundation of hazards management is proactive and correct identification of hazards. Identified hazards are principally subjected to following stages;
 - Identify all applicable hazards (both based on conditions and having origin in human behavior),
 - o Apply hierarchy of controls for managing hazards &
 - o Communicating hazards and review the same.
- All identified hazards are manageable as based on continuous efforts, the hazards and risk profile of a Location is minimized.
- It is an obligation of every Employee and Contractor to timely report hazards encountered at our sites. Therefore, they shall be encouraged to raise maximum number of hazards so that no one gets hurt.

8.1.2 Techniques for Hazard Identification

- Many techniques are used for identification of hazards; however selection of a technique depends on factors including regulatory requirement, scope, stage in project lifecycle, type and complexity of system under review.
- During normal operations, reporting of hazards is encouraged to make the workplaces safer. Following scheme of hazard identification shall be employed;
 - **+ STOP Card**
 - + Hazard Hunt Program
 - † JHA/JVA (separate Procedure)
 - Risk Register (separate Procedure)

8.1.2.1 STOP Observation

- The basic principle of STOP is that all injuries and occupational illnesses can be prevented. The main objective of the STOP program is to train each member of the line organization on-spot to eliminate incidents and injuries by skillfully observing people as they work, talking with them to correct their unsafe acts, and encouraging them to follow safe work practices.
- STOP Program aims to modify behaviors, by observing people as they work and by intervening them; hence eliminating at-risk behaviors. For this reason all hazards shall be identified, reported and documented using STOP Cards.

8.1.2.1.1 How to Conduct STOP Observation Tour

- STOP requires following the intervention cycle;
 - Stop Observe Act Report
 - One of the most important aspects shall be the communication with the personnel during the STOP intervention. This is when one can encourage good behavior / practice and with the individual, identify and discuss unsafe acts and hazards. Furthermore, it is important to realize that the intent to STOP is not a blame system, STOP is instituted to rectify hazards there and then (if possible) and change behavior and understanding of individuals involved with the task.
 - It is important to realize that you "are getting STOP observation tour to keep your fellow employees safe and change their behavior towards safety".
- A typical STOP Observation Tour shall be conducted as follows.
 - **STOP** near enough to the person so that you can clearly see what they are doing but far enough as to ensure that they do not impede their task.
 - Observe everything the person is doing in a careful systematic way as you review the audit categories in your mind; i.e. reactions of people, personal protective equipment, positions of people, tools and equipment, specifications and housekeeping.
 - OBSERVE activities from a distance and try to spot any unsafe acts. Some unsafe acts happen quickly e.g. lifting etc. So you do need to watch carefully. Try not to focus solely on people's PPE, look also at their body positions, access to the job, type and suitability of tools, people moving around, Rushing etc...
 - ACT by talking with the person to reinforce safe work practices and address at-risk behavior. The best method to do so get the job supervisor attention when safe to do so, enquire about the task at hand, then ask what unsafe behavior or conditions they



Commonica copy be not be plicate for internal use only

can observe around them. Your aim is to gently guide the supervisor towards being able to identify the unsafe acts and conditions themselves. This is called Buy-In. If the Supervisor can figure out the unsafe conditions or actions they shall eradicate themselves without requiring interventions.

- Try to engage workers; Ask open-ended questions. Speak less, listen more.
- It's better not to say 'I am conducting a STOP visit' as this tends to put people on the defensive immediately.
- Ask them if they can leave the job for a few minutes while you have a chat about HSF.
- Act in a friendly manner.
- Ask them to explain "what the job is" and "what is it for/about".
- Ask them how they think the task can be made safer
- Ask them about suggestions to improve HSE
- Only talk once the employee has finished telling you what they think
- In case of witnessing an unsafe behavior or action. Your aim is to gently guide the worker towards being able to identify the unsafe acts and conditions themselves. This is called Buy-In. If he can figure out the unsafe conditions or actions themselves, they shall eradicate it themselves without requiring interventions.
- Try to get to the root cause of the problem in order to know what the appropriate corrective action should be. Remember it may not be the individuals fault it could be due to:
 - o Inadequate training.
 - o Non recognition of the hazard or the associated impact.
 - o Impracticality of the official system or procedure.
 - o Unavailability/suitability of safety equipment.
 - o Perceived time pressure.
- Try and agree when and what needs to be done by whom.
- Try to get them to conclude what should be done rather than just telling them the answer. They are then much more likely to do this when you have gone.
- If the activities are already being conducted in safe manner, do not forget to encourage workers. This will reinforce the positive behaviors.
- **REPORT** your interventions and actions on a STOP intervention card without naming the person.

8.1.2.1.2 STOP Administration

- STOP Cards shall be available on every prominent area along with the Drop Boxes.
- Location IC shall ensure that Observation Tours are made and STOP Cards are filled-in as per following frequency:-
 - Once every day for HSE IC
 - Once every week for Departmental / Sectional IC
 - Once every fortnight for Location IC
- Different employees/ operations to be picked at a time; the objective is to train all employees to get acquainted with the use of STOP Cards, observe the unsafe conditions/ acts anytime.

8.1.2.2 Hazard Hunt Program (HHP)

- HHP is an effective hazard identification process that aims at identifying the hazards through structured and team based approach by following an approved calendar plan.
- Corporate Annual Management Walk Around (MWA) Plan For Hazards Hunting & Reporting shall be developed by HSEQ Department emphasizing HSE commitment and visibility by OGDCL Leadership (EDs; GMs/ HODs; Area Managers) as best industry practices as per following frequency:-
 - Twice every year by ED
 - Twice every year by GM/ HOD
 - Once every quarter for Area Manager
- Location's Annual Hazard Hunt Plan shall be formulated by HSE Section and approved by Location Management as tabulated below:

#	Quarter	Date	Area	Team Lead	Member-I	Member-II
1		Jan	Operations			
2	First	Feb	Camp			
3		March	Remote			
4		April	Operations			
5	Second	May	Camp			
6		June	Remote			





7		July	Operations
8	Third	Aug	Camp
9		Sept	Remote
10		Oct	Operations
11	Fourth	Nov	Camp
12		Dec	Remote

- Location InCharge shall nominate members for each team; each team shall be constituted of cross-functional representatives and limited to maximum three (03) members.
- The teams would visit the specified area as per respective timeslot mentioned in the approved Hazard Hunt Plan to collect positive & negative observations.
- All of the positive and negative observations during the HHP are required to be formally captured on STOP Cards as well.
- Each Hazard Hunt Team shall discuss the observations of each particular area with the concerned Department/ Section.
- The concerned Department/ Section shall complete the required action(s) in order to address the observations.

8.1.2.3 Review of STOP Cards

- The observations shall be presented in HSE Management Review Committee (MRC) meetings or as deemed appropriate by Location Management where Hazard Hunt Team shall deliver a presentation containing the pictorial evidence of all positive and negative observations; intent of the system remains to be to improve the workplace conditions. (HHP should not be used as tool to abase any Department/ Section or individual.)
- Authentically filled STOP Cards are to be kept with all Sectional ICs.
- On monthly & annual basis, each Sectional IC shall review / analyze its own STOP Results whereas Location HSE IC along with Location IC shall review / analyze STOP Results of the entire Location by using the following pattern:

,	Number Of Unsafe Actions / Behaviors					Number Of Unsafe Conditions				%age		
	Reaction of people (1)	Personal Protective Equipment (2)	Ergonomics (Positions of people) (3)	Tools and Equipment (4)	Procedures (5)	Tools & Equipment (6)	Structure and Work Area (7)	Environment (8)	Orderliness (9)	Total	Open	Closed
December												
November												
October												
September												
August												
July												
June												
May												
April												
March												
February												
January												
Total												
%age	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \											

- Monthly STOP Results shall be shared with HSEQ Department H.O. for review.
- Based on the annual review of STOP Cards, in order to improve the PDCA cycle, where required, following may be considered:
 - a) New CPRs be initiated;
 - b) HSE Impact (Risk) Assessment Register be updated;
 - c) Safety Talks/ Toolbox meetings be improved;
 - d) HSE Inspections and Audits be facilitated further;
 - e) HSE MRC meetings' agenda be extended;
 - f) Trends regarding the type and/ or cause of unsafe conditions & acts be exhibited;



- g) Training Need Assessment (TNA) for updating Training Calendar be performed;
- h) PPE Need Assessment Matrix be reviewed/updated;
- i) HazCom be improved; and/ or
- j) JVAs (JHAs) be revised, etc.

8.1.2.4 Follow-up of STOP Cards

- HSEQ Department/ Section shall follow-up for the closure of the recorded hazards.
- If any of the reported hazard/STOP Card remains open and action not taken, Location's Risk Register shall be updated for incorporation of the open hazard.
- The close-out status shall be presented by HSEQ Department/ Section in the HSE MRC meetings through pictorial presentation as before & after HHP.







Ref. Section 06 (Support) & Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual





ope HSE TOP CARD FOR OGDCL HOUSE ISLAMABAD ope

☐ General Movement ☐ Special Movement	☐ Visitor/ Guest/ Delegation's Movement	☐ Office: E		☐ Meeting Workshop,		☐ Filing, Ma Stacking, Sto		☐ Manual Office Equi	Handling of pment
☐ Manual Handling of Heavy Equipment	☐ Compressor: O&M ☐ Boiler: O&M	Comput & Accessor	ers/ Laptops les: O&M	☐ Fire Exti		☐ Food: Pre Serving & W	paration,	☐ Generat	
☐ HVAC System: 0&M ☐ AHU System: 0&M	☐ Elevators: O&M ☐ Lift Room: O&M	☐ Electrica O&M	Appliances:	☐ Batterie O&M	s/ Solar Cells:	☐ Janitorial O&M	Services:	☐ Suspend Platform: 0	led Working D&M
☐ Hot/ Work-At- Height/ Electrical Job	☐ Tool Room: Handling & Storage	☐ Lights/ F Detectors:		☐ Plumbin ☐ Photoco	g Job pying: O&M	☐ Data Cen☐ Data/ Ma		☐ Paint Jo ☐ Masonr	
☐ Server Room: O&M ☐ IT DR Room: O&M	☐ SDP Centre: 0&M ☐ FM200 Fire Supression	Commu		☐ Facsimil O&M	(Fax) Room:	☐ IAQM/ Ve Emissions M		☐ Carpent	ry Job
☐ Medical Services/ Drugs Supply	☐ Patients Sampling in Medical Laboratory	☐ Vaccinations/	ion/ Blood Trade Tests	☐ Fumigat		☐ Scanners, O&M	Detectors:	☐ Reception ☐ Waiting	
Power Cabling & Accessories: O&M	☐ Network Cabling & Accessories: O&M	☐ Fuel: Tra		Lube Oil Handling &	& Chemical: Use	Weapons & Operation		☐ Security Communic	: Protection & ation
☐ Wudu (Ablution) Areas/ Washrooms	☐ Device Calibration/ Testing/ Emergency Drill	☐ Surveilla Walkthrou	ghs	(Evacuation		Pray/ Leis Area or Roo	m	☐ Muster ☐ Vehicula	ar Parking
Office ambience is a working er	wirenment or condition related to a Check (*) Mark The				ALIVE DES WATER			positive or negi	tive way.
PPE	Posture	W	nev's		quipment	Proce		House	keeping
Safe Unsafe	Safe Unsafe	Safe	Unsafe	Safe	Unsafe	Safe	Unsafe	Safe	Unsafe
	TIONS observed and ac								

Reporter's Signature: Specify The Working Area/ Floor/ Tower: Reporting Date and Time: USE NEARBY DROP BOX FOR POSTING HSE TOP CARD - YOUR VERY OWN SAFETY-FIRST INITIATIVE. FOR FURTHER GUIDANCE, CONTACT HSEQ DEPARTMENT (EXT.: 3825; 3826) 3827)

8.2 HSE Monitoring, Measurement & Compliance Evaluation

OGM/P-HSE-8.2(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Added: Categories for Workforce's Health Monitoring

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 034 Health & Hygiene Monitoring Plan	Location Medical IC in consultation with Location HSE IC	Location HSE MRC	Location IC
OGF – HSE – 035 Safety Monitoring Plan	Concerned Section IC in consultation with Location HSE IC	Location HSE MRC	Location IC
OGF – HSE – 036 Environment Monitoring Plan	Location HSE IC in consultation with Location Lab. IC	Location HSE MRC	Location IC
OGF – HSE – 037 Occupational Health Assessment (Trade / Fitness Test) Plan	Location Medical IC in consultation with Location HSE IC	Location HSE IC	Location IC
HSE Monitoring/Inspection Checklist (Preparation)	Concerned Section IC	Concerned Section IC	Concerned Section IC
HSE Monitoring/ Inspection Checklist (Filling Phase)	Concerned Section Rep.	Concerned Section IC	Concerned Section IC
Calibration Record	Concerned Section Rep.	Concerned Section IC	Concerned Section IC

10



8.2.1 General

- When determining what should be monitored and measured (in addition to progress on objectives / targets), the following should be considered:
- Significant vulnerabilities, threats & opportunities,
- Compliance obligations, and
- Status (effectiveness/ reliability) of operational controls & equipment.
- HSE monitoring and measurement shall include both proactive and reactive monitoring. It shall include Type of Measurement like:
 - a) Monitoring of emissions to air
 - b) Monitoring of effluents to water and land
 - c) Monitoring of emergency equipment
 - d) Monitoring of mechanical integrity & fitness of safety critical equipment
 - e) Monitoring of electrical equipment / appliances & accessories
 - f) Monitoring of operation equipment/machinery
 - g) Monitoring of employee's health
 - h) Monitoring of noise & lighting levels
 - i) Monitoring of safety tags, signs, labels, color coding, etc.
 - j) Monitoring of energy and natural resources consumption
- For each parameter / characteristic to be monitored, the Location HSE Representative in consultation with concerned Sectional InCharge shall determine for each item/ element:
 - a) the measurement or test method (Reference Standard)
 - b) frequency of measurement
 - c) sample point for that parameter
 - d) acceptance criteria (Acceptable Limit for that parameter)
 - e) responsibility for measurement
 - f) measurement apparatus or equipment to be used to measure that parameter and the manner for recording results
- Based on these parameters, three separate OH, S, & E Monitoring Plans shall be prepared.
- The monitoring activities, frequencies and responsibilities for the OH, S, & E Monitoring Plans shall be set in the light of the table below (not exhaustive):

#	Item/ Element	Prioritized Monitoring Activity	Recommended Monitoring Frequency	Primary Responsibility
		Emergency Equipment		
1.	Fire Extinguishers (AFFF, DCP, Foam,	a. Functional Reliability b. Visual Inspection	a. Quarterly b. Weekly	HSE
	CO ₂ and Water DCP/ CO2 Trolley)	Hydrostatic (Water Jacket) Test of Cylinder	5 Yearly/ as per NFPA	HSE
2.	Mobile Foam Unit	Functional Reliability	Quarterly	HSE
3.	Fire Reservoir	General Inspection & Water Level	Daily	HSE/ Process
4.	Fire Blanket	Physical Inspection	Quarterly	HSE
5.	Fire Buckets	Physical Inspection	Monthly	HSE
6.	Emergency Exit & Light	Cleaning and Maintenance (Physical Inspection)	Monthly	HSE
7.	Emergency Signage & Layout Diagram	Physical Inspection / Availability	Monthly	HSE
8.	Wind Socks	Physical Condition	Monthly	HSE
9.	Spill Control System (Leak tape, absorbent, container, pump, etc.)	Physical Inspection	Monthly	HSE/ IC Commercial/ IC Store
10.	Life Jackets / Boats	Physical & Functional	Monthly	HSE
10.	Life Jackets / Boats	Reliability	Daily (On need basis)	Crew In- Charge
11.	Fall Arrest/ Safety Harness	Physical & Functional Reliability	Monthly	HSE/IC Workshop/Mecha nical
12.	Temperature-controlled Medicines' Storage	Physical condition, integrity & Reliability as per Manufacturer Guidelines	Monthly	Medical
	_	Calibration	Annually (3 rd Party)	
13.	Nebulizer, Suction Machines, Glucometer	Physical & Operational Reliability as per Manufacturer Guidelines	Monthly	Medical
	2.2.2	Calibration	Annually (3 rd Party)	
14.	First Aid Box	First Aid Box Items	Monthly	Area Owner/ Sectional IC
15.	Anti-Snake Venom / Emergency Vaccines / Life Saving Drugs	Physical Inspection / Availability/Required/ quantity / Expiry date	Monthly	Medical



Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

			Safety Critical Equipment (SC	CE)			
16.	Personnel	Protective Equipment (PPE)	Physical Inspection / Availability	Daily	Every Section HSE		
		Pressure Safety Valve	Availability	Monthly	HOE		
17.	Pressure Relief	(PSV) Pressure Vacuum Safety Valve (PVSV) Rupture / Bursting Disc Pressure switch / transmitters	Physical Inspection/ Calibration (Trevi or Bench Test)/ Leak Test/ Block & Bleed Test/ Isolation Test	Annually/ ATA as per CM/ PM Plan	Process/ Prod. Facilities/ Inst./ Telemetry/ Mechanical		
18.	Emergenc and Isolati	y Shutdown on	Emergency Shutdown valves (ESDV) and associated components (i.e. solenoid, actuator, switches, transducers, etc.)	Annually/ ATA as per CM/ PM Plan	Process/ Prod. Facilities/ Inst./ Telemetry/ Mechanical		
19.	Emergenc	y Blow-Down and Flaring	Emergency Blow-down valves (EBDVs) and associated components (i.e. solenoid, actuator, switches, transducers, etc.) Flare stacks and associated components (i.e. instrumentation, sensors, alarms, etc.)	Annually/ ATA as per CM/ PM Plan	Process/ Prod. Facilities/ Inst./ Telemetry/ Mechanical		
			Fire / Flame / Smoke Detector	Quarterly (Internal) Annually (Third Party)			
			Heat / Thermal Detector	Quarterly (Internal) Annually (Third Party)			
00	Emergenc	y Shutdown	Combustible Gas Detector	Quarterly (Internal)	Process / Inst./		
20.	and Evacu		Toxic Gas Detector	Annually (Third Party) Quarterly (Internal)	Telemetry		
			ESD Push Buttons	Annually (Third Party) Annually (Third Party)	_		
			Associated beacons, horns, and solenoids	Quarterly (Internal) Annually (Third Party	1		
			Fired Heaters and Boilers	Monthly (in-house)			
21.	Critical Pro	ocess Systems	Associated instrumentation	Annually (Third Party	Process / Inst./		
	Cilical Fre	ACC33 3 9 3 1 C 1 1 3	(combustion safety controls, flame arrestors/ fire-check) and shutdowns	Quarterly (Internal) Annually (Third party)	Telemetry		
			Emergency Generators (including switchgear)	Monthly (Internal) Annually (Third Party)			
22.	2. Emergency Power Systems		Emergency Power Systems		Uninterruptible Power Supply (UPS) Systems (including transfer switches)	Monthly (Internal) Annually (Third Party)	Electrical & Inst
		Emergency light panels Batteries		Monthly (Internal) Annually (Third Party) Monthly (Internal)	-		
			Exhaust fans	Annually (Third Party) Quarterly			
02	Dudlelie e M	and All and the second	HVAC (A/C Units, Air handling units, building heaters, louvers, etc.)	Quarterly	Process/ Electrical/		
23.	Building Ventilation		Building HVAC Acid and Fume scrubbers	Quarterly Quarterly	Admin/ Lab		
			Hood vents (e.g. sample	Quarterly	-		
24.	Flexible Ho	oses and Expansion Joints	boxes, laboratory) Flexible hose (including metal braided hoses, flex rubber hose, elastomer, Teflon,	Quarterly	Mechanical/ PFS		
		dresser couplings, etc.) Expansion Joints		Quarterly			
25.		Vessels (containing	Level indication/ ATGS (i.e. level transmitters, level switches, etc.)	Quarterly (Internal) Annually (Third party)	Process/ Production		
	tlammable	e or toxic commodities)	Associated components (i.e. alarms, shutdowns, etc.)	Quarterly (Internal) Annually (Third party)	Inst./ Telemetry		
			Fire Extinguishers	Monthly /Quarterly			
			Hydrants Automatic Sprinklers	Monthly/Quarterly Monthly	_		
26.		ession Equipment & y Medical Services	Fire Pumps/ Water Supply Fire-water Control Valves	Monthly Monthly	HSE/ Process/ Inst.		
	Lineigene	,	SCBA/ SABA	Monthly	1		
			Fire Lorry / Responder Vehicle Ambulance	Monthly Monthly	Medical		
27.	& Muster P	y Alarm System / Siren (Call oints)/ Public ment & General Alarm	Physical Inspection Function Test	Monthly Quarterly	E&I E&I		
20	(PAGA) sys		Physical Inspection	Monthly	Process/ Admin./		
28.	Means of E	<u> </u>	Safety showers	Monthly / Annually	HSE/ Lab / Process/		
29.	Chemical	Safety Equipment	Eye wash	Monthly / Annually	Production		
			Berms, bunds, dikes or walls	Quarterly / Annually	Production/ Process/ Store		
30.	Secondar	/ Containment	Drains, sumps, valves and piping for draw-off	Monthly	Process/ Production		
50.	occoridal)	Committee	Associated components for safe handling (i.e. safety shields for flanges, pipe joints,	Monthly	Process/ Production, Mech. / Prod. Facilities		





		expansion joints, acid walls/ Plexiglas, etc.)		
31.	Scully Grounding System/ Overfill Prevention System	Functional Reliability	Monthly	Electrical/ Commercial/ Store
32.	Earthing Continuity	Functional Reliability	Quarterly / Pre-Use	Electrical
33.	Earth Leakage Circuit Breakers (ELCB), Ground Fault Circuit Interceptors (GFCI)	Calibration Physical Condition	Annually	Rig Maint./ Electrical
34.	Blow Out Preventer (BOP) System	Physical & Functional Reliability	On Installation, Situational (Need basis)	Drilling / Rig Maint.
35.	BOP Controls	Functions & Labeling	Monthly, Situational (Need basis)	Rig Maint.
36.	Passive H2S dosimeter and badges Electric General Inspection	Calibration / Functional Reliability Safety Reliability	Situational (Need basis) Quarterly	Process / Inst./ HSE/ Mech/ Elec. Electrical
38.	Test Equipment i.e. Vibrometer, Dead Weight Tester, Earth Tester, Master Calibrator, Temperature Gun, Master Gauges, Flue Gas Analyzer, Sound Level Meter, Multi Gas Detectors etc.	Physical inspection & Calibration to ensure operational reliability and integrity	Quarterly / Annually (3 rd party)	Instrument/ Electrical/ Telemetry/ Mechanical/HSE/ Lab
	Fuel/	Explosives Handling, Storage & Tree Physical Condition (Dyke;	ansportation	
39.	Crude/ Condensate Storage Tank & Associated Equipment	Lightening Arrestor; Breather; Blanketing Gas; Flame Arrestors; Ladders); Foam- Water Deluge System	5 Yearly (3 rd Party) Quarterly (Internal)	Production / Process, Prod. Facilities
40.	LPG Storage Vessels (Bullets) & Associated Equipment	Calibration / Inspection /NDT; Sprinkler System (Pneumatic Control Valves & Relevant Systems)	As per OEM recommendation/ applicable code	Process/ Inst./Mechanical
41.	Oil/ LPG Filling Gantry	Foam-Water Deluge System, Calibration of Flow Measurement Equipment (Coriolis meters, weighing bridge, TLAS system)	Monthly (Internal) Quarterly (3 rd Party)	Prod./ Process/ Commercial/Inst/T elemetry
42.	Condensate Oil/ Crude Oil/ LPG Bowzer	Physical & Operational Reliability	Daily (if applicable)	Process/ Prod/ Commercial/ Security/ HSE
43.	Odorizing Unit/ Odorization of raw gas with Methyl Mercaptan	Physical Inspection / Availability	Monthly	Process/ Prod.
	, ,	Integrity Assessment (Hardness & Thickness)	Annually (3 rd Party)	Production Facilities/ Corrosion
44.	Well-site Pipeline/ Flow line/ Headers	Pipeline Foundation, Nipple, Socket, Weldolet, Threadlet	Quarterly (Internal)	Prod. Facilities/ Mechanical
45.	Explosives Magazine Camp	Corrosion Monitoring Earthing, Safe distance, Fencing, Security	Monthly/ Fortnightly Fortnightly Daily (Surprise)	Corrosion Shooter/ Security HSE
46.	Explosive Transportation	Explosive Vehicle Check	Daily (Mandatory) Daily (Surprise)	Shooter HSE
47.	Explosive Handling	Explosive Vehicles / Field Check	Daily (Mandatory)	Shooter
48.	Explosives Magazine Camp	Earthing, Safe distance, Fencing, Security	Fortnightly Daily (Surprise)	Shooter/ Security HSE
49.	Explosive Transportation	Explosive Vehicle Check	Daily (Mandatory)	Shooter
50.	Explosive Handling	Explosive Vehicles / Field	Daily (Surprise) Daily (Mandatory)	HSE Shooter
50.	Explosive Handling	Check Well Monitoring & Flow	Monthly (Internal)	Well Services/
51.	X-Mass tree & Well Head Assembly	Condition Down Hole Flow Parameters	Monthly Annually	Production Well Services/
52.	Down Hole Tubing, Flowline & Plant Piping	& Pressure Survey Corrosion Assessment	Monthly	Production Production / Prod. Facilities /
		Integrity Assessment	Annually (3 rd Party)	Corrosion Process/
53.	Plant Pipeline & Flow line	(Hardness & Thickness) Pipeline Foundation, Nipple, Sockolet, Weldolet,	Quarterly (Internal) as per CM/ PM Plan	Mechanical Process/ Mechanical
		Threadolet Corrosion Monitoring	Monthly / Fortnightly	Corrosion
54.	SSVs/ SSSVs	Calibration/ Functional Reliability	At the time of work-over	Production/ Telemetry
55.	ESD Panel/ WHCP	Calibration / Inspection (Hydraulic Oil Level, etc.)	Quarterly	Inst. / Telemetry
56.	Well site	Environment, Safety & integrity inspection	Quarterly	Production
		Operational Machinery/Equip Physical & Functional		
57.	Electrical Heaters/ Geysers	Reliability	Bi-Annually	Electrical/ Admin.
58.	Tools	Hand and portable power tools and equipment including pneumatic power tools	Monthly/ Pre Use	Concerned Department
59.	Gas Cutting / Welding	Pressure Gauges of cylinders; Cutting torch Tip, Clamps; NRV (Flash back arrester)	Monthly/ Pre Use	Mechanical/ Prod. Facilities
60.	Arc Welding Plant	Functional Reliability; Oil Leakage, Earth Leakage Circuit Breaker (ELCB), Cable, Wiring, Welding Rod Holder	Monthly/ Pre Use	Mechanical/ Electrical/ Prod. Facilities
61.	Control Room/ SCADA Telemetry	Functional Reliability of	Quarterly (Internal)	Telemetry/ Inst.



Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	System/ DCS	Transducer, PLC (time/ pressure/ temperature/ volume), Securities, etc.); FM- 200 Suppression System	Annual (3 rd Party)	
62.	Lights	Luminance	Bi-Annually	Electrical
63.	Power Transformer (e.g. 750 KVA)	Vibration; Cooling system; Relays, Alarms & Control Switches; Insulation resistance; Resistive value	Annually	Electrical/ Mechanical
64.	Chiller, Cooling Tower, Stabilizing Column, Flare Stack, etc.	Mechanical Integrity	As per OEM recommendation / applicable code & CM / PM Plan	Mechanical
65.	Heat Exchanger, Hot Oil Heater, Boiler, etc.	Calibration / Inspection/ NDT	As per OEM recommendation / applicable code & CM / PM Plan	Mechanical
66.	Vessel, K.O drum, Flash Tank, Separator, etc.	Mechanical Integrity	As per OEM	
67.	Control Panel	Functional Reliability	Annually	Inst.
68.	Motor Control Centre (MCC)/ Power House	FM-200 Suppression System, Air Circuit Breaker, Bus Bar, Electrical Cable, etc.	Annually (3 rd Party) Quarterly (Internal)	Process/ Electrical & Inst.
69.	Heat Tracing Cable & Insulation System Level Indicator / Transmitter / Switch	Physical & Functional Reliability	Annually	Electrical
70.	Controller, Temperature Gauges, Pressure Gauges	Functional Reliability	Monthly	Inst./Telemetry
71.	Chemical Injection Pump	Functional Reliability	Bi-Monthly	Corrosion/ Prod. Facilities Corrosion/ Prod.
72.	Chemical Injection Package	Functional Reliability	Monthly	Facilities
73.	Extraction / Reinjection Well	Operational Reliability	Bi-Annually	Prod./ Prod. Facilities
74.	Wheel Mounted & Portable Drilling Rigs	Physical & Operational Reliability	Annually (SDU, OGDCL) Monthly (Internal)	Mechanical/ Drilling
75.	Pressurized Hoses of equipment	Physical condition/ Functional Reliability	Pre-use Quarterly	Process/ Mechanical/Prod./ Prod. Facilities/ Drilling
7,	Compressed Gas Cylinders	Handling and Storage	Quarterly	Mechanical/ Lab./
76.	(Operations)	Proof Pressure Test	5 Yearly (3 rd Party)	HSE/ Prod. Facilities/ Inst./ Telemetry
77.	Compressed Gas Cylinders	Handling and Storage	Quarterly	Admin.
	(Residential) Rotary Equipment (Turbine, Pump,	Vibration Analysis/ Oil Analysis	5 Yearly (3 rd Party) Monthly (Internal) Annual (3 rd Party) as per CM/ PM Plan	Mechanical
78.	Compressor, Power Generator, Turbocharger, etc.)	CO ₂ Suppression/ Flooding System (Pressure Test & Solenoid Valve Logic Function & Relevant Components)	Quarterly (Internal) Annual (3 rd Party) as per CM/ PM Plan	Inst./ Mechanical/ Process
		Material Handling & Storag	е	
79.	Lube Oil/ Diesel Storage	Fencing; Safe Distance; Leakage; Secondary Containment, Scully Grounding System, overfill protection device	On every consignment	Store / Security
80.	HSD Filling	Safe Distance, Calibration of HSD Dispensing Unit	Monthly (internal) Quarterly (3 rd Party)	Store
81.	Chemical Storage	Designated Yard/ Stacked in an order; Labeling; Material Safety Data Sheet; Chemical Warning Signs; Ventilation; Secondary Containment; Expiry	On every consignment	Store/ User Department
	Company Maintained & Hired	Vehicle Fitness	Annually	Admin. / TPT/
82.	Vehicles	Vehicle Inspection	Daily(Pre-Trip)	Concerned Section
	Overhead Crane/ Mobile, Truck	Load Test Visual Inspection	Annually (3 rd Party) Pre Use	Mechanical/TET/
83.	Mounted Crane/ Hoist/ Chain Block/ Lifting Gears	Physical & Operational Reliability	Monthly (Internal)	Mechanical/ TPT/ Prod. Facilities
84.	Fork lifter	Physical & Operational Reliability	Annually (3 rd Party) Monthly (Internal) Pre Use	TPT/ Mechanical/ Store
85.	Ladders, Stair cases, Scaffolding	Physical	Ladder (Bi-Annually) Scaffold (Periodically)	Process,
86.	Mechanical Equipment, Parts/ Pipes Storage	Designated Yards/ Racks; Housekeeping; Obstacle- Free; Convenient handling	On every consignment/ Emergent Purchase	Mechanical & HSE Store/Mechanical
87.	Electrical Equipment, Parts/ Panels Storage	Packaging condition; safe handling; proper stacking	On every consignment	Store
88.	General Items' Storage	Segregation; Proper Shelves/ Racks (Safe Working Load); Housekeeping; Access	On every consignment	Store
89.	Hazardous Waste Storage Yard	Fencing; Proper stacking: Leakage; Secondary Containment, etc.	Annually	Store



Q)(the energy Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

90.	Seismic Data Processing (SDP) Facility	Data Storage FM-200 Suppression System;		
90.	Seismic Data Processing (SDP) Facility	Fire Extinguishers; Heat,	Annually(3 rd Party)	LICE
	Saismaia Data Internatation (SDI)	Smoke & Fire Detectors;	Quarterly (Internal)	HSE
91.	Seismic Data Interpretation (SDI) Facility	Alarms Functional Reliability &		
		Condition of Storage Media;	Annually	Exploration
92.	Technical Data Library (TDL)	Ambience (Humidity, Temperature, Light Intensity)		
	, , ,	astructure / Porta Cabin (Carava	ins)/ Offices / Camps	
93.	Elevator/ Lift	Physical & Operational	As per OEM	Admin./
70.	·	Reliability Physical & Functional	recommendation As per OEM	Maintenance
94.	Metal Detector/ Walkthrough Gate	Reliability	recommendation	Security
95.	X-ray Baggage Scanner	Physical & Functional Reliability	As per OEM	Security
07	11\/A C S. into no	Boiler; AHU; ADS; Cooling	recommendation Quarterly (Internal)	Admin./
96.	HVAC System	Towers	Annual (3 rd Party)	Maintenance
97.	Suspended Work Platform	Integrity/ Load Test / Wire rope condition	Quarterly (Internal) Annual (3 rd Party)	Admin./ Maintenance
	·	Physical Inspection	Monthly/ On need basis	HSE
98.	Control Room	Structure Integrity; FM-200 Suppression System	Quarterly (Internal) Annual (3 rd Party)	Process/Inst./ C&ESS
	Electric Geysers, Heaters, AC units,	oopprossion dystem	7 timodi (o i diriy)	CGEGG
	Electrical Fixtures (cords, extension wires, switches, Earthina			
99.	Configuration of Porta Cabins/	Safety Reliability	Quarterly	Admin./ Electrical
	Metallic Structures etc.)/ Appliances General Inspection			
	ознога пароспот	Leak Detection; Physical		Admin./
100	Utility (Fuel/ Water) Pinos Linos	Condition (paint; pin holes;	Quarterly (Internal)	Maintenance/ Cam
100	Utility (Fuel/ Water) Pipes Lines	rust; anchoring, pressure gauges, pressure regulators,	Annual (3 rd Party)	Maintenance/works
		valves condition.)	A OF! !	op
101	Weapons	Physical & Operational Reliability	As per OEM recommendation	Security
102	Communication Antenna / Dishes	Physical & Functional	Bi-Annually	Comm.
	Cury Wires of Communication Towers	Reliability	,	Comm./
103	Flare stacks etc.	Physical Condition Monitoring Free from sludge, oil	Annual	Maintenance Process/
104	Drain Channels & Discharge Points	contaminated effluents	Quarterly	Production
105	Roofs and Sheds (over equipment)	Physical condition (paint; pin holes; rust; anchoring)	Quarterly	PFS/ Mechanical/ Electrical & Inst.
	(Over equipment)	Environment Monitoring		Electrical & Irisi.
		Fugitive Emission & Soil Erosion, Effluent Monitoring	Monthly / Quarterly	Lab.
	Ponds/ Pits (Evaporation/	Fencing, Leakage/ Leaching/		Process/ Drilling/
106	Mud/CPI/API/TPI) (produced water), Sewerage Pits	Seepage	Monthly	Well Services/ HSE/
	Sewerage Fils	QC Checks regarding waste	Before Rig Demobilization	Admin/ C&ESS Drilling/ Production
	DC CC Stanks & Fire Fighting	pits treatment & restoration	before kig Demobilization	/ C&ESS/ HSE
107	DG, GG, Stacks & Fire Fighting Engine, Vehicles	Emissions	Monthly	Lab.
108	Flare/ Vent	Ambient Air Quality	Annually (3 rd Party)	Lab.
109	Storage/ Loading of Condensate/ Crude Oil	Exposure Levels BTX Volatile Organic Compounds	Bi-Annually	Lab.
110		Segregation, Labeling,	Monthly	HSE
110		Storage Condition	,	
111	Heavy or Rotating/Vibrating Machinery/Vehicles	Noise Survey	Plant (Monthly) Vehicles (Bi-Annually)	HSE TPT.
			. SS. S (B) / Will locally /	·
112	Sludge from Pipeline and Crude/ Condensate Oil Storage Tanks	Naturally Occurring Radioactive Material (NORM)	As per PNRA requirements	Prod./ Process/ Well Services
	2.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0	Hygiene Monitoring		
		Livolette Monitorino		
113	Drinking Water	Chemical, Physical and	Biannually	Lab.
		Chemical, Physical and Biological parameters	Biannually	Lab.
	Food culture analysis	Chemical, Physical and Biological parameters Microbiological analysis	Annually	HSEQ /Admin/ Medical
114	Food culture analysis	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection	,	HSEQ /Admin/ Medical Medical
114	Food culture analysis Workforce's Hygiene	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality	Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE
113 114 115 116	Food culture analysis Workforce's Hygiene Mess/ Food-handling	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene,	Annually Monthly Monthly	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical /
114 115 116	Food culture analysis Workforce's Hygiene Mess/ Food-handling	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality	Annually Monthly	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE
114 115 116	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc.	Annually Monthly Monthly Quarterly	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp
114 115 116 117	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene	Annually Monthly Monthly Quarterly Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance
14 15 16 17	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene	Annually Monthly Monthly Quarterly Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp
1114 1115 1116 1117	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks Soak Pits	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene *Workforce's Health Monitorial	Annually Monthly Monthly Quarterly Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp
14 15 16 17 18	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene *Workforce's Health Monitori Trade Tests (e.g. Audiometry,	Annually Monthly Monthly Quarterly Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp Maintenance
14 15 16 17 18	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks Soak Pits Category-1: Individuals who have high potential of direct & frequent exposure of Noise, Welding, Grinding,	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene *Workforce's Health Monitorial	Annually Monthly Monthly Quarterly Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp
114 115	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks Soak Pits Category-I: Individuals who have high potential of direct & frequent exposure of Noise, Welding, Grinding, Cutting, Chemicals and Oil	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene *Workforce's Health Monitori Trade Tests (e.g. Audiometry, Spirometery, Vision Testing,	Annually Monthly Monthly Quarterly Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp Maintenance
1114 1115 1116 1117 1118	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks Soak Pits Category-I: Individuals who have high potential of direct & frequent exposure of Noise, Welding, Grinding, Cutting, Chemicals and Oil Category-II: Food Handlers, Cooks, Bearers, Launderer, Barber, Janitorial	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene *Workforce's Health Monitori Trade Tests (e.g. Audiometry, Spirometery, Vision Testing,	Annually Monthly Monthly Quarterly Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp Maintenance
1114 1115 1116 1117 1118 1119	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks Soak Pits Category-I: Individuals who have high potential of direct & frequent exposure of Noise, Welding, Grinding, Cutting, Chemicals and Oil Category-II: Food Handlers, Cooks,	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene *Workforce's Health Monitori Trade Tests (e.g. Audiometry, Spirometery, Vision Testing, etc.) LFT, HAV, HBV, HCV, Stool DR	Annually Monthly Monthly Quarterly Annually Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp Maintenance
1114 1115 1116 1117 1118 1119	Food culture analysis Workforce's Hygiene Mess/ Food-handling Hygiene Inspection of Camp Water Tanks Soak Pits Category-I: Individuals who have high potential of direct & frequent exposure of Noise, Welding, Grinding, Cutting, Chemicals and Oil Category-II: Food Handlers, Cooks, Bearers, Launderer, Barber, Janitorial staff	Chemical, Physical and Biological parameters Microbiological analysis Personal Hygiene Inspection Cleanliness, hygiene, and quality Cleanliness, hygiene, fumigation, insecticide spray, etc. Cleanliness, hygiene Cleanliness, hygiene *Workforce's Health Monitori Trade Tests (e.g. Audiometry, Spirometery, Vision Testing, etc.)	Annually Monthly Monthly Quarterly Annually Annually Annually	HSEQ /Admin/ Medical Medical Admin/ Medical/ HSE Admin/ Medical / HSE/ Camp Maintenance Admin./ Camp Maintenance Admin./ Camp Maintenance



Ctressersy Performance Evaluation: OGDCL's Integrated HSE System Manual

Controlled Copy Do Not Duplicate For Internal Use Only

123	Category-IV: 40 – 49 Years (if not covered above)	CBC, SGPT, FBS	Annually	Medical
124	Category-V: 50 – 59 Years (if not covered above)	CBC, FBS, LFT, Creatinine, UDR, BMI, Chest X-Ray, Cardiac Screening, PSA/ Mammography	Annually	Medical
125	Category-VI: In case of an employee's frequent absenteeism, sudden change in behavior, poor job performance or as a part of incident investigation etc.,	Specialist assessment as recommended by Medical Officer/ Team	On the advice of HOD	Medical
126	Category-VII: Promotion cases for EG-VI & above	Psychoanalysis	At the time of promotion	Medical

^{*}Note:- It shall be the sole responsibility of Contractor to ensure examinations of their employees under contractual obligation; however OGDCL may crosscheck by carrying out some of these tests on their own where deemed appropriate or on random basis in the larger interest of the health & safety of their workforce members.

- o To meet on monthly basis to review the medical record & OH assessment reports of all workforce members at their respective locations.
- o To determine if medical record & health assessment reveals any acute/ chronic condition(s)/ illness(es) which may need special attention/ care.

o To carry out statistical trend analysis in terms of major OH ailments against Directorates, different age groups & trades

in the format prescribed below and discuss the same in HSE management review committee meeting

		Nur	nber of OH	l Patients (xposure to	specific h	ealth haza	ırds)	
□ Directorate □ Trade □ Age	Arthritis/ Osteoporosis	Cardiovascular/ Hypertension	Cancer and Malignant Blood Disease	Diabetes	Pulmonic/ Tuberculosis	Epilepsy/ OCD/ Migraine	Crohn's/GERD/ IBS/Hemorrhoids	Benign Prostate Enlargement (BPE)/ UTI	AIDS	Others
Total										

- OH, S, & E Monitoring Plans shall be developed by the concerned Sectional InCharges for the areas, activities, operations and processes under their iurisdiction.
- OH, S, & E Plans shall be revised based on amendments in applicable standards, guidelines and results of conditional monitoring.
- Inspection Plans / Checklists/ Forms shall be developed by the Responsible / Concerned Sectional ICs to observe & document the status observed during the monitoring.
- The equipment used for monitoring and measurements of key parameters (related to significant HSE vulnerabilities & impacts and HSE regulations) shall be calibrated as per schedule and record of calibration shall be maintained.
- Calibration record shall be specifically documented for each equipment as follow:

#	Parameters to be calibrated	Required value/set point	Read values	Final values after calibration	Calibration carried on (date)	Next calibration due date
					_	

- When HSE performance shall fall below desirable level, or when there shall be a possibility of noncompliance against laws or regulations, the concerned Section InCharge shall initiate corrective or preventive actions (CPR), and may also recommend establishment of appropriate objectives/ targets and management programs to improve HSE performance.
- The status of CPRs shall be shared in HSE MRC meetings so that rigorous followup remains in place.

^{*}Note:- Medical Officer shall review the complete health assessment reports and notify if the assessment reveals any medical condition(s) which might need special attention or extra care; the final comments on medical condition(s) about the individual shall be submitted to the concerned HOD with possible options as:

⁽a) Medically suitable/ Fit for the existing job

⁽b) Not-fit for the existing job/ Job be rotated/ Changes in workplace be made

⁽c) Specialized treatment/ Surgery/ Counselling advised (d) Further investigation advised and referred to Medical Board

^{*}Note:- In order to trace out the chronic patients/ victims and provide statistical trend analysis with the purpose to monitor workforce's health, Location's Health Monitoring Team shall comprise of Medical Rep. as Chairman, HSE Rep. as Member and Admin./ HR Rep. as Member. Roles of Health Monitoring Team shall be:

OGF/XXX - HSE - 034(01)



OIL AND GAS DEVELOPMENT COMPANY LIMITED

HEALTH & HYGIENE MONITORING PLAN

Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other):

Sr. No	Type of Measurement	Parameters to be measured	Reference Standard	Acceptable limit	Monitoring Place	Measurement Frequency	Measurement Equipment	Responsible	Related Record

Note:
THIS OCCUPATIONAL HEALTH MONITORING PLAN HAS BEEN PREPARED UNDER THE SECTION 8.0 "PERFORMANCE EVALUATION" OF OGDCL INTEGRATED HSE SYSTEM MANUAL DULY APPROVED BY MD&CEO OGDCL.

PREPARED BY	REVIEWED BY	APPROVED BY

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

OGF/XXX - HSE - 035(01)



OIL AND GAS DEVELOPMENT COMPANY LIMITED

SAFETY MONITORING PLAN

Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other): Section _

Sr. No	Type of Measurement	Parameters to be measured	Reference Standard	Acceptable limit	Monitoring Place	Measurement Frequency	Measurement Equipment	Responsible	Related Record

Note:
THIS SAFETY MONITORING PLAN HAS BEEN PREPARED UNDER THE SECTION 8.0 "PERFORMANCE EVALUATION" OF OGDCL
INTEGRATED HSE SYSTEM MANUAL DULY APPROVED BY MD&CEO OGDCL.

PREPARED BY	REVIEWED BY	APPROVED BY

Controlled Copy Do Not Duplicate For Internal Use Only

OO) (the energy

OGF/XXX - HSE - 036(01)

OIL AND GAS DEVELOPMENT COMPANY LIMITED

ENVIRONMENT MONITORING PLAN

Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other):

Sc. No	Type of Measurement	Parameters to be measured	Reference Standard	Acceptable limit	Monitoring Area	Measurement Frequency	Measurement Equipment	Responsible	Related Record
-									

NOTE:
THIS ENVIRONMENT MONITORING PLAN HAS BEEN PREPARED UNDER THE SECTION 8.0 "PERFORMANCE EVALUATION" OF
OGDCL INTEGRATED HSE SYSTEM MANUAL DULY APPROVED BY MID&CEO OGDCL.

Ī	PREPARED BY	REVIEWED BY	APPROVED BY
- 1			

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

00)(1000

OIL & GAS DEVELOPMENT COMPANY LIMITED Location (EFP/FGCP/Seismic Party/Drilling Rig/Field/Plant/Other): OCCUPATIONAL HEALTH ASSESSMENT PLAN FY

Name of	Type of Examination (Trade-wise)						Sche	dule					
Name of Section/ Department	(Trade-wise)	Jan	Feb	March	Арг	May	June	July	Aug	Sept	Oct	Nov	Dec
				-									

ASSESSMENTS TO BE CONDUCTED IN THE LAST WEEK OF EVERY MONTH.
THIS PLAN HAS BEEN PREPARED UNDER THE SECTION 8.0 "PERFORMANCE EVALUATION" OF OGDCL INTEGRATED HSE SYSTEM MANUAL DULY APPROVED BY MIRKEGO OGDCL.
THE CONTRACTIONS OF 3RD PARTY EMPLOYEES ARE LIABLE TO CARRY OUT HEALTH EXAMINATION OF THEIR RESPECTIVE EMPLOYEES ONCE IN THE YEAR.
EXACT TYPE OF EXAMINATION WILL BE DETERMINED BY LOCATION INCHARGE MEDICAL BASED ON THE HAZARDS AN EMPLOYEE RECENTLY EXPOSED.

Consulted By Reviewed By Approved By Prepared By Signature Location In-Charge HSE Signature Location In-Charge Signature Location Medical In-Charge Signature Members – Location HSE MRC

8.3 Analysis of Data

OGM/P-HSE-8.3(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1.	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 038 Monthly HSE Report	Location HSE Section	Location HSE IC	Location IC
OGF – HSE – 038A Monthly HSE Report (Static Locations)	Location HSE Section	Location HSE IC	Location IC
HSE KPI Analysis / HSE Performance	HSE Department H.O.	GM HSE → EDs	CEO / MD



8.3.1 Leading & Lagging Indicators

HSE performance shall be analyzed on regular basis and reported to top management and stakeholders through Key Performance Indicators (KPIs): KPIs mentioned below may be monitored on regular basis:

8.3.1.1 Leading Indicators (Pre-Loss/ Prevention → Loss Control)

- a) Related to Safe Man Hours
- b) Vulnerabilities (hazards), Impacts (risks) as High, Medium, Low
- c) Related to UBUCs / STOP Cards
- d) Related to Process Safety (e.g. discovery of failed safety systems upon testing)
 - # of relief devices fail bench tests at set points
 - # of interlock test failures
 - o # of uninterruptible power supply system malfunctions
 - # of times fire, gas, & toxic gas detectors found to be defective during routine inspection
 - # of times the emergency vent line header found completely blocked
 - o # of times emergency shutdown valves found stuck or jammed
 - # of times blockages found in the process vent
- e) Related to Work Permits (Hot & Cold)
 - o Corrective Jobs
 - Breakdown Jobs
 - o Prevent. Maintenance
- f) Laboratory Analysis of Products (oil; gas; LPG, etc.)
- g) Related to Energy Consumption & Conservation (for primary usage, makeup or loss)
 - Power
 - o Fuel
 - Lubricating Oil/ Grease
 - Water
 - Light
 - o Chemicals
 - pH Stabilizing Additives
 - Scale Inhibitors
 - Oxygen Scavengers
 - Corrosion Inhibitors
 - Scale Dispersants
 - Anti-Bacterial agentsAnti-Microbial Agents
 - Sweetening Agents
 - Dehydration/Drying Agents
 - Anti-Gel Additives
 - Desalting Agents
 - Surfactants
 - Chelating Agents
 - Anti-Emulsion Agents
 - Reducing Agents
- h) Related to Trainings and Awareness Sessions
- i) Related to HSE Observations, Surveillance Activities and Audits
- Related to Employees Fitness
- k) Related to HSE Management Review Committee (MRC) Meetings

8.3.1.2 Lagging Indicators (Post-Loss/ Reaction → Loss Containment)

- a) Related to Lost Man Hours
- b) Related to Near Hits/ Misses
- c) Related to Accidents
 - Non-Fatal Accidents
 - Fatal Accidents
 - First Aid Cases
 - Workers Compensation Costs
 - Property Damage Costs
- a) Related to Recordable Injury Cases
 - Restricted Workday Injuries
 - Lost Workday Injuries
 - Medical Treatment Cases
- e) Related to Occupational Health Illnesses
 - Occupational Illnesses
 - o Drinking Water
- f) Related to Waste Management
 - Non-Hazardous Waste
 - Metallic Scrap







- Vehicle Scrap
- Miscellaneous
- Hazardous Waste
 - Process
 - Mechanical
 - Clinical
 - Electrical
- g) Related to Pollution
 - o Air Emissions
 - from vehicles
 - from generators
 - from turbines
 - from boilers
 - from incinerators
 - others
 - Fugitive Emissions
 - Leaks from pressurized equipment
 - through valves
 - through pipe connections
 - through mechanical seals
 - others
 - Emissions from
 - CPI/TPI/API
 - Waste Water Ponds
 - Crude/ Condensate Storage Tanks
 - Tankers' filling and decanting
 - others
 - o Ambient Air Quality
 - due to Flare
 - due to Vent
 - Liquid Effluents
 - Produced Water
 - Process (drain) Water
 - Sewerage
 - Noise

8.3.2 HSE Performance Assessment

- All locations shall submit (preferably through email) the basics HSE facts and figures to HSEQ Department H.O. on daily basis. These shall include summary of incidents and near hits (UBUC). HSEQ Department shall further apprise top management of any untoward event(s) or symptom(s).
- All locations shall submit the consolidated HSE performance of their working entity on monthly basis to HSEQ Department H.O. on the Monthly HSEQ Report.
- HSE Scorecard (Leading and Lagging Indicators) based on following three aspects shall be discussed in Location HSE MRC meetings and used to keep an eye on how involvement of each Location or within Location (Section / Department) is working in bringing improvement in HSE System:
 - Results (Injury & Environmental Stats)
 - Program (Training, inspections, audits, etc.)
 - Culture (UBUC, rewards & recognition, etc.)
- All pertinent data (statistics) shall be compiled in an HSE database.
- Subsequently, HSE Performance shall be exhibited in the pattern given below which shall be reported on monthly, quarterly, yearly and 5-yearly basis (for corporate level and for an individual location/ field level):

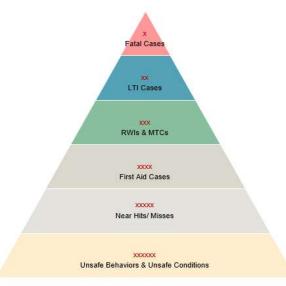
HSE Lagging Performance Indicators For Year:

HSE KPI	Formula	Benchmark	Score	Deviation
Fatality Index (Corporate)	(Number of Fatalities due to work related injuries) / (Total hours worked) × 1,000,000*			
Reportable Injury Cases	LTIs + RWIs + MTCs			
LTIF (Corporate)	(Number of Fatalities + LTIs) / (Total hours worked) × 1,000,000*			
TRICF (Corporate)	(Total Reportable Injury Cases) / (Total hours worked) × 1,000,000*			
TROIF (Corporate)	(Total Occupational Illnesses) / (Total hours worked) × 1000,000*			
TVIR (Corporate)	(Total Vehicular Incidents / (Business Use Driven KM) × 1,000,000*			

Note: For location or field-wise calculation of KPIs, 200,000 to be used instead of 1,000,000.

