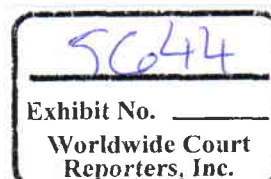


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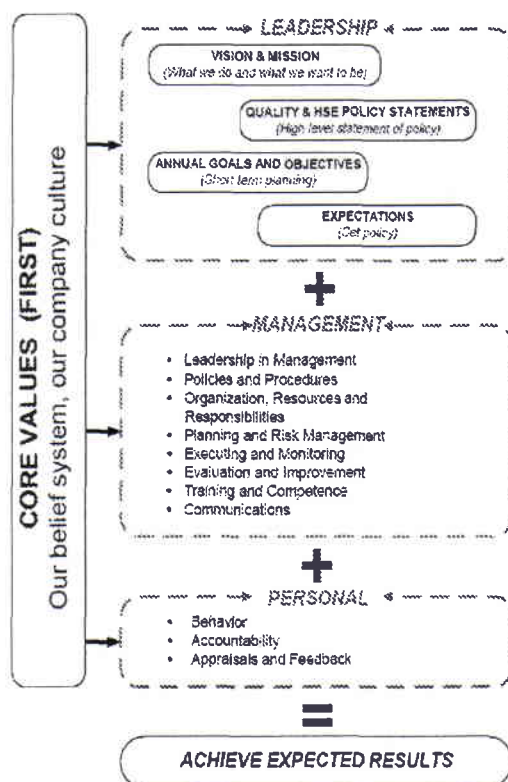
2.0 INTRODUCTION

The Transocean HSE Management System is a comprehensive organization of policies, procedures and requirements that provide expectations which are intended to motivate people to execute work safely and to achieve results. The effective implementation of this Management System provides a means by which Company HSE goals are achieved, the needs of customers are met and the requirements of regulatory bodies are satisfied, while maintaining the health and safety of our employees and respecting the condition of our environment.

This part of the OIC describes how elements of the Transocean HSE MS are implemented on board the Deepwater Horizon specifically those relevant to the management of risks for the hazards identified in Part 4 of the OIC. The documents referenced for this section are shown at the end of Section 2 in the Transocean Risk Document Hierarchy.

2.0.1 Management System Elements

The Transocean HSE Management System is based on the corporate principles provided to direct personnel in their decision making, behavior and conduct to ensure the meet leadership expectations related to people and processes for which they are responsible and accountable. Executive Management has established four leadership principles, eight management principles and three personal principles fundamental to the Management System. These principles are presented the following diagram:



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2.0.1.1 Mission Statement and CORE Values

The mission statement provides an explanation of the Company's reason for existing as a Company. It provides the focus for the Company and defines its scope of business. The Company's mission statement reflects what Executive Management wants the Company to do and to be known for. The mission represents what the Company does and the vision represents where the Company wants to be in the future. Establishing a clear mission enables employees to work together across organizational and cultural boundaries with common goals and objectives to achieve shared results.

Core Values characterize the Company's culture, beliefs and behavior. The Company's Core Values (**FIRST**) guide people in their decision making, behavior and conduct to ensure that the results of those decisions meet the expectations established by the leadership of the Company.

FIRST shapes our behaviors and forms the foundation for building and maintaining relationships with our stakeholders, suppliers, our people and the communities we work in. Relationships enable the Company and our stakeholders to be aligned with each other's needs and requirements. Our Core Values support a code of ethical business practices for our employees, which also extend to our clients and suppliers.

MISSION

"To be the premier offshore drilling company providing worldwide, rig-based well construction services to our customers through the integration of motivated people, quality equipment and innovative technology, with a particular FOCUS on technically demanding environments"

We will achieve this by making our company FIRST

Financial Discipline -- Our decisions will be made to ensure long-term growth for benefit of employees, customers and shareholders


Integrity and Honesty -- Our actions will be conducted following the highest standard of ethics, honesty and personal integrity. This will foster and maintain trust and confidence of our employees, customers and suppliers.

Respect for Employees, Customers and Suppliers -- Our employees will be developed and motivated to meet the challenges ahead. Individuality and diversity will be valued and performance recognized. We provide our customers with unsurpassed value-added service. Our relationship with suppliers will reflect respect, understanding and sound business practice.

Safety -- Personal safety and employee health is our greatest responsibility followed by the protection of our environment and Company property.

Technical Leadership -- Our competitive advantage is based on continually improving our processes and finding innovative solutions to the technical challenges in meeting the needs of our customers

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2.0.2 Environmental, Health and Safety Standards

The Transocean Environmental Management System is compliant with the requirements of ISO 140001. The Transocean HSE Management System is complies with the International Safety Management (ISM) Code which is an international Code for the Safe Operation of Ships and for Pollution Prevention.

2.0.3 Core Business Functions

The Company's management system is comprised of CORE Management functions. The following CORE Management Functions represent the core discipline (expertise) essential to execute change within the framework of the Company's business:

- Quality, Health, Safety and Environment
- Engineering and Technical Services (Operations)
- Technology and Performance (Operations)
- Marketing
- Human Resources
- Legal
- Investor Relations / Communications
- Finance – Assurance & Advisory Services