Controlled Copy Do Not Duplicate For Internal Use Only

Category	Number of Incidents	Description
Fire/ Explosion		
Oil/ Chemical Spill		
Vehicular		
Bowsers		
Fall/ Work-at-Height		
Confined Space		
Excavation		
Others		



atal Cases LTI Cases RWIs & MTCs Near Hits/ Misses Unsafe Behaviors & Unsafe Conditions

OGDCL's Performance

Contractors' Performance

HSE Leading Performance Indicators

For Year Safety Critical Equipment Inspections: SCE inspections are the proactive and reactive monitoring of the devices, equipment or system, whose failure can result in serious injuries, significant Occupational Health Assessments: Fitness for work assessments aim those employees who are exposed to hazards directly and may require due attention & care. property damage or environmental impacts. UBUCs/ STOP Cards: **HSE Meetings:** OGDCL STOP card system involves observing unsafe behaviors & conditions and intervening on-spot to prevent injuries and occupational illnesses in the workplace. Leak Detection And Repair Surveys help address fugitive emissions and leakages. HSE Meetings are the salient feature of OGDCL as performance on PDCA cycle of each Unit is discussed for availing improvement opportunities. Rewards & Recognitions:

OGDCL encourages positive behaviors & attitudes amongst employees and long term contractors who have sustained focus towards HSE aspects. Emergency Drills:

Drills remain a vibrant part of our preparedness towards emergencies to ensure timely response. Risk Assessments: Hazards identification and risk assessment helps in making workplaces safe through proactive decision making **HSE Awareness Sessions:** OGDCL is focused on capacity building through in-house Safety/Toolbox Talks: Pre-job discussions regarding job and site based hazards and control measures Personnel Participated: Competence enhancement is key element for OGDCL's HSE Management System. Permits to Work: Permits to vvork:

Permits related to cold work, hot work, electrical work, confined space/vessel entry, radiography, excavation & civil work, working at height, and vehicle entry permit show number of vulnerabilities and exposures for which safety protocols are followed. 00 **HSE Audits:** Internal and external HSE Audits are to seek compliance w.r.t. OGDCL's HSE Management System and ISO standar Leading **Indicators** Management Walk Around:

MWA are for Top/ Line Management/ HODs to identify potential hazards and to highlight the potential harm Hazard Hunt Programs: HHPs are for workforce members to identify potential hazards and to highlight the potential harm along with suggestions to manage the situation. Hazardous Waste Disposal: along with suggestions to manage the situation. OBM drill cuttings, wastewater and process waste is hazardous due to substantial / potential threats to health and environment and hence is safely disposed EIA/ IEE Studies: **Ambient Air Quality Monitoring:** Systematic, long-term assessment of pollutant levels by measuring the concentration and types of certain pollutants in the surrounding indoor/ outdoor air. Environment studies are regulatory requirements to monitor baseline data to minimize and avoid adverse impacts of project on environment





MONT Name of Unit									RT ion /														OGF-	HSE -	- 038(1	5)
For The Mont									ion /	Site.							-									
Item		an		eb		rch		pr	М	ау	Ju	ine	J	ıl	Aı	Jg	S	ept	0	ct	N	ov	D	ec	Year	ly
D=OGDCL C=Contractor	0	С	0	С	0	С	0	С	0	С	0	С	0	С	0	С	0	С	0	С	0	С	0	С	0	С
Manpower Hours Worked																										
/ehicles //ileage									Ħ																	
NVIRONM	EN'	TS	TAT	TIST	ICS	3		_	_	_		10 10						10 0			1		-	_		
	Item					Unit	J	an	Feb	IM	ar	Apr	Ma	зу	Jun	Ju	11	Aug	Se	o T	Oct	Nov	1	Dec	Ye	arly
nergy Demand						N-HR														\perp						onum Syc
Dil used for Pow Bas used for Po					Lt	rs. mscf	+		-	+	\dashv		+	+	_	+	+	_		+		-	+	-	-	
Bas Flared due				on		nscf	+			+	\rightarrow		+	\pm			-			+						
uel (Diesel) cor					Lt					7					-				-			V	- 2			
	Fla					ms	1		-	1				_						4						
CH₄	Ve	_	ore		_	ns ne	+		Š.—	+	\dashv		+	+	_	-	+			+			+		_	
	To	eneral tal	UIS			ns ns	+		ĺ	1	-		1	+			+			+			+			
Flare			ns								1								9							
	Ve					ns	1		Į.		\Box						1			T						
CO ₂		nerat				ns	+		4	-	-		+	-	_	-	+			+		-	+			
		hicles tal	5			ns	+		-	+	\dashv		+	+	-	-	+			+		i.	+	-		
		are				ms	+		1	+	\rightarrow		-	\rightarrow			_		-	$^{+}$						
Other HCs	Ve					ms														1						
		neral				ms	\perp			\perp	_		\perp	-		_	_			4			\perp	_		
	To	hicles	6			ns ns	+		-	+	\rightarrow		+	-	_	-	-			+				-	-	
	Fla					ns	+			+	_		+	-		1	-			+			+		-	
Sulphur (U. Q)	Ve				To	ms																				
Sulphur (H ₂ S/ SO _x)		nerat				ns	4				_		\perp	_			- 8			4						
5.5.0%	To	hicles	5			ns ns	+	_		-	-		\vdash	+	-	_	-			-1		-	-			
	Fla					ns	+			+			+	\rightarrow						\pm						
	Ve					ns														1						
Vitrogen (NOx)		nerat				ms	1_		5				\perp	_						4						
		hicles	5			ns ns	+	-	à	4	\rightarrow		╄	-	_	-	-4		-	+		-	-	-		
COD		wage				g/ltr.	+			+	\rightarrow		+	+	_	1	-		-	+		-	+	-		
BOD		wage				g/tr.	1			1			1	_	_		-#			1			1			
rds			ed Wa			g/ltr.			77											1						
rss			ed Wa			g/ltr.	+			1			_	-		1	-			+			-			
Chlorides Oil & Grease			ed Wa			g/ltr. g/ltr.	+			+	-		+	-	_	-	7 1			+			+	_	_	
Chemicals			Proc		Lt		1			1				1						1						
Consumed	W	ell Sit	e/He		Lt					3									i i	\Box						
A1-1		ocess			Lt		+		ġ.	-	-		\vdash	-		-	-		-	+		ß	4			
Water Consumption		lities inking	1		Lt		+		-	-	-		+	-		-	-			+			+		_	
o o i o di i i pa o i		tal			Lt															+						
Disposal of Effluents	Pr	oduce	ed Wa	ater	Lt	s.																				
Hazardous	Pr	ocess	;		K].	1			1	_			1			1			\perp			1			
Waste (Disposal)	Bio	ologic	al		K].																				
Non-Hazardous					K	1.														1						
	Pr	oduce	d Wa		Lt	S.																				
Spills		ude C			Lt		+		-	1	_		1	+			-			-		4	1			
eak Detection		emic ak Po			Lt		+			+	\dashv		+	+			-			+			+	-		
and Repair			aving	ıs	sc		+				\dashv		-	\dashv			\dashv			$^{+}$			+			
Vaste Pits:		zardo			N															1						
Restored Rehabilitated)			zardo	ous		06.				L	\Box															
See Diestell		is Se			No									1			1			1						
ree Plantation		eviou tal	s Stat	us	No No		+		9	+	\dashv		+	-	_		+			+			+			
	1 10	(a)			IN	JO.				1	1		1			1			1	L						

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

Page 1 of 3





SAFETY STATISTICS

	Item	Ja	an	F	eb	Ma	rch	A	pr	M	ay	Ju	ne	J	ul	Α	ug	Se	pt	0	ct	N	ov	D	ec	Year	rly
O=OGL																											
C=Cont		0	С	0	С	0	C	0	С	0	С	0	C	0	С	0	С	0	С	0	С	0	С	0	С	0	С
	ork Days																										
Safe Ma	an-Hours			_		\vdash		_			<u> </u>				_							_		_			_
isks	High			_					_						_												_
pdate	Medium			_		\vdash			_	_	_	_			_			_				_					<u> </u>
2	Low						_	_	_						_			_				_					_
OC Ca					0.75	_	0 0			200	_	_									- O			_		1/2	_
	NG INDICATORS																										
atal	Injury Cases	-			FO 0			_												-	0 0			_			
	ent Partial			_	6 8									3		8 8			2 0	-	2 3	-			8	8	-
Disabilit																											
	ent Total														_				_								-
Disabilit																											
ost W																										-	
	ed Workday	-						-														-			~		
	Treatment																										
irst Aid	d Cases						1																-				
	amage Cases	7 I	500	^	10 0		W		V (V)	<i>9.</i> v		(4)		A.C.	6.	11 11			11	- 10	72 V		1			77	*
Process	Equipment		1		9		1			A 1						A 11			1	1	4						
Earth M																			1		-						
Machin									_	2 2						K 8			- 0	-	2 8		- 6		C.	3	
/ehicle					2 6									S		8 9					3	- 0				8 .	_
Building				_										L								_				9	_
	mental Concern (Case.	s												_									_			-
ire				_					_	-		_	-		_	9 3	<u> </u>		-								_
Spill										_					_				_							,	_
eakag						L.,.			<u>_</u>								_										_
	Safety Cases (F	allure	es/ Fa	TUITS/	Mallu	nctioi	IS/EI	оскар	jes/ J	amm.	ing)				_									_			
nterloci		_		_		_		Ь,	_		_	_			_		<u> </u>	-				<u> </u>	_	_			_
F&G De		_								_	_	_		_	_	_			_		_	_	_			-	-
Supply	uptible Power																										
	Devices/ Vents				8 8		8 8			8 8				5		5 33			5 8	_	8 8		- 8	-	8	2	-
ESD	CVICCS/ VCITS		1			\vdash		-				\vdash															-
oss (in	Revenue	2 - 10		-												2 - 0		\vdash									
JS \$)	(Production)																										
lue to	Asset (Repair/															8 - Y											
ncidents	Replacement) Environment						-	-	-	-	-		-		_	- 2	-	-	-	-	-	-	-			-	-
ncluding	(Degradation/																										
hutdow	n Rehabilitation)																										
	IG INDICATORS			(0)			ter in								-	0 0					-					160	
Vear Hi	ts									-											1 1					16	
	Unsafe Conditions	Ü																				_ ~~					
ards	Unsafe Behaviors																										
	¢ af Tours																										
	JC Reported																										
Program	JC Closed																										
Fire Dril	ls																										
	mergency Drills																										
Awaren	ess Sessions				. 1		1 0																				
	Officers											<u> </u>															
articipan																											
	Maltera			_				\vdash																			
	Toolbox Talks																								1		
	Pending																					ا ا					_
	Total															- 3											_
	: Corrective																								1		
Jobs	PRODUCE POST AND ADDRESS OF THE PRODUCE PARTY.												-			6 - 6				- 5	81 B	- 3	-	-	8		
	Breakdown Job				-			-					_				—		-				-				_
	: PM Jobs	_						_	_	_		-				-	_				_					_	-
Reward		111-1-11	1							_					.g. inc		Ц.			-							

Lagging indicators are typically "output" oriented, easy to measure but hard to improve or influence e.g. incidents related statistics, pollution load, etc.

Leading indicators are typically "input" oriented, hard to measure and easy to influence e.g. risk assessment reports, audit results, trainings outcome, etc.

O=OGDCI, this column must include data of all OGDCL employees i.e. Regular + OGDCL Contracts + Trainees + Work-Charge/Casuals; whereas,

C=Contractors this column to include data of service companies + petty contractor workforce+ labor hired on daily wages for civil works etc.

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

Page 2 of 3



The second secon			
OCCUR	LAIAOITAL	LEALTH	STATISTICS
ULLUF	AIIUNAL	DEMLID	DIAHDIUS

Iter	n	Unit	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Yearly
Total Patients	OGDCL	No.													
visited Dispensary	Community	No.										1			
Occupational Health Dispensary (Med. R		No.	5												
Epidemic/ Pandemic Dispensary (Med. R		No.													
Employees Undergone OH	Officers	No.													
Assessment (Fitness Tests)	Staff	No.	2)												
Kitchen Staff Under Assessment	jone OH	No.											2		
Employees Hospital	ized	No.	-1												
Employees Quarant	ined	No.													
Employees Job Rota Problems	ated Due To OH	No.					3								

Monthly Log of Incidents

Stamp of Field HSE In-charge and Signature

#	Date & Time	Incident Type	Short Description	Reason (Cause)	Action Taken To Avoid Recurrence
					<u> </u>
_					
I					
-					

Monthly Log of HSE Awareness/ Training Sessions

#	Date & Time	Title	Facilitator/ Instructor	Venue/Institute	Number of Participants
Exter	rnal or Outsource Trainings/	Sessions	*		
	3 325.				
	i i				
	2				10.10
Onsit	te/ Internal Trainings/ Sessic	ns			
					72.80
					7/4

Monthly Log of HSE Reward and Recognition

#	Name & OG/S #	Design.	Type of Award	Amount	Month	Description of Contribution towards HSE System Improvement
_						***************************************
	*					

Note:- Duly Filled HSEQ Report must be emailed to HSEQReports@ogdcl.com by the 5th of every month.

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

Stamp of In-charge Location and Signature

Page 3 of 3

8.4 Reward, Recognition & Penalties

OGM/P-HSE-8.4(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Modified: Reward value raised

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by



8.4.1 Reward and Recognition Process

- OGDCL facilities shall commemorate a reward & recognition scheme as per guidelines outlined below; the special recognition system to be designed to acknowledge consistent team-based and individual's achievements, linked with efforts to strive for zero harm with the following objectives:
 - Engagement of team for achievement of injury free operations
 - Encouragement of positive behaviours and attitudes amongst employees and long term contractors to have sustained focus towards HSE aspects.

Award Title	Frequency	Estimate Reward Value	Award Committee
On Spot Recognition Award	Maximum of Three Per Month	PKR 2,000	Location IC & Location HSE IC
HSE Champion of the Month Award	One per Month	PKR 10,000	Location IC & Location HSE IC
Quarterly HSE Recognition Award for the Department/ Section	<u>Quarterly</u>	PKR 20,000	Location HSE MRC
Annual Best HSE Location of the Directorate Award	Annual	Certificate, Shield(s) & Souvenirs	MD/ CEO & GM HSEQ

Note: HSE award shall be conferred to the eligible workforce member(s) at a field /sectional-level from the standing financial head of Imprest of respective location.

8.4.1.1 Eligibility & Selection Criteria

8.4.1.1.1 On Spot Recognition

- On the spot recognition is aimed at positive, immediate and certain recognition of a significant contribution- including an aspect related to any one out of followings:
 - HSE system/ practice improvement, recommendation or implementation.
 - Positive behavior (such as good housekeeping/proper maintenance of PPE).
 - Process safety assurance and improvement.
 - Effective reporting of critical unsafe behavior/ condition.
 - Effective engagement with employees, contractors, sub-contractors or service company
 - Fearless suspension of an unsafe work etc.
- In order to have a competitive environment, maximum one award per month per 100 workers is recommended for each location / facility.
- All workforce members are eligible and encouraged to nominate any person for On Spot Recognition as per the above mentioned criteria.

8.4.1.1.2 HSE Champion of the Month Award

- This award is aimed at encouraging reporting of UBUC (hazards) and Near hits. For this reason the award shall only be given whereby an EXCEPTIONAL HAZARD / NEAR HIT HAS BEEN PROPERLY DOCUMENTED AND REPORTED on Preliminary Incident Reporting Form, CPR or STOP Card.
- All OGDCL and contractor / service company's employees are eligible for this award, who have reported UBUC (hazard) or Near hit which assisted to save life, protect environment from damage, prevent asset loss, improve HSE performance at site, ensure compliance of safe work practices, improve existing HSE Management System and/ or raise risk awareness.

8.4.1.1.3 Quarterly HSE Recognition Award for the Department

Location HSE MRC shall evaluate HSE performance of departments (sections) for this award.



The award shall be given to one department (section) for each quarter based on the following eligibility criteria:

The following engionity chiefe	<u> </u>		Exar	mples c	of Depa	rtments	s (Secti	ons)	
	Benchmark	Production	Process	Mechanical	Electrical	Instrumentation	QC / Lab.	Medical	Stores/ MMD
Near hits & UBUC reported									
Inspections Performed									
Awareness Sessions Attended									
Toolbox Talks Conducted									
HSE MRC meetings Attended									
%Personnel Undergone OH /									
Fitness Assessment									
Emergency Drills Attended									
HSE	Score								

8.4.1.4 Annual Best HSE Location of the Directorate Award

- This award is designed to annually recognize facilities which have demonstrated preferred behavior in handling HSE issues in their Directorate (Exploration / Petroserv / Production).
- Each Location IC shall submit an Annual HSE Score Card based on achievements in terms of incidents and pollution prevention where following three aspects shall be used to assess how involvement of each Location has worked in imparting improvements in the HSE System of the location:

					Loca	tions			
	Benchmark	Location A	Location B	Location C	Location D	Location E	Location F	Location G	Location H
	·		Resul	ts					
Fatalities									
LTIs (LWIs)									
Leakages & Spills									
			Progro	ım					
Trainings									
Inspections									
Audits									
			Cultu	re					
Near Hits									
UBUC									
Safety Talks									
Н	SE Score								

8.4.2 Dealing with Violations

- It is imperative for any organization to balance the need for a non-punitive learning environment with the need to hold individuals accountable for their actions.
- The purpose to describe how to "deal with Violations" is to provide guidance on the application of a fair and consistent assessment process which balances the need for a non-punitive learning environment with the need to hold individuals accountable for their actions. Henceforth, this process shall be referred to as 'Fair Treatment' Process.
- The purpose of Fair Treatment Assessment process shall be to determine the exact nature of an individual's involvement in an event where OGDCL HSE policies, standards, protocols and procedures may have been compromised and take necessary corrective, preventive and punitive action.
- In case of any incident / near hit where willful violation of OGDCL HSE policies, standards, protocols and procedures is considered to have taken place, a Fair



Treatment Assessment process shall be activated upon the request of relevant Location IC and / or Location IC HSE.

- MD / CEO in consultation with HOD HSE and HOD Discipline shall constitute, where deem necessary, a Fair Treatment Assessment Committee for taking up necessary corrective, preventive and punitive actions.
- Fair Treatment Assessment Committee shall come up with and submit its suggestions / recommendations within a fortnight to MD / CEO.

8.4.2.1 HSE Violations by Contractor

- HSEQ Department, H.O. shall chalk out Penalties viz-a-viz HSE Violation Categories in consultation with SCM to be made part of any specific Contract.
- The prescribed penalties shall be over-&-above legal requirements to be met by Contractor as per applicable local/ national laws.
- Based on the advice of HSE Rep., Location/ Project InCharge shall administer his powers regarding on-spot penalization.

8.5 Internal HSE Audit

OGM/P-HSE-8.5(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Modified: Audit Scoring Criterion
3	Modified: Standardized Audit Checklist

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 039 List of Approved Internal HSE Auditors	HSE Department H.O. Rep.	Manager HSE	GM HSE
OGF – HSE – 040 Annual HSE Audit Planner (Schedule)	HSE Department H.O. Rep.	Manager HSE	GM HSE
OGF – HSE – 041 HSE Audit Plan	Internal HSE Team Member/ Auditor	HSE Lead Auditor	Manager HSE
OGF – HSE – 042 Standardized HSE Audit Checklist	HSE Department H.O. Rep.	Manager HSE	GM HSE
OGF – HSE – 043 HSE Audit Report	HSE Lead Auditor	Manager HSE	GM HSE

Controlled Copy Do Not Duplicate For Internal Use Only

8.5.1 Purpose

- Internal HSE Audits shall be planned and carried out in order to:-
 - determine whether HSE management system conforms to the planned arrangements for controlling and minimizing the significant HSE risks;
 - oversee whether HSE management system has been implemented, maintained and meeting HSE policy & objectives in an effective manner; &
 - provide feedback to management of the results of such audits.

8.5.2 Audit Team

- Internal HSE Auditors shall be selected from different organizational functions based on their experience and professional skills.
- Internal HSE Auditors shall be at least university graduates (professional engineers, environmentalists, or domain specialists).
- Internal HSE Auditors shall have to undergo and qualify Certificate Level Training on HSE Auditing Methodologies, Skills & Ethics.
- HSE Department shall maintain the training, evaluation and certification renewal record of the qualified HSE Auditors for their continual professional development.

8.5.3 Audit Modalities

0	E	2	1	Definitions
×	^	_5		1)Atinitions

3.1 Deliminons	
Auditee	Location (field/ site) to be or being audited.
Auditor	Competent person who conducts an HSE audit.
Audit Conclusion	Outcome of an audit, after consideration of the audit objectives and all audit findings.
Audit Criteria	Set of policies, procedures or requirements used as a reference against which audit evidence is compared.
Audit Evidence	Records, statements of fact, or other documented information (qualitative or quantitative) which are relevant to the audit criteria and verifiable.
Audit Findings	Results of the evaluation of the collected audit evidence against audit criteria. The findings include good practices, nonconformities, observations or opportunities for improvement.
Audit Grade	Audit Grade for a specific location (attributed as Excellent, Good or Poor) is based upon percentage compliance level determined by Audit Team against the Standardized HSE Audit Checklist.
Audit Plan	Arrangements for an audit planned (as per audit planner/ schedule) for a specific time frame and directed towards a specific purpose.
Audit Planner (Schedule)	Audit program arrangements for a set of audits scheduled for a specific time period and directed towards specific purpose.
Audit Scope	Extent and boundaries of an audit; It generally includes a description of the physical locations, organizational units, activities and processes, as well as the time period covered.
Audit Team	One or more HSE Auditors conducting an audit, and supported by technical or subject matter experts, if needed.
Documented Information	Documented information, refers to any information required to be controlled & maintained. (It can be in any format/ media, and from any source.)
Lead Auditor	An experienced HSE Auditor of the Audit Team who is appointed as Team Leader for a specific audit.
Objective Evidence	Records, statements of fact, or other documented information (qualitative or quantitative) supporting the existence or verity of something obtained through observation, measurement, test, or other means.

8.5.3.2 Categories of Audit Findings

Audit findings shall be categorized as follows:

O Non-conformity (Category 1): As defined in the standardized audit checklist it is either a) a SYSTEMATIC FAILURE, SIGNIFICANT DEFICIENCY in part of the HSE system, or the LACK OF IMPLEMENTATION of such a part, governed by applicable standards or b) an ISOLATED or SPORADIC LAPSE in the content or implementation of procedures or records which could reasonably "lead to" a systematic failure or significant deficiency if not corrected.



- ◆ Observation (Category 2): As defined in the standardized audit checklist it is an AREA OF CONCERN, a process, document or activity that is CURRENTLY CONFORMING or a WEAK PRACTICE which, if not improved, RESULTS IN A NONCONFORMING system, product or service.
- **Opportunity For Improvement OFI (Category 3):** OFI is a RECOMMEND BEST INDUSTRIAL PRACTICE which results in improvement of HSE management system.

8.5.3.3 Scoring Criterion for Audit Findings

Following Audit Scoring Criteria shall be used for audit findings:

Compliance Level (Against Each Requirement)	Score
Documentation and implementation is totally absent	0
Documentation is partially available but not completely implemented	2.5
Documentation is completely available but partially implemented Or	5.0
Implementation is there but documents partially in place	
Documentation & implementation is in place to a larger extent	7.5
Documentation and implementation is fully in place	10

8.5.3.4 Audit Grade & Star Rating

Audit outcome shall be assigned a Grade and Star Rating as follows:

Audit Grade		Audit Grade Star Rating	
A Excellent Compliance Level		0000	More than 75 Percent
В	Good Compliance Level	000	60 – 75 Percent
С	Average Compliance Level	00	45 – 59 Percent
D	Poor Compliance Level	©	Less than 45 Percent

8.5.4 Audit Planning

HSE Department shall prepare an Annual HSE Audit Planner (Schedule) before the 31st of July each year based on the following Matrix of Frequency-Risk Classification;

<u>Risk</u> Exposure	Risk Classification	<u>Preferred Sites</u>	<u>Audit</u> <u>Frequency</u>
High	Where multiple regulated hazards are present in a significant proportion of the workplace operations, e.g. project activities, high pressure & temperature, un-stabilized oil, H2S, steam, flammable material, working at heights, chemical exposure, confined spaces, rotary equipment, and process hazardous waste.	 Production Fields/ Gas Processing Plants Drilling Rigs 	Biannual (one full audit + 01 follow-up of audit)
Medium	Where multiple regulated hazards are present but on intermittent basis w.r.t. the workplace operations and/ or conditions.	 Seismic Parties Engineering Field Parties Field Gathering Construction Party 	Annual Only annual inspection is recommended
Low	Where regulated hazards are generally not present in the workplace operations. This includes office-based administrative operations, regional offices, medical units, material storage, workshops, or teaching/research areas.	 OGDCL House Medical Centers OGTI G&R Labs. Workshops Base Stores 	Only annual inspection is recommended; but in case of Certification, audit is recommended

- HSEQ Department shall develop/update Standardized HSE Audit Checklist (attached) based on the requirements of HSE management system and hand it over to Lead Auditor.
- Lead Auditor shall prepare Audit Plan of a specific location based on audit criteria and scope using risk-based approach to ensure focus on matters that are significant in terms of risks & opportunities and the results of previous audits.
- The scope of audit shall be based on the size, functions and complexities of processes, operations and activities of the site.
- The Audit Plan along with the copy of Standardized HSE Audit Checklist shall be disseminated to Location InCharge.
- The Audit Plan shall enlist all the activities corresponding to the HSE management system, identify areas where these activities are taking



place, and time of audit for each activity.

■ Location InCharge shall arrange logistics and relevant Personal Protective Equipment (PPE) for the auditors.

8.5.5 Audit Execution

- Before starting an audit, internal HSE auditors shall ensure the possession of:
 - a) Audit Plan
 - b) Standardized HSE Audit Checklist
 - c) HSE System Manual
 - d) HSE Risk Register
 - e) HSE Regulatory Requirements Matrix

8.5.5.1 Opening Meeting

- The audit shall begin with an introduction of audit team members & location's management, briefing on the objective, methodology, scope and criteria of the HSE audit and any occupational health, safety, environmental and administrative arrangements required.
- o Audit Plan shall be discussed for ensuring smooth audit process.
- Location InCharge shall ensure the availability of all Sectional InCharges, auditee personnel and a suitable guide/ Rep. to escort the audit team.

8.5.5.2 Conducting the Audit

- While conducting audit, the auditors shall seek to verify whether procedures and instructions are being implemented. For this, following shall be considered:
 - Examination of the data & record (documented information),
 - + Talking to personnel actually performing various tasks,
 - Observing tasks/ operations being carried out, and
 - Validating safety critical equipment to see whether these are fit to address emergencies.
- o Internal HSE Auditors shall ensure to focus and spend more time on significant areas and activities with high risks keeping in view time management as one of the crucial factors of HSE audit.
- HSE Auditors shall ensure proper handling and reporting of sensitive information applying due diligence.
- HSE Auditors shall remain impartial, free from bias & conflict of interest, and maintain integrity and objectivity throughout the audit process to ensure that audit findings and conclusions are based on audit evidence.
- During the proceedings of audit, Lead Auditor shall convene short meetings with the audit team members to exchange notes and discuss audit progress.

8.5.5.3 Closing Meeting

- o On completion of audit, a closing meeting shall be arranged with the management of the site to share findings and conclusion of the audit.
- None of the audit information shall be used inappropriately for personal gains by the auditors, or in a manner detrimental to the legitimate interests of the auditee.

8.5.6 Audit Report

After the completion of audit, audit team members shall formally submit findings to Lead Auditor who compiles, categorizes & assign scores to audit findings; calculate sub-score for each element of HSE-MS (Plan-Do-Check-Act cycle) and determine HSE Audit Score & percentage compliance as follows:



Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	Plan	
Leadership	HSE & RM Policy Statements OGM/P-HSE-4.1	
•	Fatality Control Policy Guidelines OGM/P-HSE-4.2	
	Roles, Responsibilities, Accountabilities, and Authorities OGM/P-HSE-4.3	
	Crisis Management OGM/P-HSE-4.4	
Planning	Risk Management OGM/P-HSE-5.1	
	Job Vulnerability /Hazard Analysis OGM/P-HSE-5.2	
	Legal & Other Requirements OGM/P-HSE-5.3	
	Objectives & Management Program OGM/P-HSE-5.4	
Support	Competence & Awareness OGM/P-HSE-6.1	
	Communication & Consultation OGM/P-HSE-6.2	
	Documented Information OGM/P-HSE-6.3	
	Control of Records OGM/P-HSE-6.4	
	Sub Score (A)	
	Do	
Operation	Operational Planning and Control OGM/P-HSE-7.1	
	Permit to Work System OGM/P-HSE-7.2	
	Handling, Segregation and Disposal of Waste OGM/P-HSE-7.	
	Journey Management OGM/P-HSE-7.4	
	Framework For Hydrogen Sulfide Management OGM/P-HSE-7.5	
	Management of Project Contractors & Service Companie OGM/P-HSE-7.6	
	Use of Personal Protective Equipment OGM/P-HSE-7.7	
	Framework For Site Restoration OGM/P-HSE-7.8	
	Sub Score (B)	
	Check	
Performance	UBUC (Hazards) Identification & Reporting OGM/P-HSE-8.1	
Evaluation	Monitoring, Measurement & Compliance Evaluation OGM/P-HSE-8.2	
	Analysis of Data OGM/P-HSE-8.3	
	Reward, Recognition & Penalties OGM/P-HSE-8.4	
	HSE Audit OGM/P-HSE-8.5	
	Management Reviews OGM/P-HSE-8.6	
	Sub Score (C)	
	Act	
Improvement	Opportunities For Continual Improvement OGM/P-HSE-9.1	
	Management of Change OGM/P-HSE-9.2	
	Incident Investigation OGM/P-HSE-9.3	
	Sub Score (D)	

Audit Score (Sub Score A+B+C+D)
Percentage Compliance

- Subsequently, Lead Auditor shall prepare the draft of Audit Report, containing following information:
 - Composition of the audit team, roles and audit man-hours.
 - Introduction; audit's objective, criteria & scope.
 - Audit modalities.
 - Audit score, percentage compliance and grade (secured).
 - Good practices observed.
 - Actual audit findings (non-conformities, observations and opportunities for improvement)
 - Areas missed out.
 - Names of auditee-team.
 - Instructions regarding HSE Audit Corrective Action Plan.
 - Pictorial/ documented evidence.
- The draft Audit Report shall be submitted to HSEQ Department within a week (after conducting the audit) for review.
- Based upon the HSE Audit Score & percentage compliance, HSEQ Department shall assign a Grade and Star Rating to the Audit Report.
- The final Audit Report shall be distributed to the concerned auditee through their respective HOD/GM/ED with a copy to MD/CEO.





8.5.7 Post-Audit Action Plan and Follow up

The audit findings shall be discussed in the Corporate and Location's HSE MRC Meetings and be addressed as tabulated below:

Controlled Copy Do Not Duplicate For Internal Use Only

Audi	Grade & Star Rating	Action Required	
A	Excellent Compliance Level	 Location securing Excellent (Grade) shall be recommended for Annual Best HSE Location of the Directorate Award. Respective GM shall nominate a suitable operational representative to develop an Action Plan to address the audit findings and closeout within 06 months. 	
В	Good Compliance Level	Respective GM shall nominate a suitable operational representative (not below the rank of Chief) to develop an Action Plan to address the audit findings and closeout within 04 to 06 months.	
С	Average Compliance Level	Respective ED shall nominate an Officer (not below the	
D	Poor Compliance Level	rank of Manager) to develop an Action Plan to address the audit findings and closeout within 03 to 06 months.	

Auditee (Area/ Location InCharge) shall submit HSE Audit Corrective Action Plan to HSEQ Department within a week (after receiving of the audit report) in the following format:

#	Audit Finding (Ref. Audit Report)	Probable Cause(s) (In perspective of PDCA Cycle)	Action(s) Recommended	Responsibility	Target Deadline
				_	

Where required, Lead Auditor/ HSE Rep. shall follow-up the audit to determine if corrective actions have been implemented effectively and submit Audit Follow-up Status Report in the following format:

#	Audit Finding (Ref. Audit Report)	Action Recommended (Ref. Audit Report)	Action(s) Actually Taken	Audit Finding's Closure Status	Further Follow- up Required (Yes/ No)

- When there is sufficient objective evidence that the corrective action(s) are effective, audit shall be closed out.
- If more work is needed to fully implement the corrective actions, a new followup date shall be agreed upon and audit shall be closed out accordingly.



OGF - HSE - 039(01)



Oil & Gas Development Company Limited

List of Internal (Qualified) HSE Auditors

(To be kept with HSE Department Head Office)

#	Name/ Decimation	Name/ Designation OG Poste		HSE A	Name of Institute & Instructor	
#	Name/ Designation	Number	Posted at (Location)	Date (when attended)	Name of Institute & Instructor	
				7		
	ĺ	İ				
		1				
-		4:				
-						
		1	L.	3		
-						
		1				
		ļ				
		1				
	ļ.	1	S			
			ĵ			
		1				
	8)	1	8	X		
			7	,		
-		1				
-		+				
-						
-			,			
			4			
			ĺ			
			Ĭ	0		
			î			
	H	1				
		1				
		†				
		t	<u>C</u>			
-		+	<u></u>			
-		1	(r)			
_		 	2:			
		ļ	10			
		1				



Oil & Gas Development Company Limited ANNUAL INTERNAL HSE AUDIT PLANNER FY______

Audit	Location	Team Lead	Audit Team	Duration of	Plan/						Year <		-				
#	(Auditee)	(Auditor)	Members	Audit (days)	Actual	Jan	Feb	Mar	Apri	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
					Planned												
1					Actual												
2					Planned												
					Actual												
T					Planned												
3					Actual												
=																	
4					Planned												
					Actual	L											
T	1				Planned												
5					Actual												
_			-		Situation												
6					Planned												
					Actual												
-1					Planned												
7					Actual												
_		-			Actual												
Prepared	by:				Approved by	r:											
Date:					Date:												

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual





Oil & Gas Development Company Limited Location:

INTERNAL HSE (RISK BASED) AUDIT PLAN

Based on ISO 19011:2018 Guidelines For Auditing Management Systems

Audit #:	Audit Dates/ Man-Hours:	Ī
Audit Scope: Well Site Operations Production Engineering Separation, Dehydration Sulfur Recovery LPG Recovery Crude Oil Storage & Dispatch/ Marketing Maintenance (Mechanical, Electrical, Instrument) HSE & Medical Services Quality Control/ Metering Raw Material, Spare Parts, etc.	Audit Criteria: ISO 14001:2015 ISO 45001:2018 OGDCL's Integrated HSE System Manual	
Lead Auditor:	Audit Team Members:	ī

Time	Dept./Section to be audited	Risk Based Activity/ Operation	Auditors	HSE MS PDCA Cycle audited	e Elements to be ed	
AY & DAT	E:					
				Leadership		
				Planning		
				Support		
				Operation		
				Performance Evaluation		
				Improvement		
				Leadership		
				Planning		
				Support		
				Operation		
				Performance Evaluation		
				Improvement		
		BRI	EAK			
				Leadership		
				Planning		



Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	Support	
	Operation	
	Performance Evaluation	
	Improvement	
	Leadership	
	Planning	
	Support	
	Operation	
	Performance Evaluation	
	Improvement	
	END OF DAY-1	
	Grand Medicontrolled (Mp. 1. Sociation) (grand standards in	
DAY & DATE :		
	Leadership	
	Planning	
	Support	
	Operation	
	Performance Evaluation	
	Improvement	
	Leadership	
	Planning	
	Support	
	Operation	
	Performance Evaluation	
	Improvement	
	BREAK	
	Leadership	
	Planning	
	Support	
	Operation	
	Performance	



Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Improvement	
Leadership	
Planning	
Support	
Operation	
Performance Evaluation	
Improvement	

Prepared by:	Reviewed by:	Approved by:	
(Internal HSE Auditor)	(Lead Auditor)	Manager (HSEQ)	
Date:	Date:	Date:	





QGF = HSE = 042(02) Standardizad HSE Audit Checklist

00)(----

Standardized HSE Audit Checklist

				PLAN (46 Qui	estions)			
					<u>Ewing</u>			
	100 nd Zweins	No Applicable	Bourse two and implementation and implementations to discontinuous disco	Comparison n carridge and fair inter- nal companies (replacements)	Documentation is any deed a contrible out partially implementation in their body documents partially in stem used	Social entities by the second section of the second section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the sec	Occurectation and option and space with space in \$4.50 to place in the space in the	Findings and Commission (the second deads index meaning)
	Patro		3	2.5	5)	2.5	10	
KSE I	B RM Policy Statements OGM/P-HSE-4.L							
1.	Are HSE/ Risk Management Policies available and understood/ communicated for compliance?							
Lifese	exing Golden Rules/ Fetality Control Policy Guidelines OGM/P-	HSE-4.2	*		*			
2	Are Utesaving Golden Rules/ Fatality Guidelines communicated at sub-unit levels and transformed into HSE objectives for conformity?					8		
3.	Are personnel formally trained to comprehend Lifesaving Golden Rules/ Fatality Guidelines?							
Proce	iss Safety Fundamental (PSFs) OGM/P-HSE-4.3						-115	
4,	Are Process Safety Fundamentals (PSFs) communicated as sub-unit levels, linked with Process Safety Events (PSEs), made part of Root Couse Analysis and discussed in HSE MRC meetings?							
Roles	Responsibilities, Accountabilities, and Authorities OGM/P-HS	E-4.4						
5. 6.	Is fine management and workforce aware of their MSE roles, responsibilities, accountabilities and authorities? Are Location Emergency Management Teams (LMT) formulated and aware of their MSE roles?							
Chisis	Management OGM/F+ISE-4.5			,	h			
7.	Is site based Emergency Response Plan developed and Implemented?							
9.	Are Emergency LMT Teams and Duty Roster(s) prepared and disseminated to all concerned?							
9.	Is mock-up drill plan prepared, approved and exercised? Is updated record of Emergency Orlf Reports available?						1	
10.	Is an authentic Head Count System established for rescue operations during emergency situations? Are First Aid Boxes available & maintained at all pertinent places?					11		
12.	Are validation tests of emergency detection & response system /equipment performed at a prescribed frequency?							

QGF - HSE - 042(02) ndardizad HSE Audit Checklist

					Standardized HSE Audit Checklis
0	Q)(******	Standardized HSE	Audit Checklist		
13.	After an Emergency/ Drill, is Location Emergency Preparedness & Response PAIn (ERP) discussed in the HSE NRC Meetings and revised based on Lessons Learned?				
14.	Is Emergency Response Control Centre LMT Room / Alternate LMT Room available with tested resources?				
15.	Is list of required resources for ERTs identified, available, and maintained?				
16.	Are members of Emergency Teams (LMT) trained?			,	
Struit	ture OGM/P-HSE-4.6				
17.	Has the Location Incharge devised Field HSE Setup based on multiple cross-functional teams to facilitate the implementation/ improvement of HSE system?				4
Ente	prise Risk Management OGM/P-HSE-5,1				
18.	Is Risk Management Team (RMT) formulated and conducted risk assessment?				
19.	Is Location-Based Rick Register developed/ updated by Risk Management Team (RMT), reviewed by H5E MRC and approved by Location Charge?				
20.	Are climate related risks included in the risk assessment process, using the applicable consequences table?				
21.	Are Risk Cards of significant risks developed?				
22.	Are Risk Ratings and Risk Cards communicated to all concerned stakeholders?				
23.	Are members of Reik Management Team (RMT) trained in risk management?				
Job V	ulnerability /Hazard Analysis OGM/P-HSE-5.2				
24.	Is JVA/ JVA conducted for all tasks performed under a Permit to Work (PTW)?				
25.	Is IVA/IHA discussed with workforce prior to commencement of work?				
26.	Are Permit Issuing and Receiving Authorities trained on JUA/ JHA?				
Lega	6. Other Requirements DGM/P-HSE-5.3		No. 100		0
27.	Are all applicable legal and other requirements identified & timely updated in the Regulatory Requirement Matrix and their compliance obligation status evaluated on periodic linea?				
Obje	tives & Management Program OGM/P-HSE-5.4				
28.	Is Annual HSE (Activity) Plan developed and readily available? Is Progress against HSE Plan followed up?				
29.	Are HSE Objective formulated to reduce, manage or mitigate the Impact of high rated risks?				
30.	Are Annual HSE (Activity) Plan and HSE Objectives discussed, reviewed and followed up in HSE MRC meeting?				7
Com	etence & Awareness OGM/P-HSE-6.1	15			
31.	Based on TNA, is Annual HSE Training and Awareness Planner developed considering all essential HSE topics.				

QGF = HSE = 042(02) rdized HSE Audit Checklist

_	034	Standardized HSE Audi	t Charlelist	Standardized HSE Audit Check
U	8) (amati	Standardized HSE Addi	t Checklist	
32.	Do the selection of training facilitators/ instructors consider some eligibility criterion?			
33.	Are HSE Trainings/ Awareness Sessions conducted at the lotentified frequencies?			
34.	Is record of HSE Trainings/ Awareness Sessions maintained and are the seasons being attended by adequate number of personnel?			
35.	Is effectiveness of HSE Trainings/ Awareness Sessions evaluated to oversee their intended purpose/ utilization?			
36.	Are site visitors, guests, etc. provided formal HSE Induction and record kept?			
Comi	nunication & Consultation OGM/P-HSE-6.2			**
37.	Are Tool Box Talks conducted by each Section?			i i
38.	Is Effectiveness of Tool Box Talks evaluated on periodic basis on prescribed template?			
39.	Are adequate number of safety signboards available at site and are these maintained to a good standard?			
40.	Are Product Safety Data Sheets developed, reviewed and distributed to Purchasers?			
41.	Are updated copies of applicable MSDSs distributed to Store, Medical, HSB and illear's Sections and contents therein properly communicated?			
42.	Are Pipeline, Vessels and Lifting-gears color coded and labeled?			
43.	Are assured grounding color codes; lock out tag out devices color coding being carried out?			
44.	Is Stakeholders? External Environmental Complaint Register maintained to log the complaints?			
Docu	mented Information OGN/P-HSE-6.3			
45.	Is Documented Information controlled (i.e. prepared, reviewed, updated, approved, and distributed)?			
Cont	of of Records OGM/P-HSE-5.4			90
46.	Are documents reference numbering, approval & Issuance, record keeping, retention and disposition being cernied out?			
	SUB SCORE	W W		77









CGF - H5E - 042(02) Standardized HSE Audit Checklist

00)(----

Standardized HSE Audit Checklist

	VII.			DO (34 Questio	ns)		200	
				Liabo	a			
ž	AND ME SUPPLY	Not topy when	Documentation and conference or in cases as seri-	Decur entities in paydy, watallishing not completely imposite tid	Clacomer radio, a completely place to but per rady incommend in publishment on its view but treatment portially implemented	Courrentation & in dense to fice o in place to a larger coront	bourseries to not oppose to be seen to the seen to be s	Endings and Economiss (fine sector also devices where document)
	16519		· ·	18 %	\$	70	10	
Öper	ational Planning and Control OGM/P-HSE-7.1							
47.	Are Standard Operating Procedures (SOPs) and Work Instructions (WIs) prepared by relevant Sections for all activities which may pose an HSE Risk?							
48.	Are Preventive Maintenance Plans developed and Implemented?			o.				
49.	Are Calibration Plans developed and implemented? Does real-time testing validate the calibration results?							
Perm	it to Work System OGM/P-HSE-7.2							
50.	Are Work Permits easily accessible during normal conditions, emergencies, SIMOPs, ATAs, etc.?							
51.	Is the system of Authorized Person for permit issuance S							
52,	receiving documented and implemented? Have Issuing and Receiving Authorities received IPW trainings and record of these trainings available?			Si .				
53.	Are adequate gas detectors available to conduct gas test?							
54.	is energy isolation system developed and followed?							
55.	Is safety defeat system developed and followed?							
56.	Are applicable Permits timely issued, compiled upon, closed out and record maintained?			î:				
57.	Are PTW audits conducted and outcome of these audits actioned?							
SB.	Are our employees and contractors' employees regularly trained on PTW system?							
Hand	lling, Segregation and Disposal of Waste OGM/P-HSE- 7.3		. v	144			2 3744	
59.	Is On-Site Waste Management Plan developed and implemented?							
60.	Is weste segregation, handling, temporary storage and disposal cerried out?							
61.	Is record of waste collection, handing over and disposal maintained? Disposal sites crosschecked/ venified?							

Page 4 of B

QGF - HSE - 042(02) Standardized HSE Audit Checklist

Standardized HSE Audit Checklist 00)(---- Are employees trained in waste management. Behavioured methodologies? Journey Management CONI/D-HSE-7.4 Behavioured Management Plan developed, made available in rehicles and record mathitalised? Are all aspilicate operations controls checked and made available; ensured before journey? Are controls for the high security journeys a pilice? St. Are driver(s) competence and futness assured through Craiming and manafolding and management and management and manafolding and manafolding and manafolding and management and management and manafolding and manafolding and management and management and manafolding and management and Are Contractors & Service Companies managed through overseasing their compliance boward 162 portocols? Are Contractors & Service Companies recognized through MSE reveals and warmed for widelined. Use of Personal Protective Equipment CoMP-HSE-7,7 Do all Sections propare and update PE lended Assessment Matrix and mandain record? Do RE Le Salary Speciale/Glasses; Face Protection, Respiratory Protection, Hawing Protection, Clothing, Head Protection, Protection, Face Protection, Continguish Management Matrix Control Contro 22. Does PPE issuamos, lebamp & maintenance, disposal meets requirementa? 23. The properties of the maintained? Are employees trained in handling, treatment and disposal of hazardous? non-hazardous materials and waste? SUB SCORE

QGF - HSE - 042(02) Standardized HSE Audit Checklist



Standardized HSE Audit Checklist

				CHECK (25 Que	stions)			
SF	A DES AGO Sementia	No. Applicable	Soc. Hereafter and imperior to to be totally about	Doumertation () graft is granished for an oppositely implements	Focumentation is completely and who believes the best of the property of the p	Doc needs to 8 microstratus sice balance come.	Discussion of the last in the	Findings and Commons (fine awards down white machine)
	Nating			48	- 6	2.5	16	
isuc	(Hazards) Identification & Reporting OGM/P-HSE-8.1							
91.	Are STOP Cards available at prominent areas along with the Drop Boxes?							
12.	Is STOP Cards/ UBUC Hazard Hunt Tours schedule/ frequency followed?							
3,5.	Are STOP Cards analyzed, results shared and record maintained?							
34.	Are personnel trained in how to use STOP cards?							
4on t	toring, Measurement & Compliance Evaluation OGM/P-HSE-8.	2	*			**	100	
55.	is Occupational flealth Plan developed/ updated and distributed?							
96.	Are Section-wise Safety Monitoring Flans developed/ updated and distributed?							
7.	is Environmental Monitoring Plan developed/ updated and distributed?		v.					
18.	Are monitoring Checklists developed/ updated and made available in each Section?							
19.	Are HSE monitoring activities performed in accordance with HSE (funitoring Plans)							
10.	Is a quantitative noise survey completed around all machinery and equipment and sign posted where noise levels greater than \$0 dB(A)?							
91.	Are CPRs initiated for the deviations and corrective actions followed up?							
92.	Are HSE objectives set for the deviations and progress followed up?						i di	
Inaly	sis of Data OGM/P-HSE-8.3							
93.	Is Location Planagement aware of his location's HSE Performance/ KPI/ benchmarking criteria?							
94.	Is location's HSE performance shared with all concerned via HSE Monthly Reports?					f:		

Page 6 of 8





Performance Evaluation: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

QGF = HSE = 042(02) Standardized HSE Audit Checklist

0	9)(*****	Standardized HSE Audit Checklist
95.	Is HSE Scorecard (Leading and Lagging Indicators) discussed in Location HSE MRC meetings and used to keep an eye on how involvement of each Section is going in bringing improvement?	
Rexa	rd, Recognition & Penalties CGM/P-HSE-B 4	<u> </u>
96.	Is the reward and recognition system known and followed in letter & spirit?	
Inten	nal HSE Audits OGM/P-HSE-8.5	
97.	Are Internal HSE Audits planned and conducted?	
98.	Are Internal HSE Audit Teams trained/ certified and the list of location's qualified Internal HSE Auditors maintained?	
99.	Are Internal HSE Audits findings referred to all concerned for developing Action Plan?	
100:	Are Internal HSE Audits findings effectively closed out?	
Mana	gement Reviews OGM/P-HSE-S.6	
101.	Are quarterly HSE Management Reviews conducted?	
102.	Are Agenda and Minutes of HSE MRC Meetings timely circulated to all concerned for necessary actions?	
103.	Does each Section reflect its own HSE Performance (through Presenting Section's PDCA Cycle) in HSE MRC Montings?	
104.	Are HSE MRC meetings decisions followed up?	
105.	In case it is decided in the HSE MRC Meeting to communicate the significant HSE vulnerabilities and related impacts/ risks to the interested parties, are suitable arrangements made for external communication?	
	SUB SCORE	

Page 7 of 8

OGF - HSE - 042(02) Standardizad HSE Audit Checklist

Standardized HSE Audit Checklist

				ACT (13 Ques	tions)			
		Latina						
ž	AND ME ANNIE	No. Facts . d.de	Jos. necestra and ingle-re-tition is treate seven	Course facin s par 14 y and hobe out on floor flash, implemente	Econy enterior is corpleted that also bet partially, excit existed the force of the control of the force of the control of periods in pleasants of	Doc nieral in 8 rpice orizona Bootos a ger remo:	Downerobion and Layer strates is: 1.1 v m s less	Ending and Lemmuns (fine security subsets where (demod).
	14550			Vo-	-	7.5	10	
Орро	rtunities For Continual Improvement DGM/P-HSE-9.1				100	N		
106.	Are Corrective Preventive Actions (CPRs) initiated and processed?		ĺ					
107.	Are root cause analysis (RCA) of near hits/ misses carried out, reported and discussed using CPRs?							
108.	Is CPR Log maintained and updated?							
Mana	gement of Change GGM/P-HSE-9.2		ñs-			t-	72	
109.	Are Engineering Changes Request (ECR) made for modification jobs? Are records of these changes available and maintained?							
110.	Is an ECR Committee formulated in the field?							
211.	Dies the ECR Committee conduct Monthly ECR Reviews and record minutes?							
212.	During post incident scenarios, are Emergency ECR meetings convened?							
113.	Are personnel trained on MOC procedure?							
Incide	ent Investigation OGM/P-HSE-9.3		0.0	0.00				
114.	Are Preliminary Incident Reports timely submitted to head office?							
115.	Are investigation conducted as per criterion?							
115.	Are investigation reports developed using the standard template?							
117.	Are lessons learned (Safety Alerts) shared with all concerned and they understand how to avoid recurrence?							
218.	Is workforce trained on incident investigation protocol?							_
	SUB SCORE		84				10.70	

Page 8 of 8



OGF - HSE - 043(01)



INTERNAL HSE AUDIT REPORT

<Location's Name>

Ref. Audit Plan- OGF-HSE-041 (01)

Audit Date:	
Audit Session:	
Audit Conducted By:	
Report Prepared By:	
Report Reviewed by:	
Report Endorsed by:	
Forwarded For C&P Actions:	
Copy to:	
Date:	

Audit Outcome					
	Nonconformity	Observation	OFI	Total	
Plan	70.			Į.	
Do					
Check					
Act					
Total	2			Ï	
Score:		***			
Percentage Compliance:					
Grade:					
Star Ratina:					

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual





Controlled Copy Do Not Duplicate For Internal Use Only

1. Objective

This was the first/ second Internal HSE Audit of ______ FYxx-yy in compliance with the Annual Internal HSE Audit Schedule FY 20xx-yy. The audit was conducted as per already furnished Audit Plan in order to determine whether activities and related results comply with the planned arrangements as per the requirements of OGDCL's Integrated HSE Management System and whether these arrangements are implemented effectively. The Internal HSE Audits are to be conducted at least once in 06 months for each field/plant on mandatory basis to fulfill the requirements of OGDCL's Integrated HSE System Manual Rev-6.0 (duly approved by MD/CEO). The Internal HSE Auditors were selected from different organizational functions based on their experience and professional skills. The Internal HSE Auditors were trained on auditing skills by conducting internal training sessions. HSEQ Department maintains the audit-training records of these qualified auditors.

2. Scope

Section Audited Functions	Standards' Requirements
	Leadership
	 HSE & RM Policy Statements OGM/P-HSE-4.1
	 Fatality Control Policy Guidelines OGM/P-HSE-4.2
	 Roles, Responsibilities, Accountabilities, and
	Authorities OGM/P-HSE-4.3
	4. Crisis Management OGM/P-HSE-4.4
	5. Structure OGM/P-HSE-4.5
	Planning
	Enterprise Risk Management OGM/P-HSE-5.1
	7. Job Vulnerability /Hazard Analysis OGM/P-HSE-5.2
	8. Legal & Other Requirements OGM/P-HSE-5.3
	9. Objectives & Management Program OGM/P-HSE-5.4
	Support
	10. Competence & Awareness OGM/P-HSE-6.1
	11. Communication & Consultation OGM/P-HSE-6.2
	12. Documented Information OGM/P-HSE-6.3
	13. Control of Records OGM/P-HSE-6.4
	Operation
	14. Operational Planning and Control OGM/P-HSE-7.1
	15. Permit to Work System OGM/P-HSE-7.2
	 Handling, Segregation and Disposal of Waste OGM/ HSE- 7.3
	17. Journey Management OGM/P-HSE-7.4
	18. Management of Project Contractors & Service Companies OGM/P-HSE-7.6
	19. Use of Personal Protective Equipment OGM/P-HSE-7
	20. Framework for Site Restoration
	Performance Evaluation
	21. UBUC (Hazards) Identification & Reporting OGM/P- HSE-8.1
	 Monitoring, Measurement & Compliance Evaluation OGM/P-HSE-8.2
	23. Analysis of Data OGM/P-HSE-8.3
	24. Reward, Recognition & Penalties OGM/P-HSE-8.4
	25. Internal Audits OGM/P-HSE-8.5
	26. Management Reviews OGM/P-HSE-8.6
	Improvement
	27. Opportunities for Continual Improvement OGM/P- HSE-9.1
	28. Management of Change OGM/P-HSE-9.2
	29. Incident Investigation OGM/P-HSE-9.3

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual Page 2 of 5





Controlled Copy Do Not Duplicate For Internal Use Only

3. Audit Modalities

Categories of Audit Findings

- Non-conformity (Category 1): As defined in the standardized audit checklist it is either a) a SYSTEMATIC FAILURE, SIGNIFICANT DEFICIENCY in part of the HSE system, or the LACK OF IMPLEMENTATION of such a part, governed by applicable standards or b) an ISOLATED or SPORADIC LAPSE in the content or implementation of procedures or records which could reasonably "lead to" a systematic failure or significant deficiency if not corrected.
- Observation (Category 2): As defined in the standardized audit checklist it is an AREA OF CONCERN, a process, document or activity that is CURRENTLY CONFORMING or a WEAK PRACTICE which, if not improved, RESULTS IN A NONCONFORMING system, product or service.
- Opportunity For Improvement OFI (Category 3): OFI is a RECOMMEND BEST INDUSTRIAL PRACTICE which results in improvement of HSE management system.

Scoring Criterion for Audit Findings

Compliance Level (Against Each Requirement)	Score
Documentation and implementation is totally absent	0
Documentation is partially available but not completely implemented	2.5
Documentation is completely available but partially implemented Or	5.0
Implementation is there but documents partially in place	
Documentation & implementation is in place to a larger extent	7.5
Documentation and implementation is fully in place	10

Audit Grade & Star Rating

	Audit Grade	Star Rating	Percentage Compliance
A	Excellent Compliance Level	0000	More than 75 Percent
В	Good Compliance Level	000	60 - 75 Percent
C	Average Compliance Level	00	45 – 59 Percent
D	Poor Compliance Level	O	Less than 45 Percent

4. Audit Score Sheet

Plan		
	HSE & RM Policy Statements OGM/P-HSE-4.1	
Leadership	Fatality Control Policy Guidelines OGM/P-HSE-4.2	
Leadership	Roles, Responsibilities, Accountabilities, and Authorities OGM/P-HSE-4.3	
	Crisis Management OGM/P-HSE-4.4	
	Risk Management OGM/P-HSE-5.1	
Diamento e	Job Vulnerability /Hazard Analysis OGM/P-HSE-5.2	
Planning	Legal & Other Requirements OGM/P-HSE-5.3	
	Objectives & Management Program OGM/P-HSE-5.4	
	Competence & Awareness OGM/P-HSE-6.1	
	Communication & Consultation OGM/P-HSE-6.2	
Support	Documented Information OGM/P-HSE-6.3	
	Control of Records OGM/P-HSE-6.4	
	Sub Score (A)	
Do		
	Operational Planning and Control OGM/P-HSE-7.1	
	Permit to Work System OGM/P-HSE-7.2	
Operation	Handling, Segregation and Disposal of Waste OGM/P-HSE- 7.3	
	Journey Management OGM/P-HSE-7.4	
	Framework For Hydrogen Sulfide Management OGM/P-HSE-7.5	

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual Page 3 of $5\,$





	Use of Personal Protective Equipment OGM/P-HSE-7.7	
	Framework For Site Restoration OGM/P-HSE-7.8	
	Sub Score (B)	
Check		
	UBUC (Hazards) Identification & Reporting OGM/P-HSE-8.1	
	Monitoring, Measurement & Compliance Evaluation OGM/P-HSE-8.2	
Performance	Analysis of Data OGM/P-HSE-8.3	
Evaluation	Reward, Recognition & Penalties OGM/P-HSE-8.4	
	HSE Audit OGM/P-HSE-8.5	
	Management Reviews OGM/P-HSE-8.6	
	Sub Score (C)	
Act		
	Opportunities For Continual Improvement OGM/P-HSE-9.1	
Improvement	Management of Change OGM/P-HSE-9.2	
	Incident Investigation OGM/P-HSE-9.3	
	Sub Score (D)	

Audit Score (Sub Score A+B+C+D) Percentage Compliance

-	0-1	Maria Para	Observed
~	anna	Practices	CIDSPOJEG

6. Audit Findings

6.1 P	LAN (CONTEXT, LEADERSHIP, PLANN	IING & SUPPORT)		
#	FINDING	REF. CLAUSE/ SEVERITY	RECOMMENDATION	RESPONSIBILITY

6.2 DO (OPE	RATION)			
#	FINDING	REF. CLAUSE/ SEVERITY	RECOMMENDATION	RESPONSIBILITY

#	FINDING	REF. CLAUSE/ SEVERITY	RECOMMENDATION	RESPONSIBILITY
---	---------	--------------------------	----------------	----------------

6.4 ACT (IMI	PROVEMENT)			
#	FINDING	REF. CLAUSE/ SEVERITY	RECOMMENDATION	RESPONSIBILITY

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual Page 4 of 5 $\,$

7. Key Personnel Interviewed

S/No.	Name	Designation	Department/Section
27			
7			

8.	Problems	Faced/Areas	Missed
----	-----------------	-------------	--------

=

9. Instruction For HSE Audit Corrective Action Plan and Follow-p

 $\label{eq:auditee} \textit{Auditee} \ (\textit{Area/Location InCharge}) \ \textit{MUST SUBMIT HSE AUDIT CORRECTIVE ACTION PLAN to HSEQ Department } \underline{\textit{within}} \\ \underline{\textit{a week}} \ (\textit{after receiving of the audit report)} \ \textit{in the following format:} \\$

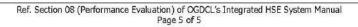
_	

Lead Auditor/ HSE Rep. shall follow-up the audit to determine if corrective actions have been implemented effectively and submit Audit Follow-up Status Report in the following format:

#	Audit Finding (Ref. Audit Report)	Action Recommended (Ref. Audit Report)	Action(s) Actually Taken	Audit Finding's Closure Status	Further Follow- up Required (Yes/ No)
E					

When there is sufficient objective evidence that the corrective action(s) are effective, audit shall be closed out. If more work is needed to fully implement the corrective actions, a new follow-up date shall be agreed upon and audit shall be closed out accordingly.

10. Pictorial/ documented evidence.





8.6 Management Review

OGM/P-HSE-8.6(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 044 Agenda of Management Review Committee (MRC) Meetings	Location HSE Section	Location HSE IC	Location IC
OGF – HSE – 045 Minutes of Management Review Committee (MRC) Meetings	Location HSE Section	Location HSE IC	Location IC



8.6.1 General

- Functional Heads/ Area Managers shall be responsible to establish Location HSE Management Review Committee (HSE MRC) to coordinate and control the activities of the HSE System being carried out by different functions and to periodically review and evaluate the performance of HSE system.
- However MD/ CEO shall be responsible to call an Annual Corporate HSE Management Review (Meeting) during the end of each Year to be attended by all Functional Heads (EDs and HODs) as a minimum; otherwise he may conduct HSE Performance Reviews by any other suitable means.
- In addition, daily HSE meetings shall be conducted at the start / end of each business day in each location. This meeting can either be conducted separately or as part of daily 'operations' meeting however it shall, at the minimum, be attended by Location IC, Location HSE Representative and Section ICs. The minutes of meeting shall be recorded and agenda of meeting shall comprise of the following:
 - Review of outstanding action items from previous meeting
 - Review of hazards/ incidents reported since last meeting
 - Review of HSE issues pertaining to any operational jobs
 - New HSE initiatives
 - HSE incident/ video/ learning of the day

8.6.2 Frequency of HSE MRC Reviews

- The Location HSE MRC Meeting shall be held at on quarterly basis.
 - Q1- Around End March
 - Q2- Around End June
 - Q3- Around End September
 - Q4- Around End December
- However, the meeting may be called at any time, when it is considered necessary, on the discretion Location Management.
- In case where delay is inevitable, the management may delay the Location HSE MRC Meeting for a maximum of 30 days; However in case of emergencies, the Location HSE MRC Meeting may not take place over a period of time and can be part of regularly scheduled management activities such as operational meetings.

8.6.3 Composition of HSE MRC

Location HSE MRC shall review the HSE issues on fields with following constitution:

Location IC	Chairman
Location IC HSE	Secretary
All Sectional ICs	Members
HSE Department H.O. Rep.	Observer(optional)
Area Manager	Observer(optional)

8.6.4 HSE Inputs to HSE MRC Reviews

- The agenda of the Location HSE MRC shall be prepared by the HSE Section a week before the meeting and distributed to all the members mentioned above.
- The inputs to Location HSE MRC Meeting shall include quarterly performance on PDCA cycle of each Section to be presented by relevant Sectional ICs:

Plan

- Communication/understanding level of OGDCL HSE policy (to be presented by HSE IC)
- Status of threats and opportunities identified during risk assessment
- HSE objectives & management program (to be presented by HSE IC)
- Evaluation of compliance with legal requirements and other requirements
- Training need analysis (to be presented by HSE IC)
- Effectiveness of toolbox/ safety talks (to be presented by HSE IC)





Do

- Participation levels in scenario-based mockup emergency drills
- Status of and issues related to permit to work system
- Status of safe disposal of hazardous waste, measures to reduce waste quantum and waste streams

Check

- Analysis of STOP Cards (to be presented by HSE IC)
- Lagging & leading indicators, performance and compliance
- Calibration status of measuring equipment/ gadgets
- Compliance of Safety/ Environment/ OH Monitoring Plan
- Results of internal and external HSE audits (to be presented by HSE IC)
- Follow up of previous MRC MoMs (to be presented by HSE IC)

Act

- Complaints, accidents, incidents, comments and views of interested parties and feed back (to be presented by HSE IC)
- Status of preventive and corrective actions (to be presented by HSE IC)
- Issues related to modification jobs and compliance of MoC
- Any recommendations/ suggestion for improvement in process or system

8.6.5 Outputs to HSE MRC Reviews

- The minutes of Location HSE MRC meeting shall be prepared by the Secretary after the meeting and then distributed to the members.
- The minutes shall include decisions related to:
 - a) Improvement in Pollution Prevention System;
 - b) Improvement in Accident Prevention System;
 - c) Execution of Annual Vulnerabilities Identification and Impact (Risk) Plan
 - d) Execution of Annual Internal HSE Awareness Plan;
 - e) Execution of Annual Emergency Drill Plan;
 - f) Execution of Annual OH Assessment Plan;
 - g) Execution of Annual Toolbox Talk Plan;
 - h) Specific corrective actions for individual/ subcommittees with target dates of completion.
 - i) Revisions to HSE Objectives and Management Programs;
 - j) Resource/training needs.
- The minutes shall include the name of persons who attended the meeting, matters reviewed, decisions taken on required actions, the names of persons responsible for implementing such actions and the dates by which they are to be completed.

8.6.6 Follow up of the HSE MRC Meeting

HSE Department/ Section shall be responsible for the follow up of the decisions taken in the meeting to ensure that the decisions are implemented in the time frame specified.



Controlled Copy Do Not Duplicate For Internal Use Only



OO) (tho energy Oil & Gas Development Corporation Limited

OGF/XXX - HSEQ - 044(00)

AGENDA HSE MANAGEMENT REVIEW COMMITTEE (MRC) MEETING

MEETING TYPE	MEETING DATE	MEETING TIME	MEETING LOCATION
MEETING CALLED BY			

- 1. Previous items (follow-up)
- 2. Improvement
 - a) Summary of incidents and actions taken/ follow-upsb) External complaints received and follow-ups

 - c) No. of CPRs issued, pending, closed & their effectiveness
- 3. Leadership
 - A) Status of objectives/ targets and goals
 - B) Surprise visits/ Walkthroughs by location management
- Planning
 A. Vulnerabilities identification and impact (risk) assessment
 compliance issue
 - B. Any regulatory requirement/ compliance issue
- 5. Support

 - A) Training need analysis, gaps, and effectiveness
 B) Toolbox Talks effectiveness + Analysis of Stop Cards
 - C) Status of labels, signs, etc.
- 6. Operation
 - A) Pollution prevention measures (summary of waste collected from each Section and safe
 - disposal & measures to minimize waste generation at source)
 b) Accidents prevention measures (summary of modification/ maintenance jobs and risk management & permit system)
 - Status of Personal Protective Equipment (PPE)
 - D) Emergency (mock-up) drills and effectiveness
- 7. Performance evaluation
 - a) Status of Occupational Health Monitoring (planned vs actual)
 B) Status of Environment Monitoring (planned vs actual)
 C) Status of Safety Monitoring (planned vs actual)
 d) Outcome of internal HSE audits & follow-up
- 8. Other

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

DISTRIBUTION					
NAME	DESIGNATION	NAME	DESIGNATION		

PREPARED BY	
REVIEWED BY	
APPROVED BY	

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

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



Oil & Gas Development Company Limited OGF/XXX - HSE - 045(00)

Location:			

MI	NUTES OF	HSE MRC ME	ETING	
QUARTER	DATE	TIME	LOCA	ATION
1 ST /2 ND /3 RD /4 TH				400-10-10-00-10-0
MEETING CALLED BY				
DEPARTMENT / SECTION				
CHAIRMAN				
SECRETARY HSE MRC				
COORDINATOR				
ATTENDEES				
AGENDA TOPICS				
AGENDA TOPIC	TIME	ALLOCATED	PRESEN	ITER
DISCUSSION				
CONCLUSIONS				
ACTION ITEMS		PERSON RESPON	ISIBLE DEADL	INE

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

AGENDA TOPIC	TIME ALLO	CATED	PRESENTER
ISCUSSION			
ONCLUSIONS			
CTION ITEMS		PERSON RESPONSIBLE	DEADLINE
OBSERVERS			
SPECIAL NOTES			
PREPARED BY			
REVIEWED BY			
APPROVED BY			
	DIS	TRIBUTION	
NAME	DESIGNATION	NAME	DESIGNATION

Ref. Section 08 (Performance Evaluation) of OGDCL's Integrated HSE System Manual

• • •

Reference Standards

ISO14001:2015 & ISO45001:2016

Clause 10.1: Opportunities For Continual Improvement; Nonconformity and Corrective Action.

Clause 10.2: Continual Improvement.

Clause 8.2: Management of Change.

PSM (22 Elements) Model

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.

This Section's Objectives

- Take action to improve HSE System and achieve intended outcomes.
- Investigate an incident for its root cause determination to avoid recurrence.
- Control nonconformities and take appropriate corrective & preventive actions.
- Enhance the suitability, adequacy, and effectiveness of HSE System.

Associated Documents

- CPR Form
- CPR Log / Register
- Register of Occupational Illnesses and Injuries
- Employee's Workplace Exposure & Health (WEH)

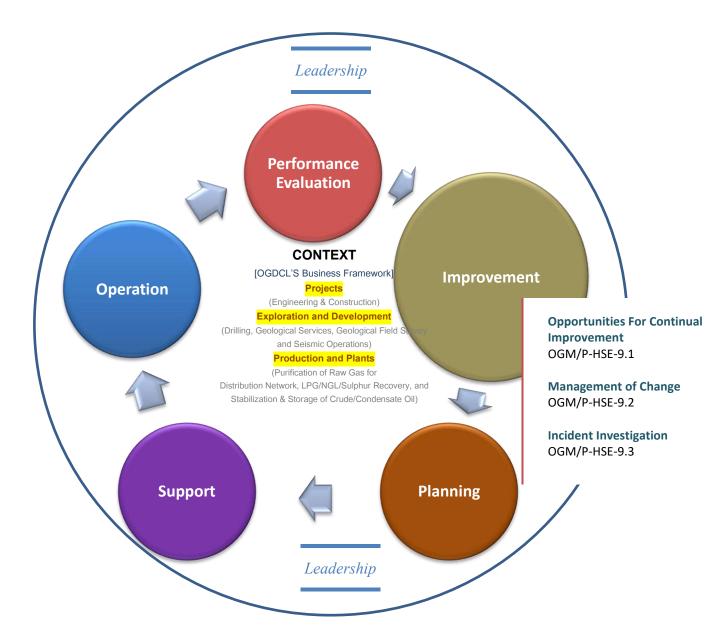
 Record
- Engineering Change Request (ECR)

Applicable Documents

Specimen Pre-Startup Safety Review (PSSR) Checklist



Improvement



9.1 Opportunities For Continual Improvement

OGM/P-HSE-9.1(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:

Babar Iftikhar

General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change	
1	Modified: New Logo & Tag Line	

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 047 CPR	Any Employee	Location HSE Rep.	Location IC
OGF – HSE – 048 CPR Log	Location HSE Rep.	Location HSE IC	Location IC/ Location HSE IC

9.1.1 Mechanism for Identifying Opportunities For Continual Improvement

- Workforce members at all levels shall be encouraged to identify opportunities for continual improvements to improve the reliability of operations, processes, services with respect to HSE management system.
- Following activities shall provide mechanism for identifying opportunities for continual improvement, but not limited to:
 - a) Observation visits / walkthroughs / STOP Card Logs (unsafe conditions and unsafe behaviors)
 - b) Performance trends against the objectives and targets
 - c) Identification of a system deviation or failure that may result in non-fulfillment of HSE related contractual, legal or regulatory requirement
 - d) HSE audit findings
 - e) HSE performance reports (KPIs analysis)
 - f) Inspection and test records
 (esp. when performance of personal protective, safety critical and emergency
 equipment falls below desirable level)
 - g) Repetitive operational failures or near hits of similar nature that have tendency to cause incident
 - h) HSE related complaints / feedback from customers
 - i) HSE MRC meetings

9.1.2 Corrective and Preventive Actions

- Corrective and preventive actions shall be taken to eliminate the causes of non-conformities to prevent their recurrence and to eliminate any potential causes of non-conformity using CPR template as follows:
 - Location HSE IC shall review and classify the reported-issue, sort out Primary Surface Cause and discusses the nature of problem and corrective & preventive action with the concerned Sectional IC
 - HSE Section shall enter CPR description into CPR Log
 - Concerned Sectional IC shall determine the Contributing Surface Cause(s) and Design Root Cause after thorough investigation in consultation with all the stakeholders
 - HSEQ Section in consultation with the relevant ICs shall formulate the Problem Solving Team and get endorsement by Location IC
 - HSEQ Section shall forward copies of CPR to Problem Solving Team due to whom the issue has fundamentally arisen or who are responsible to rectify
 - Problem Solving Team shall:
 - + Propose actions in the presence of HSEQ Rep.
 - Agree on the decision regarding the final action(s) to be taken, fully endorsed by Location IC
 - Allocate Completion-Time to correct / prevent the issue (to be concurred in the presence of Location IC),
 - * Take appropriate action(s), and
 - Timely intimate HSE Section of the actions taken.
 Note: Concerned IC could also be the part of Problem Solving Team.
 - When a corrective and preventive action is decided upon, it may be implemented on trial basis and the results shall be closely monitored. Further measures or changes shall be made where required during the
 - trial period until satisfactory results are attained.

 The corrective and preventive measures where deem fit shall be made by incorporating changes in the HSE system in the relevant documents such as drawings, specifications, operating procedures, work instructions and / or templates.
 - Where the corrective and preventive action identifies new or changed hazards or need for new or changed controls, the proposed actions shall be implemented ensuring that the risk(s) reassessed accordingly.
 - On, or immediately after, the due date of implementation of a corrective and preventive action, HSE Rep. shall follow up to determine if the corrective and preventive action has been implemented and whether it is

effective.

- When there is objective evidence that the corrective and preventive action is effective, CPR shall be closed out. If more work is needed to fully implement the action, a new follow up date shall be agreed upon.
- HSE Section shall enter the final status of the CPR into the CPR Log and maintain the original CPR form as record.





Oil & Gas Development Company Limited

OGF - HSE - 047(3)

Corrective and Preventive Action Request (CPR)

CPR Number:

ART I: General						Team L	eader	
Deter					Issue		Reference	
Date: Time:	-				☐ Proced	dura		
Activity:					☐ Proces			
Area:						2004		
Auditee / Concern					Produ			
Reported / Reques	ted By: _		-					
ART II: Nonconfo	rmance /	Deviation / C	pportuni	ty For Improv	ement:		RECEIPT Auditor/ MR / I/O	C HSEQ
	17.	7	3	7 7			Classificati Major Minor	Obsr.
							Incident Hazard	Near
							Ilicident nazard	Hit
	- W	-3-	H		4		ļ. 	
				Signature		Requested By	Unsafe Unsafe Condition Behavio	Rot
(Impact-Value in	Asset	Environment	Hun	nan Damage	Production	Reputation		
relevant Units)	Damage	Damage	Injury(ies		Loss	Damage		
☐ Actual/Incurring:								
20142 A March 1977				_		-	Signature	
□ Could have resulted in:								
Toolsea III				To be see	cified/verifier	d by I/C HSEQ.	Date:	
				no se spe	cirred, verime	a by the model.	Time:	
						/H-11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-		
ART III: *Root Contributing Surface		ach Analysis / 1	nvestigati	on Report, if ne	essary)		RECEIPT Auditee/ Concert	
	afe Conditi	ion		Unsafe A	ct/Behavio	r	Additee/ Concert	ned I/C
☐ Improper HSE				Operating withou	it Authority			
☐ Improper HSE ☐ Improper / In				Horseplay Overriding Safet	, Dovisos		Signature	· ·
☐ Unsafe Design				Disobeying Instr		Following	Signature	50
		ting Conditions		SOP	University of the second	- nowe and and a nd	Date:	
☐ Inadequate W ☐ Too Much Occ		tem -worked/Fatigu		Wrong Orders of ack of Skill / Kn		Vorker(s)	Time:	
☐ Poor Houseke		-Workedyr adge		Jnsafe Act of Ou		401 Kei (3)	THITCE	
□ Bad Environm				Jnsafe Act of Fe	low-Worker(200
☐ Any Other(s)				Working in Bad E Any Other(s)	nvironmenta	I Conditions	RECEIPT Auditor/ MR / I/O	
esign Root Cause(s	1:		10 /	any Odler(s)			Productify Princy 2/1	o norq
Unsafe Cor		erations]	U	nsafe Act/Beh	avior [Mana	gement]	†Problem Solvin	g Team
□ NO Hazards I		n & Risk		Hazards NOT Co	nmunicated ,	/ NO	1.	
Assessment [INADEQUATE		entification &		HazCom System Provided INAPPR	OPPIATE		1.	
Risk Assessm		enemeacion &		Fool(s)/Equipme			2	
□ NO SOP/Work	Instruction			rovided INAPPR	OPRIATE		3.	
☐ FLAWED SOP, ☐ INADEQUATE		uction(s) Instruction(s)		Chemical(s)/Mat Provided INAPPR			2	
☐ INCONSISTEN				Control(s)/Warni				
Operational C	ontrols			Provided INADEC	UATÉ Job			
	/ Maintena	nce/Calibration		Description(s)/JA NADEQUATE Su		Manitorina	Signature	4
Plan(s) ☐ FLAWED Inspe	ection/			NADEQUATE Su			Signature	
Maintenance/	Calibration		1	ıps		-25.766690000	Date:	
□ INADEQUATE				NADEQUATE Ma	nagement Re	eview	Time:	
				Meetings SOP/Work Instru	ction(s) NOT	Enforced	THUS.	
Maintenance/		Territoria de la compania del compania del compania de la compania del compania del compania de la compania del compania d		nspection/ Main				and the
Maintenance/ □ UNTRAINED of Worker/Opera	and Manag	ement Program	F	Plan(s) NOT Enfo	rced		† ENDORSEM	
☐ UNTRAINED of Worker/Opera ☐ NO Objective		ind Managemei		NADEQUATE Tra			Location In-Ch	idi ye
□ UNTRAINED of Worker/Opera □ NO Objective □ INADEQUATE		15		LIGHTING CITECTIVE	THESE INCLUDES	easurea	1	
☐ UNTRAINED of Worker/Opera ☐ NO Objective		35				efresher		
□ UNTRAINED of Worker/Opera □ NO Objective □ INADEQUATE Program				NCONSISTENT Courses	Frainings / Re	ACONTO LA CONTRACTO DE ACURACIONA CO		20 //
□ UNTRAINED of Worker/Opera □ NO Objective □ INADEQUATE Program				NCONSISTENT Courses Objective and Ma	Frainings / Re	ACONTO LA CONTRACTO DE ACURACIONA CO	Signature	a
□ UNTRAINED of Worker/Opera □ NO Objective □ INADEQUATE Program				NCONSISTENT Courses	Frainings / Re	ACONTO LA CONTRACTO DE ACURACIONA CO	Signature	

Ref. Section 09 (Improvement) of OGDCL's Integrated HSE System Manual









Oil & Gas Development Company Limited

OGF - HSE - 047(3)

Corrective and Preventive Action Request (CPR)

CPR Number:

	RECEIPT Problem Solving Team Leader
	Signature Date: Time:
Agreement Decision on the Solution:	
entative Completion Date / Time for taking corrective/preventive action(s): o be concurred in the presence of Location In-Charge.	†† ENDORSEMENT Location In-Charge
Precetive / Preventive Action(s) Taken: Focused Area(s) Hazards Identification & Risk Assessment [HIRA]; Objective and Management Programs Engineering Controls [Design of a workplace, Automation, Material handling devices, Use of technology for reducing	Signature Date: Time:
emergency situations/ waste/adverse health, etc.] Administrative Controls [SOP,	
Purchasing Criterion, Frainings, etc.] Inspection/ Maintenance/Calibration	COMPLETION Problem Solving Team Leader
Work Instruction(s), HazCom, Purchasing Criterion, Trainings, etc.] Inspection/ Maintenance/Calibration Plan(s) Supervision / Surveillance Audits / Management Review Meetings	Problem Solving
Purchasing Criterion, Frainings, etc.] Inspection/ Maintenance/Calibration Plan(s) Supervision / Surveillance Audits / Management Review	Problem Solving
Purchasing Criterion, Frainings, etc.] Inspection/ Maintenance/Calibration Plan(s) Supervision / Surveillance Audits / Management Review Meetings	Problem Solving Team Leader Signature Date:

Ref. Section 09 (Improvement) of OGDCL's Integrated HSE System Manual

Page 2 of 3





Oil & Cas Development Company Limited

OGF - HSE - 047(3)

Corrective and Preventive Action Request (CPR)

CPR Numb	ver:
w up Audit / Close Out details:	(Implementation and effectiveness of action

- 1		and the second of the second o	Signature
+			
1			

Instructions

- 1. Requesting / reporting person shall report the issue through CPR to HSEQ.
 2. HSEQ shall classify the issue, assign primary surface cause, determine the impact-value in relevant units and forward the reported issue to the Concerned I/C (in whose area issue apparently took place).
 3. Concerned I/C shall:

 Find the Contributing Surface Cause(s) and Design Root Cause after doing thorough investigation in consultation with all the stakeholders, and

 Inform HSEO.
- Inform HSEQ.

 4. HSEQ shall formulate the Problem Solving Team in consultation with the relevant In-Charges and get endorsement by Location
- management.

 5. HSEQ shall forward copies of CPR to **Problem Solving Team** due to whom the issue has fundamentally arisen or who are 5. HSEQ shall forward copies of CPR to **Problem Solving Team** due to whom the issue has fundamentally arisen or who a responsible to rectify.

 6. **Problem Solving Team** shall:

 - Propose actions in the presence of HSEQ

 - Agree on the decision regarding the final action(s) to be taken (endorsed by Location management)

 - Allot Completion-Time to correct / prevent the issue (to be concurred in the presence of Location In-Charge),

 - Take appropriate action(s), and

 - Timely intimate HSEQ of the actions taken.

 6. HSEQ on the promised date shall verify the corrective / preventive action and set follow-up date and time.

 7. HSEQ shall follow-up, close CPR and note down actual / total time taken on rectification.

Note: Concerned I/C could also be the part of Problem Solving Team.



Root-cause describing 'why not-agree' with the reported issue is also required to be mentioned.



000

Oil & Gas Development Company Limited Corrective & Preventive Action [CPR] Log

OGF - HSE - 048(01)

Location: _ Month __ ___ Year __

	Init	iation		1 1	Root	Cause	Correct	tive / Preventiv	e Action	Clos	e Out
CPR #	Ву	Date/ Time	Description	Classific- ation	Ву	Date / Time	Ву	Tentative Date / Time	Actual Completion Date & Time	Number of Follow-ups	Total Time Taken on Rectification

Ref. Section 09 (Improvement) of OGDCL's Integrated HSE System Manual

Page 1 of 1



9.2 Management of Change (MoC)

OGM/P-HSE-9.2(9) Revision Number 9

Original Issue: June 25, 2007 This Issue: November 21, 2025

Updated By:
Muhammad Mubashir Abbas
Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iffikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 051 Engineering Control Request	Any Employee	Location IC, Sectional IC, Location HSE Rep.	Respective HOD, Area Manager, Location IC



9.2.1 General

- Management of Change, or MoC, is a practice used to ensure that safety, health and environmental risks are controlled when a company makes changes in their facilities and operations; When decisions and changes are made rapidly, safety and health risks can increase resulting in disasters such as deflagrations and/or explosions.
- There are mainly two types of MoCs at OGDCL:
 - Management of Change (MoC) Facility and Technology
 - Management of Change (MoC) Personnel

9.2.1.1 Management of Change (MoC) – Facility and Technology

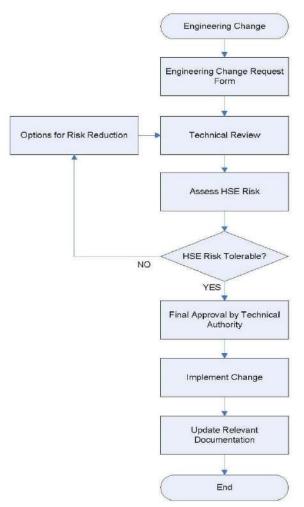
- A MoC shall be used to ensure that all changes to operating processes are properly reviewed and any hazards introduced by the change are identified, analyzed, and controlled before start-up and/or before resuming the production process.
- Engineering Change are any modifications that differ from the current facilities design basis.
- It applies to facilities in operation and in the development phase. This procedure mandates that OGDCL management shall control the change regarding any modification whether temporary or permanent, to plant and equipment, process materials, operating procedure, operating conditions which is outside the normal methods of operation and maintenance.
- Few examples of modifications are as follows:
 - Any change in the approved method of operation (as defined in the SOP).
 - A repair to or replacement of an existing item of equipment or component which represents a departure from the existing engineering specification.
 - A change in the means of support of plant items, pipe-work or fittings or a change to a structure, which could affect its load bearing capabilities.
 - A change, irrespective of its magnitude, that affects the engineering line diagram.
 - A change in the material of construction, size or shape of any component which is in contact with process fluid or utility stream or which could affect the flow rate, temperature, pressure or composition of a process fluid or utility stream.
 - A change to the setting of an alarm or trip irrespective of any maintenance job requirement.
 - A change to the setting or capacity of a relief stream or device.
 - A change to a control system including the overriding of control action in the field by forcing actuated valves to a particular position.
 - A change to any hardware or software trip or interlock system, including controllers/ indicators, etc. This includes any override or defeat of a trip or interlock system unless the override/defeat is an integral part of the system design e.g. a key override or purpose-designed faceplate for software overrides/defeats.
 - Introduction of any new substance into any part of the process or plant equipment including any change in formulation, change in ratio of ingredients or change in source of supply.
 - An alteration to the flow-rate, temperature, pressure or composition of a process fluid or utility stream outside the defined operating parameters.
 - Any change or alteration in layout of an operating field building or building services.
 - Any change in the approved project/ design specification during field implementation
 - Any change in Operating, maintenance, inspection and testing procedures
 - Change in duty or operation from original design intent even though physical changes are not required, e.g. load increase
 - Introduction of new methods, materials and/ or chemicals



Controlled Copy Do Not Duplicate For Internal Use Only

Whereas the following type of activities shall "not" constitute modification:

- Replacement of similar kind of piping, mechanical parts, instruments or electrical components that are identical to the existing ones.
- Change in operating parameters within safe operating limits as specified in the design conditions or the operating manuals.
- Routine repairs and services carried out by maintenance or other groups.
- Modifications that are adequately covered by existing control procedures or do not affect the integrity of the facilities are EXCLUDED from the scope of this standard. Typically, these would be as follows: -
 - Changes to domestic and office equipment, and consumables
 - Temporary isolations for servicing, examination and testing of equipment within the planned maintenance program
 - o Routine servicing for lube oil, filters, etc.
 - o <u>Like-for-like replacements</u>, <u>e.g.</u> <u>gas</u> <u>detector</u>, <u>floor grating</u>, <u>loose lifting gear</u>
 - Temporary changes covered by permit to work or standing order procedures.



9.2.1.1.1 Engineering Change Request Lifecycle

All Engineering Change Request shall be raised via Engineering Change Request

Form. Engineering Change Request can be raised by any OGDCL employee when any change as per above section is required.

- An ECR Committee shall be formulated at each location comprising minimum of Location IC, Sectional ICs and Location HSE Representative. The committee shall conduct **Monthly ECR Review** to review change proposals and minutes of meetings shall be documented. The meeting shall:
 - Review all Engineering Change Requests (ECR) and give a priority status.
 - Assign technical authority (role) for each ECR for further assessment. Technical authority (role) shall be an employee (Location or Head office) who is deemed competent to analyze and conduct Hazard / Risk Analysis of Engineering Change Request.
 - Review ECR priorities where questions exist.
 - Review all other ECR priorities in view of the current status and backlog.
 - Review overall ECR progress and agree measures to address any resultant issues.
 - Recommend ECR's for cancellation shall be identified in the meeting minutes and the originator shall be advised. The reason for cancellation will be documented.

Note:- In special circumstances, an ECR may need to be progressed very rapidly. In this instance, Location IC shall convene **Emergency ECR meeting**.

- The assigned person(s) shall technically review the ECR and shall:
 - Comment upon the requirement for the change
 - Evaluate hazards associated with the change (e.g. increased noise levels)
 - Assess risks (safety, environmental, business)
 - Assess maintenance and operational requirements
 - Consider whether a better solution should be implemented
 - Estimate the pre-implementation costs i.e. design costs
 - Estimate the total ECR costs i.e. Design, Materials, Installation (±25%)
 - Conduct and document Risk Assessment for the planned change and provide any steps /action necessary before proceeding with the Job.
- Approval of Modification Job (change) shall be taken from the concerned competent authority(ies) based on various scenarios as given below:





Controlled Copy Do Not Duplicate For Internal Use Only

MoC Scenarios	Executive Director	Gene Mana		Area Manager	Lc	ocation IC	Sectional IC
Change to be affecting operations	Complete shutdown of operations, affecting production	Partial shutdov operati affectir produc	ons, ng	Complete shutdown of sub-unit, not affecting production	sh sul af	urtial utdown of b-unit, not fecting oduction	No shutdown
Change which would require regulatory/ 3 rd party approvals or intimation	approved project/ design is affected	new sub- unit is required		safety critical equipment		ermissible / owance perating nits are plated	N/A
Costing	As per delegat	ion of fin	ancial	powers			
Change to be made after an emergency	Catastrophic (5)	Critic (4)		Major (3)	Marginal (2)		Negligible (1)
Change to be affecting risk rating (afterwards)	Low/ Mediu High/ Intoler		Lo	ow to Medium		No e	effect

- The ECR shall be considered as complete/ closed based on following:
 - All work detailed in ECR is completed
 - Pre-Startup Safety Review (PSSR) to protect personnel and processes by conducting a thorough review before operating the new, repaired or updated/modified units. The pre-startup safety review shall confirm that prior to the introduction of hazards to a process, construction and equipment is in accordance with design specifications and safety, operating, maintenance, and emergency procedures are in place and are adequate. (Specimen PSSR Checklist is attached at Appendix A)
 - Satisfactory commissioning and testing has been conducted
 - Process safety information has been updated and personnel have been trained
 - Completion of all as-built, revision and updating of all affected drawings, manuals and procedures
 - Issue to field of all affected drawings, manuals and procedures
 - Development and approval of any new procedures required as a consequence of the engineering change
 - Confirmation of receipt from site that all affected drawings, manuals and procedures have been received and filed (copies of transmittals showing field acknowledgement to be placed in ECR file); Filing into ECR file copies of all affected drawings, manuals and procedures
 - Purchase of spare parts
 - Close out of all statutory requirements
 - ECR form is completed and signed off.
- Engineering changes may lead to revision and formal approval of few other documents. These include but are not limited to:
 - Risk register
 - Operating, maintenance, inspection, test procedures and work instructions
 - Emergency response procedures/notices
 - Layouts, process flow diagrams, P&IDs, isometrics and utility line diagrams
 - Instrument loop diagrams, cause and effect diagrams, piping isometrics
 - Safety and lifesaving appliance location diagrams
 - QA / QC plans

9.2.1.2 Management of Change (MoC) – Personnel

- There may be other organizational changes, such as changes resulting from mergers, acquisitions, reorganizations, personnel changes (including changes in staffing levels, workforce experience, contracting out), and / or policy changes such as budget cutting.
- Due to these contemplated changes which may have impacts on the safety & health of workforce members & assets as existing operating procedures/ protocols may not be complied upon in toto and the timeliness or frequency of budgetary approvals, trainings, tests, inspections, repairs, or replacements of equipment could not be properly followed.
- In such scenario, a special MOC/ risk assessment shall be carried out by concerned Department to ensure that anticipated changes are managed

and implemented in a manner that assures the safety & health of workforce members, continued safe operations and integrity of the processes under normal production & emergency upset conditions by modifying the existing operating procedures/ protocols and controls.

Record of such these special MOC/ risk assessment shall be maintained by concerned Department with a copy to HSEQ Department.

9.2.1.3 Mandatory Requirement For MoC

- Persons involved in Technical review should be experienced in the area that is being assessed.
- The cost of change will not necessarily be proportional to the risk impact. In all cases an HSE risk screen shall be used to determine the resources required to fully evaluate the impact of the change. Ranking of changes using financial criteria shall not be done.
- The cumulative effects of change shall be considered. For example a small change, when looked at in isolation, may be rated a relatively low and insignificant risk. However, when combined with other changes the overall risk profile may be intolerable.
- HSE Department/ Section shall be consulted to ensure adequate assessment of the HSE risks.
- Resources shall be made available to ensure the change is implemented as planned.
- Where new skills, technology or greater responsibilities are required, then training and development programs shall be included for persons who may be impacted by the change.
- © Communication of change during all phases of the change from inception through to completion is obligatory. Special emphasis shall be placed on using feedback during the communication process in order that the persons impacted by the change have the opportunity to suggest improved methods of implementing the change. This will have the benefit of encouraging ownership of the change, overcome inherent resistance to change, and increasing the probability that the change will be successfully implemented.
- © Close out of completed changes shall always include a full update of the relevant documentation in hard copy and electronic format, as appropriate.



Oil & Gas Development Company Limited Location/ Site:

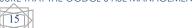
OGF -HSE - 051(02)

ENGINEERING CHANGE REQUEST

Serial Number/ Revision Title	
MoC initiated by: Name/ Department Date	
1.1 Description of the Change	
Current situation/ condition:	
Target change (situation/ condition, motivation):	
Reasons for change:	
Expected savings:	
Expected savings.	
System/ location/ organization which is affected (benefitted) by the change:	
1.2 Is it a temporary change change? One of the property change change change valid until:	
1.3 Impact of the Change	
Would the change process equipment? ☐ Yes ♠ No organization? ☐ Yes ♠ No	
process systems? C Yes • No operability? C Yes • No	
systems interfaces? C Yes • No operations environment? C Yes • No other?	
Description of the Impact of the Change:	
bestription of the impact of the change.	
1.4 Will the change Human ☐ û ⑥ ⇔ ☐ ⇩ Environment ☐ û ⑥ ⇔ ☐ ⇩	j.
modify the risks with respect to: Reputation ○☆ ● ⇔ ○ ⇩ Finance ○☆ ● ⇔ ○ ⇩)
1: increase, 0: decrease (asset & production)	

Ref. Section 09 (Improvement) of OGDCL's Integrated HSE System Manual

Page 1 of 3



2.	Change Review (To	o be Fil	led by (hange	Review	Comm	ittee)						
2.1	Assign Technical Auth	ority											
	Role		Function	a .	1	Name/ D	epartme	nt	Sig	gnature		Date	
	Team Lead												
Team Members													
1	QC Team:												
	Other Consulted:												
3.	HSE Hazard / Risk	Analys	is (To h	e Filled	hy Tec	hnical A	uthorit	v)					
3.1	Mark In the Control of the Control o	AVABLE AVAILABLE		ves minuses and	<i>Dy</i> 100	Timedi 7	dellolle	7.1					
5.1	KISK ASSESSINENC PHOTO		ge of Vu		ties	Ris	sk (Dama	ge		- 1 1		ľ	
			Hazards/				xpected	Conference of the Conference o	Risk	Calcula	tion		
De	escription of Jobs and						nt		24	8	_	Controls	
	Activities	al	cal	ical		2	Environment		billity	Consequence	Risk Rating	Solicited	
		Physical	Chemical	Biological	Social	Нитап	viro	Assets	Probability	asuc	sk R		
-		ld	O	18	S	I	Ē	¥	P	3	Q.		
3.2	Costing prior to start-	un/go-li	VO						1			Į.	
5.2	Estimated Cost	ap/ go ii		aterial Re	quireme	ent	Lak	or Strer	ngth	T	Othe	er Resources	
													_
Esti	mated Time For Execution	n:				-							_
3.3	Actions to be impleme		ior to sta	rt-up/ g	o-live								
No.	Desc	ription			Responsible(s)				Date		1	Results	
1.													
2.	-												_
3.													
4.								_					_
5.													_
6.	· F												_
7.	1												_

Ref. Section 09 (Improvement) of OGDCL's Integrated HSE System Manual

oncerned Competent Authority	Approval		Domain/Department/Section	Signature	Date
	Job	Fund	Domainy Departmenty Section	Signature	Date
Executive Director					
General Manager					
Area Manager					
Location IC					
Sectional IC					
5. Data Entry					
Approval Entered in Record					
Drawings Marked As Approved	For Consti	uction		10	
Document Controller			Signature (Name/ Department)	Da	te
		Ĭ			
		-10)	
6. Quality Checks		1/4			
Pre-Commissioning Checks Con					
Commissioning Checks Comple	te	- U		*****	40.17
Team Leader			Signature (Name/ Department)	Da	te
7. Close & Archive MoC					
MoC Initiator			Signature (Name/ Department)	Da	te
QC			Signature (Name/ Department)	Da	to
		-	Digitature (Marrie) Department,		ic.
X.77.0.			2 2 15		ASS.
				Da	te
Location IC			Signature (Name/ Department)	7	
			Signature (Name/ Department)		
			Signature (Name/ Department)		
Location IC			Signature (Name/ Department)		

Appendix A

Specimen Pre-Startup Safety Review (PSSR) Checklist

Following checks are to be ensured:

		EACTION CONSIDERATIONS
		Have personnel been adequately protected from contact with hot surfaces?
		Has potential for instrument failure (including computer shutdown) been adequately addressed?
	(TO3)	Has potential for leaks into or out of the process been adequately addressed?
	(TO4)	Has potential for improper valve setup or operating error been adequately addressed?
	(TO5)	Has potential for loss of utilities been adequately addressed?
VALVE	, PIPING,	AND VESSEL CONSIDERATIONS
-		Have cross-tied lines (pump headers, utility lines, etc.) been avoided where contamination, pressure, or
tempe		roblems are likely?
		Has a line-by-line review been conducted to ensure that the piping is installed as specified?
		Is piping laid out such that it is self-draining for cleanup and maintenance?
		Have unused piping branches been eliminated?
		Has piping been laid out in a straightforward manner such that potential for confusion is minimized?
		Are vents and drains located such that they do not create personnel hazards?
		Are sample points properly configured for safe sampling?
		Has safe access to valve operation been provided?
		Has pipe been located such that it cannot slip or fall due to line expansion during cleanup, startup, or
shutdo		
		Are hoses and fittings of the approved type according to the plant hose policy?
	٠,	Have the hoses been fitted with current inspection tags?
	(V12)	Have bleedoffs been provided at hose connection points?
	(V13)	Are open-ended valves of the approved type (i.e., locking handle, gate valve)?
	(V14)	Has a means been provided such that all valves can be locked?
		Has adequate backflow prevention been provided?
		Have nipple lengths been minimized and cantilevered branch connections avoided?
		Have electrical continuity and grounding been provided and checked?
		Has appropriate color-coding been provided where needed?
		Have lines been clearly labeled, including flow arrows?
	, ,	, ,
		Has appropriate testing been completed and documented to ensure the integrity of new or revised
bibing	systems	
		Have drawings been revised to show "as installed" condition?
	٠,	Has material of construction been verified to ensure that the correct material was received and installed
accor		ne valve and piping specifications?
		Have the correct gaskets been installed according to the valve and piping specifications?
		Have all test blanks and blinds been removed?
	٠,	Has the testing fluid been properly flushed from the piping or vessel?
		ls the piping system adequately supported or braced?
	(V27)	Have check valves been reviewed to ensure that they are installed in the proper direction?
	(V28)	Is piping sloped where necessary?
	(\/29)	Are bolts properly torqued?
	(+ 2 /)	
ROTAI	ING AND	MECHANICAL EQUIPMENT CONSIDERATIONS
ROTAT	ING AND	
ROTAI	ING AND	MECHANICAL EQUIPMENT CONSIDERATIONS
ROTAI	(R01)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided?
	(R01) (R02) (R03)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified?
	(R01) (R02) (R03) (R03)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure a after maintenance?
	(R01) (R02) (R03) (R03) of hookup (R04)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed?
	(R01) (R02) (R03) et hookup (R04) (R05)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance?
	(R01) (R02) (R03) ot hookup (R04) (R05) (R06)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made?
	(R01) (R02) (R03) of hookup (R04) (R05) (R06) (R07)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator?
	(R01) (R02) (R03) of hookup (R04) (R05) (R06) (R07) (R08)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured?
	(R01) (R02) (R03) of hookup (R04) (R05) (R06) (R07) (R08) (R09)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded?
	(R01) (R02) (R03) of hookup (R04) (R05) (R06) (R07) (R08) (R09)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured?
correc	(R01) (R02) (R03) of hookup (R04) (R05) (R06) (R07) (R08) (R09) (R10)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged?
correc	(R01) (R02) (R03) of hookup (R04) (R05) (R06) (R07) (R08) (R09) (R10)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged?
correc	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) (R01)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? Has the fail-safe function of valves been properly installed?
correc	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) (R01) (R01) (R01)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed?
correc	(R01) (R02) (R03) ort hookup (R04) (R05) (R06) (R07) (R08) (R09) (R10) (R01) (C01) (C02) (C03)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary?
correc	(R01) (R02) (R03) ort hookup (R04) (R05) (R06) (R07) (R08) (R09) (R10) (R01) (C01) (C02) (C03) (C04)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided?
correc	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? MCONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches?
correc	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) (R01) (C01) (C02) (C03) (C04) (C05) (C06)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? M CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal?
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure of after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) ntive mai	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? MCONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program?
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? M CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified?
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in?
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? M CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified?
CONT	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mail (C08) (C09) (C10)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Has the operation of all control loops been verified?
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Has the operation of all control loops been verified?
CONT	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure of the maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Has the operation of all control loops been verified? IECH CONSIDERATIONS Have start/stop switches and electrical switchgear been properly labeled?
CONT	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? MCONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work?
correct	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10) RICAL SYSTE (E01) (E02) (E03)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Has the operation of interlocks and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch?
CONT CONT preve ELECTI	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10) RICAL SYSTE (E01) (E02) (E03)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? MCONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work?
CONT CONT preve ELECTI	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10) RICAL SYS (E01) (E02) (E03) (E04)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Has the operation of interlocks and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch?
CONT CONT preve	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10) RICAL SYS (E01) (E02) (E03) (E04) (E05)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure of after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Has the operation of interlocks and clarms been verified? Has the operation of all control loops been verified? Itake CONSIDERATIONS Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch? Have conduit fittings been properly sealed?
CONT CONT preve	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive mai (C08) (C09) (C10) RICAL SYS (E01) (E02) (E03) (E04) (E05) (E06)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure of the maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? MCONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Have the actuator air supplies been valved in? Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch? Have electrical properly sealed? Have electrical protective relays and safety devices been calibrated?
CONT CONT preve	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (C10) RICAL SYS (E01) (E02) (E03) (E04) (E05) (E06) (E07)	MECHANICAL EQUIPMENT CONSIDERATIONS Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure of after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Has the operation of interlocks and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of all control loops been verified? Have the actuator air supplies been valved in? Have the actuator air supplies been valved in? Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch? Have econduit fittings been properly sealed? Have electrical protective relays and safety devices been calibrated? Is electrical equipment properly grounded?
CONT CONT preve	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) ROL SYSTE (C01) (C02) (C03) (C04) (C05) (C06) (C07) (ntive main (C08) (C09) (C10) RICAL SYS (E01) (E02) (E03) (E04) (E05) (E06) (E07) (E08)	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure offer maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Have the lubricants and seal fluids been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are guards provided to prevent accidental tripping of switches? Can automatic valves be properly isolated and cleaned for servicing or removal? Have new instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Have the actuator air supplies been valved in? Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch? Have electrical equipment properly sealed? Have electrical equipment properly sealed? Have electrical equipment properly sealed? Have electrical equipment be properly protected from corrosion?
correct CONT CONT CONT CONT CONT CONT CONT CONT	(R01) (R02) (R03) (R04) (R05) (R06) (R07) (R08) (R09) (R10) (R01) (R02) (C03) (C04) (C05) (C06) (C07) (R10) (C10) (R10) (R10	Have special precautions for safe operation been adequately specified? If new lubricants or buffer fluids have been introduced, have MSDSs been provided? Has tubing on complex seal flush arrangements been color-coded or otherwise marked to ensure of after maintenance? Have adequate equipment guards been installed? Do adequate provisions exist for cleanup, isolation, and lockout of equipment to perform maintenance? Have inspection, test, and preventive maintenance provisions been made? Are capacities of lifting equipment, floors, and hoists clearly displayed and visible to the operator? Has the proper rotation of equipment been assured? Is the drive unit grounded? Has the proper rotation of valves been properly charged? EM CONSIDERATIONS Has the fail-safe function of valves been properly installed? Has potential for interaction with existing controls been reviewed and addressed? Are alarms provided where necessary? Are unnecessary alarms avoided? Are unnecessary alarms avoided? Are unever instruments and alarms been identified and designated as such in the inspection, test, and intenance program? Has the operation of interlocks and alarms been verified? Have the actuator air supplies been valved in? Have the actuator air supplies been valved in? Have start/stop switches and electrical switchgear been properly labeled? Can electrical equipment be isolated safely for repair work? Do lockout provisions exist both at the switchgear and at the start/stop switch? Have electrical equipment properly sealed? Have electrical equipment properly grounded? Have electrical equipment properly protected from corrosion? Have electrical equipment been properly protected from corrosion?





Option of the energy Improvement: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	. ,	Have electrical equipment manuals been appropriately filed?
	(E12)	Have electrical guards been installed?
	(E13)	Are indicator lights operating properly?
	(E14)	Have electrical test results been reviewed and approved?
		Has electrical heat tracing been properly labeled?
		Is all electrical equipment consistent with electrical classification documentation?
	(-,	
PERSONN	IEL SAI	ETY/HEALTH AND FIRE PROTECTION CONSIDERATIONS
		Has adequate safety equipment (e.g., fire extinguishers, eye baths, safety showers, Scott Air Paks, alarm
boyos) b		ovided and located where needed?
DOXES) D		
		Is unobstructed access to safety and fire protection equipment provided?
		Has potential for exposure to high noise levels been adequately addressed?
		Is lighting adequate?
	. ,	Do walkways and ladders provide safe access at all levels?
		Do all ladders have gates or chains across opening?
	(SO7)	Are walking and working surfaces level, properly secured, and providing adequate traction?
	(808)	Have elevated work requirements been met?
		Is the work area adequately ventilated?
		Are process sight glasses, flow indicators, gauges, etc., properly armored?
		Do signs adequately identify work area hazards and provide appropriate instruction?
		Are exits and egress routes clearly identified?
		Is the physical layout acceptable in regard to:
	(313)	
		Height of equipment, accessibility, and lifting?
		All "hot" surfaces being covered?
		Tank legs being fire-proofed?
	(S14)	Are MSDSs available at the locations where the chemicals will be handled?
	(S15)	Has the HAZCOM program been updated to reflect changes in chemicals handled?
	(\$16)	Have vessels been properly labeled?
	(S17)	Have proper handling and storage facilities been provided for all new chemicals?
	(\$18)	Has the job site been properly cleaned up?
	(\$19)	Have provisions been made to minimize potential for personnel exposure during cleanup, preparation
for maint	. ,	e, and maintenance work (field and shop)?
101 IIIdii II	endine	e, and maintenance work (neid and shop)?
WASTEST	DEAAA	AND ENVIRONMENTAL IMPACT CONCIDED ATIONS
MASIE 31	_	AND ENVIRONMENTAL IMPACT CONSIDERATIONS
	(W01	
	(W02	Have adequate provisions been made for disposal of all wastes (i.e., drums, bags, filter elements,
liquid resi	idues)	
	(W03	
	(W04	
	(W05	
	(W06	
	(W07	·
	(7 7 0 7	
	•	Trave diving isolation valves been closedy
DOCTIME	· ·NTATIO	
DOCUME		ON AND TRAINING CONSIDERATIONS
DOCUME	(D01)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required?
DOCUME	(D01) (D02)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided?
	(D01) (D02) (D03)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate
	(D01) (D02) (D03)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided?
provision	(D01) (D02) (D03) s for he	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and
provision	(D01) (D02) (D03) s for he	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities?
provision emerger	(D01) (D02) (D03) s for he ncy res (D04)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities?
provision	(D01) (D02) (D03) s for he ncy res (D04)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the
provision emerger	(D01) (D02) (D03) s for he ncy res (D04) (D05)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance?
provision emerger revisions?	(D01) (D02) (D03) s for he acy res (D04) (D05) (D06)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals
provision emerger	(D01) (D02) (D03) s for he ncy res (D04) (D05) (D06) tained	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals?
provision emerger revisions?	(D01) (D02) (D03) s for heacy res (D04) (D05) (D06) tained (D07)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals?
provision emerger revisions?	(D01) (D02) (D03) s for heacy res (D04) (D05) (D06) tained (D07)	Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised
provision emerger revisions?	(D01) (D02) (D03) s for heacy res (D04) (D05) (D06) tained (D07)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms?
provision emerger revisions?	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms?
provision emerger revisions?	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08)	Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for he acy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10)	Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions?
provision emerger revisions?	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ?	Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ?	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14) (D15)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) ttained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14) (D15) filled?	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals Has the unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14) (D15) filled? (D16)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Has the unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14) (D15) filled? (D16)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14) (D15) filled? (D16)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas?
provision emerger revisions? been ob equipme	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D09) (D10) ? (D11) (D12) (D13) (D14) (D15) filled? (D16)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas?
provision emerger revisions? been ob equipme required? properly	(D01) (D02) (D03) s for heacy res (D04) (D05) (D06) tained (D07) ent? (D08) (D09) (D10) (D11) (D12) (D13) (D14) (D15) filled? (D18)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas?
provision emerger revisions? been ob equipme required? properly	(D01) (D02) (D03) s for heacy res (D04) (D05) (D06) tained (D07) ent? (D08) (D09) (D10) (D11) (D12) (D13) (D14) (D15) filled? (D18)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate earth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas? Has the training been completed, documented, and input into the training records system?
provision emerger revisions? been ob equipme required? properly	(D01) (D02) (D03) s for heacy res (D04) ? (D05) (D06) tained (D07) ent? (D08) (D01) ? (D11) (D12) (D13) (D14) (D15) filed? (D16) (D17) (D18)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate eath exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas? Has the training been completed, documented, and input into the training records system? ERATIONS Does equipment layout provide safe access for production and maintenance?
provision emerger revisions? been ob equipme required? properly	(D01) (D02) (D03) s for heady residency reside	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate salth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas? Has the training been completed, documented, and input into the training records system? ERATIONS Does equipment layout provide safe access for production and maintenance? Are vessels, piping, instruments, and other components adequately supported?
provision emerger revisions? been ob equipme required? properly	(D01) (D02) (D03) s for heacy res (D04) f (D05) (D06) tained (D07) ent? (D08) (D09) (D10) (D11) (D12) (D13) (D14) (D15) filled? (D16) (D17) (D18) ONSID (O02) (O03)	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate ealth exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Has the plant plot plan been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas? Has the training been completed, documented, and input into the training records system? ERATIONS Does equipment layout provide safe access for production and maintenance? Are vessels, piping, instruments, and other components adequately supported? Are appropriate materials of construction used for compatibility/corrosion?
provision emerger revisions? been ob equipme required? properly	(D01) (D02) (D03) s for heady residency reside	DN AND TRAINING CONSIDERATIONS Has a new or revised procedure been provided and approved if required? Have special procedures such as sampling methods, equipment lubrication, etc., been provided? Have procedures and operator training been checked to ensure that they contain adequate earlife exposure control; unit startup, recycle, or hold modes; unit shutdown; and component failure and ponse activities? Have production, maintenance, hourly, and supervisory personnel been properly trained in the Have training and certification materials been updated for production and maintenance? Have emergency procedures been reviewed and revised as appropriate? Have required approvals? Have unit safety equipment checklists been updated to reflect required checks of new or revised Has the unit alarm listing been updated to reflect additions or deletions of alarms? Has the unit safety relief device checklist been updated to reflect additions or deletions? Have special procedures for commissioning or first-time startup been provided and reviewed, if Has this change been adequately communicated to adjacent units or other affected groups? Have process flow diagrams (PFDs) and P&IDs been updated? Have process flow diagrams (PFDs) and P&IDs been updated? Have the training equipment needs been considered and purchased for this project? Have the production and maintenance training materials been forwarded to unit personnel and Have appropriate manuals or programs been updated? Has vendor literature on equipment been filed properly in maintenance and production areas? Has the training been completed, documented, and input into the training records system? ERATIONS Does equipment layout provide safe access for production and maintenance? Are vessels, piping, instruments, and other components adequately supported? Are appropriate materials of construction used for compatibility/corrosion? Has the potential impact of the change on unchanged facilities been adequately addressed?

9.3 Incident Investigation

OGM/P-HSE-9.3(2) Revision Number 2

Original Issue: October 14, 2019
This Issue: November 21, 2025

Updated By:

Muhammad Mubashir Abbas

Manager HSEQ-ERM/ CRO, OGDCL

Reviewed By:
Babar Iftikhar
General Manager HSEQ-Security, OGDCL

Approved By:
Ahmed Hayat Lak
Managing Director, OGDCL

Change/ Revision Log

#	Description of Change
1	Modified: New Logo & Tag Line
2	Modified: Activity-based Event Classification

Associated Documents Approval & Issue

Related Document/ Record	Initiated by	Reviewed by	Checked/ Verified / Approved by
OGF – HSE – 046 Preliminary Incident Report (PIR)	Any Employee	Location IC Location HSE Rep.	Location IC
OGF – HSE – 046A Incident Investigation Report (IIR)	Investigation Committee	Investigation Committee	Investigation Committee
OGF – HSE – 049 Register of Occupational Illnesses and Injuries	Location Medical Rep.	Location Medical Rep.	Location Medical Rep.
OGF – HSE – 050 Employee's Workplace Exposure & Health (WEH) Record	Location Medical Rep.	Location Medical Rep.	Location Medical Rep.



9.3.1 Definitions

Bowtie Diagram	A 'bowtie' is a diagram that visualizes the risks and multiple plausible scenarios in an easy to understand picture. The diagram is shaped like a bow-tie, creating a clear differentiation between proactive and reactive risk management.
	Threat Preventive Preventive Barrier Top Event Preventive Barrier Top Event Recovery Barrier Recovery Barrier Consequence Recovery Barrier Fector Factor
Controlled Activity	An activity in a work environment (as a condition of employment i.e. physical location, equipment, material or vehicle) where OGDCL can set HSE policies, standards and procedures (PSP) and directly supervise and enforce its application. Incidents arising from controlled activities are reported, investigated and tracked.
Continual improvement	Process of enhancing the HSE management system to achieve improvements in overall HSE performance in line with organization's HSE policy.
Contributing Surface Cause	Major but not the root level cause of an incident (implicating or has potential to implicate) an injury or illness e.g. in case of a fall from a ladder contributing surface causes may be a) slippery floor, chemical leak, broken valve and/or untrained worker indicating unsafe condition and b) person did not inspect, ignored the vulnerability (hazard), failed to report the vulnerability (hazard) and/or himself created the vulnerability (hazard) indicating unsafe behavior.
Corrective & Preventive Action Request (CPR)	An HSE System Tool/Form for continuous improvement to timely document an issue or an emerging issue to enable focus on systematic investigation of discrepancies (violation, failures and/or deviations) in an attempt to prevent their recurrence (for corrective action) or to prevent occurrence (for preventive action).
Design Root Cause	Root level cause of an incident (implicating or has potential to implicate) an injury or illness e.g. in case of a fall from a ladder primary surface causes may be a) nonexistence of maintenance plan, flawed inspection plan and/or nonexistence of implementation strategy indicating unsafe condition and b) failing to provide tools, inadequate supervision, non-enforcement of rules and/or inconsistent training of the person indicating unsafe behavior.
Dangerous Occurrence	Readily identifiable event with potential to cause an accident or disease to persons at work and the public or of significant actual or potential material damage. (Also see Near Hit.)
Fatality	Death of workforce member caused by a work related incident, regardless of the time intervening between injury and death.
First Aid Case	Work related injuries or illnesses that involve a single treatment of minor bruises, cuts, burns, scratches etc. and not requiring medical care of the level to take the patient to the Hospital. This includes injuries / illnesses that require minor treatment, e.g. any one-time treatment, cleansing, application of bandages / band-aids, treatment of minor scratches, cuts, burns, splinters, etc.
Line Of Fire Injuries	Line of fire injuries occur when the path of a moving object or the release of hazardous energy (to be taken as a harms-way) intersects with an individual's body.
Layers of Protection Analysis (LOPA)	A method used to evaluate high-consequence scenarios determining if the combination of probability of occurrence and severity of consequences meets a company's risk tolerance.



Og) (the energy Improvement: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

	(F.25)
	Community
	Emergency Response
	Mitigation Loss of Residence Response
	Containment Passive Protection
	Active Protection
	Trip Safety Instrumented System
	Prevention Operator Intervention
	Loop Process Control
	Process Value Process Design
Loss of Primary	An unplanned or uncontrolled release of any material from primary
Containment (LOPC)	containment, including non-toxic and non-flammable materials (e.g. steam, hot condensate, nitrogen, compressed CO2 or compressed air).
Lost Workday (Time)	A work related injury or illness which results in the OGDCL's or
Injury (LWI o LTI)	contractor's workforce member declared medically unfit to attend
	duty on the next calendar day (24 hrs) after the day of injury. The criteria "24 hours" include rest days, weekend days, scheduled
	holidays, public holidays or subsequent days after ceasing
	employment; However, if medical practitioner declares that the
	injured person is fit to attend office within 24 hours, then the injury shall
Monitored Activity	not be LWI or LTI. An activity where OGDCL can influence but cannot set HSE policies,
Monitored Activity	standards and procedures (PSP) and cannot directly supervise and
	enforce its application. Incidents arising from monitored activities are
	reported and investigated where possible.
Near Hit/ Near	An unplanned event that do not result in injury, illness, or damage –
Miss	but has the potential to do so. Only a fortunate break in the chain of events prevents an injury, fatality or damage. Human error is
	commonly an initiating event, a faulty process or system invariably
	permits or compounds the harm, and is the focus of improvement.
	Other familiar terms for these events is a "close call", "dangerous
Occupational	occurrence", or in the case of moving objects, "near collision".
Occupational Health Illness	Any illness suffered due to occupational matter like Noise Induced Hearing Loss, Food Poisoning, Musculoskeletal Disorder, etc.
Opportunity	A circumstance or a set of circumstances that could lead to the
	improvement of HSE performance.
Medical Treatment	An injury severe enough to require treatment by a medical
Case (MTC)	practitioner (a physician or nurse), but does not cause the worker to miss any work.
Permanent Partial	Any work related injury or illness which results in complete loss, or
Disability (PPD)	permanent loss of use, of any part(s) of the body or any permanent
	impairment of function or parts of body, regardless of any pre-existing
	disability of the injured member of impaired body function. A PPD is
	not related to the ability of the injured person to do is normal work, e.g. it is classified as a PPD if he has lost a finger, toe, arm, limb, etc.
	but (upon recovery) is still able to do his normal work or any other work
	that permits for the partial disability.
Permanent Total	Any work-related injury or illness, which permanently incapacitates an
Disability (PTD)	employee from doing any work and results in termination of employment.
Primary	A tank, vessel, pipe, transport vessel or equipment intended to serve
Containment	as the primary container for, or used for the transfer of, a material.
	Primary containers may be designed with secondary containment
Drolinsin are	systems to contain or control a release from the primary containment.
Preliminary Incident Report	Template used to capture workplace accidents, injury occurrences, or similar events. When an incident occurs, it must be reported within 12
(PIR)	hours, regardless of the extent of the damage.
Primary Surface	Most superficial level of cause of an incident (implicating or has
Cause	potential to implicate) an injury or illness e.g. in case of a fall from a
	ladder primary surface causes may be defective ladder indicating
	unsafe condition and hurriedness of the person indicating unsafe behavior.
Process Safety	An undesirable event / condition, generally traceable through a trip or





Option of the energy Improvement: OGDCL's Integrated HSE System Manual Controlled Copy Do Not Duplicate For Internal Use Only

Incident	alarm via the instrumentation circuit e.g. an unplanned or						
	uncontrolled Loss of Primary Containment (LOPC) from a process, or						
	an undesired event or condition that, under slightly different						
Dooks at a	circumstances, could have resulted in a LOPC.						
Restricted Workday Case	A RWC is a work related injury or illness which results in the OGDCL's or contractor's workforce member being unable; (1) to perform one or						
(RWC)	more routine duties, or (2) to work the full day on, or the next calendar						
	day after the day of injury/illness. A RWC occurs when the injured						
	person is temporarily assigned to do other, less strenuous work (than						
	the normal job) e.g. an injured maintenance technician doing light						
	office work. This also includes situations where the worker does perform						
	his routine duties but for less period of time than normal shift timings						
Root Cause	because of restriction of work. A structured process that uncovers the physical, human, and latent						
Analysis (RCA)	causes of any undesirable event in the workplace.						
Safety Integrity	A measure of how "good" a Safety Instrumented System (SIS) will be at						
Level (SIL)	ensuring safety for a specific scenario and is based on hardware						
	safety integrity and quantification of random hardware failures.						
STOP Card	Influenced by STOP (Safety, Training, Observation and Program) Card,						
	an HSE management tool proposed by DuPont and adopted by OGDCL. By encouraging all the employees to observe, identify and						
	intervene the unsafe acts or accident symptom at workplace, it aims						
	at "instantly" eliminating the hidden dangers and reducing						
	occurrence of accident through small behavior based "on-spot talks"						
	so that job/ work can resume safely.						
Swim Lane	Tool used to analyze an accident by connecting events to indicate						
Diagram or STEP (Sequential Timed	how they prompted a final result. It enables the investigator to build a						
Event Plot) Diagram	graphical timeline and utilize it for further accident assessments techniques.						
, ,	Toch miquos.						
	1 2 3						
	Agents						
	Agent A Event 1 Accident						
	Agent B Event 2 Event 3						
	Agent C Event 4						
	Accident Description						
Swiss Cheese	A simplified model used to illustrate analyses of major accidents and						
Model	catastrophic systems failures by exhibiting multiple, smaller failures						
	leading up to the actual hazard. Each slice of cheese represents a safety barrier or precaution relevant to a particular hazard.						
	safety barrier of precabilion relevant to a particular flazara.						
	Hazards						
	Management Deficiencies						
	Inadequate Controls						
	Physical Failures						
	Accident						
UBUC	Unsafe Behavior Unsafe Condition.						
Uncontrolled	If an activity is not controlled or monitored, it is an uncontrolled						
Activity	activity. This is an activity where OGDCL does not set or influence HSE						
	policies, standards and procedures (PSP) and does not supervise HSE						
	performance. Incidents arising from uncontrolled activities are neither						
	reported, investigated or tracked; however, these incidents should be assessed for potential learning that could be applied within OGDCL.						
	assessed for potermanearthing that could be applied within OGDCL.						





9.3.2 Incident Reporting

- First-hand information of an incident shall be transmitted by Location IC to all concerned at Head Office within 01 hour of the incident through available communication channels like telephonically, cellular messaging, email, etc.
- Location IC shall submit Preliminary Incident Report (PIR) on the prescribed format to HSEQ Department and concerned HOD at Head Office on immediate basis but not later than 12 hours.
- Location IC shall give severity to the incident in the Preliminary Incident Report (PIR) from the table provided in the overleaf of PIR template.

9.3.3 Activity-based Event Classification

Controlled Activities: An activity in a work environment (as a condition of employment i.e. physical location, equipment, material or vehicle) where OGDCL can set HSE policies, standards and procedures (PSP) and directly supervise and enforce its application. Incidents arising from controlled activities are reported, investigated and tracked.

Scenario/ Examp	Scenario/ Example						
		OGDCL	Contractor				
An incident or illness involves signs or symptoms that result solely from a work-	At a site operated & administered by OGDCL	Yes	Yes				
related event or exposure (performing job or driving company-owned vehicle) or caused by inhalation, absorption, ingestion or direct contact with workplace hazard(s) or by ingesting food contaminated by workplace contaminants, or gets food poisoning from food supplied by the company.	At an outsourced project site (e.g. seismic, drilling, pipeline laying, civil, etc.)	Yes, where OGDCL employee/ asset is affected	Yes				
An incident arising from the crew performing job or driving vehicles under contractual obligation.	Hired bowsers/ carriage services/ service-company/ contractor/ sub-contractor INSIDE OGDCL site boundaries Contractor/ sub-contractor at seismic survey site or pipeline laying area INSIDE OGDCL block/ lease	Yes, where OGDCL employee/ asset is affected	Yes				
An incident arising while traveling (in either company-hired or personal vehicle) INSIDE i. to or from fixed or temporary residence ii. from fixed or temporary workplace or iii. for providing pick & drop/ medical cov	Yes, where OGDCL employee/ asset is affected	Yes , where hired vehicle is involved					

Monitored Activities: An activity where OGDCL can influence but cannot set HSE policies, standards and procedures (PSP) and cannot directly supervise and enforce its application. Incidents arising from monitored activities are reported and investigated where possible.

Scenario/ Examp	Scenario/ Example							
		OGDCL	Contractor					
An incident arising from the crew performing job or driving vehicles under	Hired bowsers/ carriage services/ service-company/ contractor/ sub-contractor OUTSIDE OGDCL site boundaries	Yes, where OGDCL employee/ asset is affected	Yes (Not to be included in the					
contractual obligation.	Contractor/ sub-contractor at seismic field or pipeline laying area OUTSIDE OGDCL block/ lease	No	combined HSE KPIs)					
An incident arising from the government re Contractor's/ sub-contractor's crew perfor involving Right of Way (ROW)/ government canal, river, transmission line, etc.) as well c OGDCL site boundaries	ming job or driving vehicle t infrastructure (bridge, road,	Yes, where OGDCL employee/ asset is affected	N/A					
An incident arising while traveling OUTSIDE OGDCL site boundaries: i. to or from fixed or temporary residence to or	In either company's-owned or company-hired vehicle	Yes, where OGDCL employee/ asset is affected	Yes , where hired vehicle is involved					
ii. from fixed or temporary workplace or iii. for providing pick & drop/ medical coverage under CSR obligation.	In personal vehicle	No	No					
An incident arising while travelling or visiting stakeholder e.g. customer, vendor, OGDCI Venture Partner, or any other oil and gas Edunder contractual obligation.	's non-operated Joint	Yes, where OGDCL employee/ asset is affected	Yes, where hired vehicle is involved					



An injury or illness involves signs or symptoms that surface at work but result solely from a non-work-related event/ exposure outside the work environment like voluntary participation in a wellness program or in a medical, fitness, or recreational activity; eating, drinking, or preparing food or drink for personal consumption; or personal grooming, selfmedication for a non-work related condition, or is intentionally self-inflicted.

Uncontrolled Activities: If an activity is not controlled or monitored, it is an uncontrolled activity. This is an activity where OGDCL does not set or influence HSE policies, standards and procedures (PSP) and does not supervise HSE performance. Incidents arising from uncontrolled activities are neither reported, investigated or tracked; however, these incidents should be assessed for potential learning that could be applied within OGDCL.

- OGDCL employee/ asset affected due to security-related incident (terrorist attack, bomb/ improvised explosive device (IED) blast, theft/ pilferage firing attack, local insurgency etc.)
- OGDCL employee while attending meetings, conferences, seminars, workshops OUTSIDE OGDCL premises.
- OGDCL employee travelling in public transport like bus, train, airplane, ship, etc.
- Activities in OGDCL's non-operated Joint Venture Partner's field by its own or contractor's workforce members.
- Service company, contractor or sub-contractor crew performing job or driving vehicles as per contractual obligation OUTSIDE OGDCL site boundaries/ block/ lease.

Note-1

A work related injury incurred to visitors/ guests of following categories visiting OGDCL site and declared <u>medically unfit</u> to attend <u>duty</u> <u>on the next calendar day</u> shall not be considered as OGDCL's lost time:

Customer

◆ Regulator

Third party auditor

◆ Supplier

Incident caused to above categories shall be reported and investigated keeping in view the level and potential of incident and shall be considered in the HSE Performance only if the root cause is operational control or equipment failure but not due to individual's mistake.

Note-2:

For further clarification, HSEQ Department Head Office may be consulted.

9.3.4 Constitution and Eligibility Criteria of Investigation Committee

- The investigation should be led by a person independent of the activities being investigated.
- Incident Investigation Committee for the Significant Incidents (Severity Level 4/5) shall comprise of:
 - Investigation Committee Chairman
 - Investigation Committee Member-I (Operation)
 - Investigation Committee Member-II (HSE/ HR)
 - Investigation Committee Member-III (Optional; Workers' (Staff) Representative)
- The formation, constitution and eligibility criteria of the Investigation Committee is explained below:

<u> </u>											
			Eligibility								
Severity Level*	Committee Appointed By	<u>Committee</u>	<u>Committee</u>	<u>Committee</u>							
		<u>Chairman</u>	Member-l	<u>Member-II</u>							
Catastrophic (5)	MD/ CEO/ CFO	Executive Director	GM Operations	GM/ Manager HSEQ							
Critical (4)	MD/ CEO/ CFO	Executive Director	GM/ Manager Operations	GM/ Manager HSEQ							
Major (3)	Executive Director	GM/ Manager HSEQ	Manager/ Chief Operations	Manager/ Chief HR Directorate							
Marginal (2)	GM HSEQ	Manager/ Chief Operations	Medical/Security Rep.	HSEQ Rep.							
Negligible (1)	Location IC	Section IC	Medical/Security/ Operations Rep.	HSEQ Rep.							

^{*} Ref. Table-A: Consequence Severity (C), Enterprise Risk Management (ERM) Procedure

- Committee Chairman shall be independent of the domain/ activity where incident occurred.
- Investigation Committee members must successfully complete formal training on Incident Investigation.
- Investigation Committee shall formulate the investigation report on a prescribed format attached with this procedure titled Incident Investigation Report (IIR).

9.3.5 Investigation Process

9.3.5.1 Planning

- The investigation Committee should conduct formal planning prior to collecting data and interviewing personnel. The following provide an overview of activities, but not limited to, that needs to be conducted:
 - The planning stage may normally commence with a presentation from the Location Management giving an overview of the incident sequence and operation of the site. This presentation is not to be used to draw preliminary conclusions but is used only to familiarize the investigation Committee with the operations and the event sequence.
 - A site visit by the investigation Committee should be conducted before the information collection begins.
 - Physical evidence should be collected, protected, preserved, evaluated and recorded to ultimately determine how and why failures occurred.
 - Evidence should be documented (sketched, mapped, photographed, video), preserved and secured by the investigating Committee.
 - Prior to the removal of any evidence, the exact location and orientation must be recorded or referenced to the incident location.
 - If the scene of incident is declared a crime scene, no evidence can be removed.
 - Facts and data gathering should be initiated as soon as possible after an incident to limit the information "decay" with time.

9.3.5.2 Interviewing

- Those personnel directly involved with the incident, including contractors and temporary staff, should be interviewed.
- The Investigation Committee shall develop a standard set of interview questions and determine the most appropriate means of documenting interviews.
- The Investigation Committee may adopt the 5W1H technique (i.e. Who; What; When; Where; Why and How type questions) during investigation process.

9.3.5.3 Establishing Events Timeline

- Identify the main incident event. This should be a single line statement usually describing the point in time when the incident occurred.
- Progress backward in time to identify the pre-incident sequence of subevents from the information collected.
- Progress forward in time from the incident to identify the post-incident subevent sequence.
- For each sub-event, detail of relevant conditions at the time of that event to be noted.
- Each sub-event and condition to be discretely numbered so that the Timeline can be reconstructed.
- Events that require further investigation should be clearly marked so that the relevant information be acquired.

9.3.5.4 Identify Failed / Missing Barrier(s)

- Swiss-Cheese/ Bowtie Diagram may be drawn for accident causation to illustrate layers of defense between hazards and accidents.
- For any incident to occur, multiple barriers may have weakened or failed. Investigation Committee should determine why the barriers weakened or failed by assessing following Comprehensive List of Causes (CLCs):

9.3.5.4.1 Active Failures (Primary Surface Causes)

- Active failure is a factor which directly caused the incident. It is also called Primary Surface Cause of the Incident.
- An active failure is an element of unsafe or unsatisfactory behavior or condition prior to an incident event which is significant in initiating the event.
- Investigation Committee should determine why the active failure occurred and linking the replies with the other evidence.

* Active failures (Actions and Conditions) can take a variety of forms and Investigation Committee shall identify the pertinent failures form the chart mentioned in the Incident Investigation Report (IIR) template.

9.3.5.4.2 Preconditions (Contributory Causes)

- Preconditions are those conditions under which work is undertaken and that directly influence human or equipment performance.
- These are also sometimes mentioned as Contributory Cause which directly contributes to Active Failure.
- For each Active Failure, there can be a multiple number of Preconditions (Contributory Causes) and Investigation Committee shall identify the pertinent failures form the chart mentioned in the Incident Investigation Report (IIR) template. (Contributory Causes are assigned distinct color scheme to be linked with Design Root Causes)

9.3.5.4.3 Latent Failures (Design Root Causes)

- Latent Failures are HSE Management System failures which led to the preconditions of the incident. They are also mentioned as Design Root Causes and often ascribed to Elements of Management Systems or Elements of Performance Standards.
- Latent Failures (Design Root Causes) are linked with Preconditions (Contributory Causes) using a distinct color scheme as visible from the list mentioned below:

Leadership, Commitment & Accountability	Risk Assessment and Management	Training, Competence and Fitness	Documented Information and Communication	Design, Engineering and Construction	Operations & Maintenance	Contractors Management	Management of Change	Crisis & Emergency Preparedness and Planning	Incident Investigation and Analysis	Performance Measurement, Audit, Management Review, and Improvement
---	-----------------------------------	-------------------------------------	--	---	-----------------------------	---------------------------	-------------------------	--	--	--

 Investigation Committee shall identify and elaborate the pertinent failures, gaps or deviations as design root causes in the Incident Investigation Report (IIR).

9.3.5.5 Findings and Report Writing

- Assessment of all failed & missing barriers i.e. active failures (primary surface causes), preconditions (contributory causes) and latent failures (design root causes) shall be correlated and a comprehensive root cause analysis shall be summarized as findings.
- Immediate corrective measures as well as long-term corrective & preventive actions shall be determined along with timeframe.
- Standardized Incident Investigation Report (IIR) format shall be used for all investigations.

9.3.5.6 Close Out of Corrective & Preventive Actions

- Concerned HOD(s) shall be responsible to ensure that corrective and preventive actions are implemented as per prescribed timeframe.
- B HSEQ Department shall develop a Checklist against the recommendations scribed in the IIR and review the compliance status on quarterly basis.
- Subsequently based upon satisfactory follow-ups on the effectiveness of actions taken, the Investigation Report shall be closed out by HOD, HSEQ Department.

9.3.5.7 Communication of Lessons Learned

- Investigation Report shall be retained as an evidence of type / nature of the incidents that have occurred and the results of corrective & preventive actions taken, including their effectiveness.
- The lessons learned from the incident and the description of associated dangers shall be communicated through Safety Alert across the

organization and with relevant stakeholders as well and it shall be encouraged that the Recipients of Safety Alert to share them further within their coworkers.





Oil & Gas Development Company Limited

PRELIMINARY INCIDENT REPORT

(Must be reported on the same day to HSEQ Department OGDCL Head Office Islamabad) [Fax.: 051-2623041; Email: HSEQReports@ogdcl.com]

PART I: Gen	eral							Activity	-based Event Clas	sification	
	Time: Activity:						□ Work-related □ Within OGDCL site boundary □ Non-work related □ Outside OGDCL site boundary □ OGDCL crew □ Contractor crew □ Third party				
Severity 5 4 3 2 1 Note: Location IC shoil assign Severity to the incident from the Severity Matrix mentioned overleaf. PART II: Incident / Nonconformance / Deviation:											
Summary:					-						
		Oil/	Roadside	Improper	Falli] ne		Confined	Explosive	☐ Equipment	Fall from
Fire	Gas Leakage	Chemical Spi		Lifting	Obje		ruck By	space	Blast	Safeguarding	Height
Asset	mmary of Con Damage antify)	sequences: Environmen (Quant		Injury(ies)	Human Da		lity(ies)		duction Loss Quantify)	Reputation	n Damage
1.											
2.											
Nar	ne of Injured/ F	atality	Designation	Employm	Employment No				Section/Deptt. Status*		
			ee/ Contractor/ C	Other			(0)=0000				-0.0000-0000000
PARI IV: Co	ntributing Sur		ondition					Unsa	rfe Act/Behavior	Ti .	
PART IV: Contributing Surface Cause(s): Unsafe Condition Unsafe Act/Behavior Improper HSE Equipment Improper HSE Documentation Poor Illumination Operating without Authority Horseplay Over-speeding Overriding Safety Devices Non-provision of Necessary Protection Equipment Unsafe Design or Construction Poor / Inadequate Operating Conditions Disobering Instructions / Not Following SOP Inadequate Warning System Wrong Orders of Supervisor Poor Housekeeping Defective Tool Slippery Surface Bad Environmental Conditions Unsafe Act of Outsider(s) Unsafe Act of Fellow-Worker(s) Unsafe Act of Fellow-Worker(s) Unsafe Act of Fellow-Worker(s) Unsafe Act of Fellow-Worker(s) Any Other(s) Any Other(s)											
	47		ffected Area/ I							192	4
Conce		□ Injured/ casualt	ine Sita ha	rricaded &	[G45+1140	Adm	in & Medical	Hazards conta	ined/	
informed/		removed		sign posted	First aid	provided		ns informed	controllec		gy isolated
PART VI: Re	gulatory Depa	rtment/ Conce	rned Intimated	?							
								Notes:			
Familie	s of Victims	CIM	E	A	PNRA		Police				
								nature & Date:			





Oil & Gas Development Company Limited

PRELIMINARY INCIDENT REPORT

(Must be reported on the same day to HSEQ Department OGDCL Head Office Islamabad) [Fax.: 051-2623041; Email: HSEQReports@ogdcl.com]

evenity (C) pact	afety Security Financial Reputation	Extensive loss of Exteems impact of affecting the company's life, widespread investment or risk-event affecting the company's solutions, total loss of princesses or processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the core processes or the company, with reiterated for the core processes or the company, with reiterated for the core processes or Loss of life/ serious injuries, damage to transfer ability impairment of ability impairment of core processes core processes and functions of 60–99.9 million US\$ contact ability core processes core pro	investment or risk-event damage to the company's reputation at national/strine and processes 10-29.9 million US\$ Significant but containable impact of damage to the company's reputation at national/provincial level covered processes 10-29.9 million US\$ Other/ Diversification 10.59.	ries) Investment or isk-event innear to risk-event signt damage/ timent to the assets/personnel. Other/ Diversification assets/personnel. 29.9 million US\$	ht Small procession impact of investment or Some attention from ries near location with risk-event minor stakeholders, preempively resolved by	
-		Ti .	TH.	¥	tu s	50.00 500
6	Security					
Sequence Severity (C Potential Impact	Safety	Muttiple Fatadities/ Disabilities	Single Fatality/ Disability	Serious injury(ies) resulting in Lost Time	Injury (or injuries) requiring medical treatment	Süght injuries requiring
Table-A: Consequence Severity (C) Potential Impact	Environment	Continuous excursions perpendicular to grant multiple and mage to multiple and mage to multiple and mage to multiple and more an either rot be remediated or remediated or remediation resources and time from the resources and time from the tresources and time from than a year time frame).	Intermittent excursions beyond allowable or regulatory limits Or extensive densible to extensive analyse to extensive consequences that can be rectified and remediated within a year's timeframe	Occasional excursions beyond altowable or regulatory limits Or environmental damage with consequences that can be rectified and remediated within a month's timeframe	Rare excursions beyond adloveshe or regulatory limits Or no significant or no significant environmental damage to the local environment, effects can be rectified and remediated immediately with some clean-up intervention within days.	Slight environmental damage within the premises
	Social/Community	Widespread, visible complaints and modespread, visible NGOs, notables, national authorities and general public	Major and repeated community & stakeholder concerns, involvement of notables, local entities	No serious community or stakeholder stakeholder social or other media coverage that causes temporary disruption to business	Low impact community issues, remedied after negotiations	Low impact community issues,
	Regulatory & Legal	Breaches resulting in herry penalties/ imprisonment/ revocation of registrations, ilconses or permits	Broaches resulting in significant penatties/ceasing of operations	Breaches resulting in warnings without peneities	Breaches resulting in Low impact exposure to legal community proceedings/show remedied at cause notices negotiations	Rectifiable breaches with no consequence to the
		Catastrophic [Jety Material] (2)	Critical [Material] (4)	Major [Consequential] (S)	Marginal [leinconsequential] (2)	eldigible Trivial] (1)

TEMPLATE

< Mention Title of Incident Here >

INCIDENT INVESTIGATION REPORT (IIR)

TABLE OF CONTENTS

S#	CONTENTS	PG#
1.	CONSTITUTION OF INCIDENT INVESTIGATION COMMITTEE	
2.	SUMMARY OF INCIDENT DATE, TIME, AND SPECIFIC LOCATION OF INCIDENT NAMES, JOB TITLES, AND EMPLOYEES / CONTRACTORS INVOLVED AND IMMEDIATE SUPERVISOR(S) NAMES AND STATEMENTS OF WITNESSES EVENTS LEADING UP TO INCIDENT EXACTLY WHAT EMPLOYEE / CONTRACTOR WAS DOING AT THE MOMENT OF THE ACCIDENT ENVIRONMENTAL CONDITIONS CIRCUMSTANCES (INCLUDING TASKS, EQUIPMENT, TOOLS, MATERIALS, PPE, ETC.) SPECIFIC INJURIES (INCLUDING PART(S) OF BODY INJURED AND NATURE AND EXTENT OF INJURIES) TYPE OF TREATMENT FOR INJURIES DAMAGE TO ENVIRONMENT, EQUIPMENT, MATERIALS, ETC.	
3.	FAILED / MISSING BARRIER(S) SWISS CHEESE/ BOWTIE DIAGRAM ACTIVE FAILURES (PRIMARY SURFACE CAUSES) PRECONDITIONS (CONTRIBUTORY CAUSES) LATENT FAILURES (DESIGN ROOT CAUSES)	
4.	FINDINGS	
5.	RECOMMENDATIONS	
6.	ANNEXURES	

OGF - HSE - 046A(01)

DNSTITUTION OF INCIDENT INVESTIGATION COMMITTEE	
Ref. Section 1.3 of Incident Investigation Procedure.	

INCIDENT INVESTIGATION REPORT (IIR)

2. SUMMARY OF INCIDENT

- DATE, TIME, AND SPECIFIC LOCATION OF INCIDENT
- + NAMES, JOB TITLES, AND EMPLOYEES / CONTRACTORS INVOLVED AND IMMEDIATE SUPERVISOR(S)
- ♦ NAMES AND STATEMENTS OF WITNESSES
- **EVENTS LEADING UP TO INCIDENT**
- * EXACTLY WHAT EMPLOYEE / CONTRACTOR WAS DOING AT THE MOMENT OF THE ACCIDENT
- *** ENVIRONMENTAL CONDITIONS**
- CIRCUMSTANCES (INCLUDING TASKS, EQUIPMENT, TOOLS, MATERIALS, PPE, ETC.)
- * SPECIFIC INJURIES (INCLUDING PART(S) OF BODY INJURED AND NATURE AND EXTENT OF INJURIES)
- **† TYPE OF TREATMENT FOR INJURIES**
- DAMAGE TO ENVIRONMENT, EQUIPMENT, MATERIALS, ETC.
- ◆ FLOWCHARTS / SKETCHES / PICTURES

OGF - HSE - 046A(01)

SWISS CHEESE DIAGRAM BOWTIE DIAGRAM For any incident to occur, multiple barriers may have weakened or failed. Investigation team should determine why the barriers weakened or failed by assessing following Comprehensive List of Causes (CLCs): PROBABLE ACTIVE FAILURES (PRIMARY SURFACE CAUSES) PROBABLE PRECONDITIONS (CONTRIBUTORY CAUSES) LATENT FAILURES (DESIGN ROOT CAUSES)

INCIDENT INVESTIGATION REPORT (IIR)

SELECT MOST PROBABLE ACTIVE FAILURES (PRIMARY SURFACE CAUSES)

			Actio	ns				
1.0 Following Procedures		2.0 Use of Tools or Equipment			se of Protective Methods	4.0 Inattention / Lack of Awareness		
1.1.	Violation by individual	2.1.	Improper use of equipment	3.1.	Lack of knowledge of hazards present	4.1.	Improper decision making or lack of judgment	
1.2.	Violation by group	2.2.	Improper use of tools	3.2.	Personal protective equipment not used	4.2.	Distracted by other concerns	
1.3.	Violation by supervisor	2.3.	Use of defective equipment (aware)	3.3.	Improper use of proper personal protective equipment	4.3.	Inattention to footing and surroundings	
1.4.	Operation of equipment without authority	2.4.	Use of defective tools (aware)	3.4.	Servicing of energized equipment	4.4.	Horseplay	
1.5.	Improper position or posture for the task	2.5.	Improper placement of tools, equipment or materials	3.5.	Equipment of materials not secured	4.5.	Acts of violence	
1.6.	Overexertion of physical capability	2.6.	Operation of equipment at improper speed	3.6.	Disabled guards, warning systems or safety devices	4.6.	Failure to warn	
1.7.	Work or motion at improper speed	2.7.	Servicing of equipment in operation	3.7.	Removal of guards, warning systems or safety devices	4.7.	Use of drugs or alcohol	
1.8.	Improper lifting	2.8.	Other	3.8.	Personal protective equipment not available	4.8.	Routine activity without thought	
1.9.	Improper loading			3.9.	Other	4.9.	Other	
1.10.	Shortcuts							
1.11.	Other							

Conditions											
5.0 Protective System		6.	0 Tools, Equipment and Vehicles	7	.0 Work Exposure To	8.0 Workplace Environment Layout					
5.1.	Inadequate guards or protective devices	6.1.	Defective equipment	7.1.	Fire or explosion	8.1.	Congestion or restricted motion				
5.2.	Defective guards or proactive devices	6.2.	Inadequate equipment	7.2.	Noise	8.2.	Inadequate or excessive illumination				
5.3.	Inadequate personal protective equipment	6.3.	Improperly prepared equipment	7.3.	Energized electrical systems	8.3.	Inadequate ventilation				
5.4.	Defective personal protective equipment	6.4.	Defective tools	7.4.	Energized systems, other than electrical	8.4.	Unprotected height				
5.5.	Inadequate warning	6.5.	Inadequate tools	7.5.	Radiation	8.5.	Workplace layout				

OGF - HSE - 046A(01)

	systems						controls
5.6.	Defective warning systems	6.6.	Improperly prepared tools	7.6.	Temperature extremes	-	displays less than adequate
5.7.	Inadequate isolation of process or equipment	6.7.	Defective vehicle	7.7.	Hazardous chemicals	4	labels less than adequate
5.8.	Inadequate safety devices	6.8.	Inadequate vehicle for the purpose	7.8.	Mechanical hazards	-	locations out of reach or sight
5.9.	Defective safety devices	6.9.	Improperly prepared vehicle	7.9.	Clutter or debris	-	conflicting information presented
5.10.	Other	6.10	Other	7.10	Storms or acts of nature	8.6.	Other
				7.11	Slippery floors or walkways		
				7.12	Other		



INCIDENT INVESTIGATION REPORT (IIR)

SELECT MOST PROBABLE PRECONDITIONS (CONTRIBUTORY CAUSES)

					Perso	nal F	actors				
9	9.0 Physical Capability		.0 Physical Condition	11.	0 Mental State		12.0 Mental Stress	1	3.0 Behavior		14.0 Skills
9.1.	Vision deficiency	10.1.	Previous injury or illness	11.1.	Poor judgment	12.1	Preoccupied with problems	13.1	Improper performance is rewarded	14.1	Inadequate assessment of required skills
9.2.	Hearing deficiency	10.2.	Fatigue	11.2.	Memory failure	12.2	Frustration	:50	saves time or effort	14.2	Inadequate practice of skill
9.3.	Other sensory deficiency		due to workload	11,3.	Poor coordination or reaction time	12.3.	Confusing directions/demands	-	avoids discomfort	14.3	Infrequent performance of skill
9.4.	Reduced respiratory capacity		due to lack of rest	11.4	Emotional disturbance	12,4	Conflicting Directions demands	-	gains attention	14.4	Lack of coaching on skill
9.5.	Other permanent physical disabilities	•	due to sensory overload	11,5,	Fears or phobias	12.5.	Meaningless or degrading activities	13.2	Improper supervision	14.5	Insufficient review of instruction to establish skill
9.6.	Temporary disabilities	10.3.	Diminished performance	11.6.	Low mechanical aptitude	12.6	Emotional overload	13.3	Inadequate identification of critical safe behaviors	14.6	Other
9.7.	Inability to sustain body positions	+	due lo temperature extremes	11.7.	Low learning aptitude	12.7.	Extreme judgment decisions/demands	13.4	Inadequate reinforcement of critical safe behaviors		
9.8.	Restricted range of body movement	-	due to oxygen deficiency	11.8	Influenced by medication	12.8.	Extreme concentration/ perception demands	728	proper performance is criticized		
9.9.	Inadequate size or strength	٠	due to atmospheric pressure variation	11.9.	Other	12.9.	Extreme boredom	٠	Inappropriate peer pressure		
9.10.	Substance sensitivities or allergies	10.4.	Blood sugar insufficiency			12.11	Other	175	inadequate performance feedback		
9.11.	Diminished capacity due to medication	10.5.	Impairment due to use of drug					-	inadequate disciplinary process		

OGF - HSE - 046A(01)



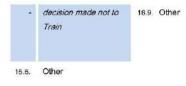
				Job	Factors				
15.0 Training / Knowledge Transfer		16.0 Management / Supervision Employee Leadership		17.0 Contractor Selection and Oversight		18.0 Engineering / Design		19.0 Work Planning	
15.1.	Inadequate knowledge transfer	16.1	Conflicting roles/ responsibilities	17.1.	Lack of contractor pre- qualifications	18.1	Inadequate technical design	19.1.	Inadequate work planning
(7.	inability to comprehend	-	unclear reporting relationships	17.2.	Inadequate contractor pre- qualifications	(5)	design input obsolete	19.2.	Inadequate preventive maintenance
12	inadequate instruction Qualifications	2	conflicting reporting relationships	17.3.	inadequate contractor selection	-	design input not correct	12	assessment of needs
H	inadequate training equipment	*	unclear assignment of responsibility	17.4.	Use of non- approved contractor	8#8	design input not available		lubrication/ servicing
Ī	misunderstood instructions		conflicting assignment of responsibility	17.5.	Lack of job oversight		design output inadequate	32	adjustment/ assembly
15.2.	Inadequate recall of training material	ä	improper or insufficient delegation of authority	17.6.	Inadequate oversight		design input feasible	(2)	clearing/ resurfacing
T	training not reinforced on the job	16.2	Inadequate leadership	17.7.	Other		design output unclear	19.3.	Inadequate repair
	inadequate refresher	-	standards of				design output	-	communication

OGF - HSE - 046A(01)

	training frequency		performance missing or not enforced
16.3.	Inadequate training effort	2	inadequate accountability
ā	inadequale training program design	1	inadequate or incorrect performance feedback
Ü	inadequate training goals/ objectives		inadequate work site walk-through
ie.	inadequate new employee orientation	7	inadequate safety Promotion
*	inadequate initial training	16.3	Inadequate correction of prior hazard / incident
7	inadequale means to determine if qualified for job	16.4.	Inadequate identification of worksite/ job hazards
15.4.	No training provided	16.5	Inadequate management of change system
-	need for training not Identified	16.6	Inadequate incident reporting/ investigation system
7	training records incorrect or out of date	16.7.	Inadequate or lack of safety meetings
975	new work methods introduced without training	16.8	Inadequate performance measurement and assessment

	not correct		of needed repair
3	design output inconsistent	5	scheduling of work
	no independent design Review	£	examination of parts
18.2	Inadequate standards, specifications, and/or design criteria	u u	parts substitution
18.3	Inadequate assessment of potential failure	19.4.	Excessive wear and tear
18.4	Inadequate ergonomic design		inadequate planning for use
18.5	Inadequate monitoring of construction	>+	extension of service life
18.6	Inadequate assessment of operational readiness	-	improper loading
18.7	Inadequate monitoring of initial operation	-	use by untrained people
18.8	Inadequate evaluation and/or documentation of change		use for wrong purpose
18.9	Other	19,5.	Inadequate reference materials or publications

OGF - HSE - 046A(01)



19.6.	Inadequate audit/ inspection/ monitoring
	no documentation
	no correction responsibility assigned
-	no accountability for corrective action
19.7.	Inadequate job placement
	4.02
	appropriate personnel not identified
-	personnel
	personnel not identified appropriate personnel

			Jo	b Fac	tors		
20.0 Purchasing, Material Handling and Material Control		21.0 Tools and Equipment		22.0 Work Rules (Policies, Standards & Procedures - PSP)		23.0 Communication	
20.1.	Incorrect Items Received	21.1.	Inadequate assessment of needs and risks	22.1	Lack of PSP for the task	23.1.	Inadequate horizontal communication between peen
100.	inadequate specifications to vendor	21.2.	Inadequate human factors / ergonomics considerations		lack of defined responsibility for PSP	23.2.	Inadequate vertical communication between supervisor and person
	inadequate specifications on requisition	21,3,	Inadequate standards or specifications	-	lack of job safety Analysis	23.3.	Inadequate communication between different organizations
*	inadequate control on changes to orders	21.4.	Inadequate availability	**	inadequate job safety analysis	23.4.	Inadequate communication between work groups
-	unauthorized Substitution	21.5,	Inadequate adjustment / repair / maintenance	22.2	Inadequate development of PSP	23.5.	Inadequate communication between shifts
	inadequate product Acceptance requirements	21.6.	Inadequate salvage and reclamation	*	inadequate coordination with process / equipment	23.6.	Inadequate communication methods



OGF - HSE - 046A(01)

*	no acceptance verification performed	21.7.	Inadequate removal / replacement of unsuitable items	:#S	inadequate employee involvement in the development	23.7.	No communication method available
20.2.	Inadequate research on materials / equipment	21.8.	No equipment record history		inadequate definition of correction actions	23.8.	Incorrect instructions
20.3.	Inadequate mode or route of shipment	21.9.	Inadequate equipment record history	::	inadequate format for easy use	23.9.	Inadequate communication due to job turnover
20.4.	Improper handling of materials	21.11	Other	22.3.	Inadequate implementation of PSP, due to deficiencies	23.10.	Inadequate communication of safety and health data, regulations or guidelines
20.5.	Improper storage of materials or spare parts				contradictory requirements	23.11.	Standard terminology not used
20.6.	Inadequate material packaging			-	confusing format	23.12.	Verification / repeat back techniques not used
20.7.	Material shelf life exceeded				more than one action per step	23.13.	Messages too long
20.8.	Improper identification of hazardous materials			(•	no check-off spaces provided	23.14.	Speech interference
20.9.	Improper salvage and/or waste disposal			-	inaccurate sequence of steps	23.15.	Other
20.10	Inadequate use of safety and health data			: +3	confusing instructions		
20.11	Other			-	technical error / missing steps		
				(e)	excessive references		
					potential situations not covered		
				22.4.	Inadequate enforcement of PSP		
				-	inadequate monitoring of work		
				- 20	inadequate supervisory knowledge		
					inadequate reinforcement		
				(3	non-compliant not corrected		
				22.5	Inadequate communication of PSP		

OGF - HSE - 046A(01)

to work groups

- inadequate translation
to appropriate
languages

- incomplete integration
with training

- out of date revisions
still in use

22.6. Other



ANALYSIS OF LATENT FAILURES (DESIGN ROOT CAUSES)

INCIDENT INVESTIGATION REPORT (IIR)

- Latent Failures are HSE Management System failures which led to the pre-conditions of the incident. They are also mentioned as Design Root Causes and often ascribed to Elements of Management Systems or Elements of Performance Standards.
- Investigation Committee shall identify and elaborate the pertinent gaps or deviations as design root causes.

#	HSE System Element	Detail of Gap / Deviation
a.	Leadership, Commitment & Accountability	
b.	Risk Assessment and Management	
C.	Training, Competence and Fitness	
d.	Documented Information and Communication	
e.	Design, Engineering and Construction	
f.	Operations & Maintenance	
g.	Contractors Management	
h.	Management of Change	
i.	Crisis & Emergency Preparedness and Planning	
j.	Incident Investigation and Analysis	
k.	Performance Measurement, Audit, Management Reviews and Improvement	

4. FINDINGS

INCIDENT INVESTIGATION REPORT (IIR)

OGF - HSE - 046A(01)

Assessment of all failed & missing barriers i.e. active failures (primary surface causes), preconditions (contributory causes) and latent failures (design root causes) shall be correlated and a comprehensive root cause analysis shall be summarized
as findings.

INCIDENT INVESTIGATION REPORT (IIR)

5. RECOMMENDATIONS

Immediate corrective measures as well as long-term corrective & preventive a shall be jot down along with timeframe.	actions

INCIDENT INVESTIGATION REPORT (IIR)

6. ANNEXURES

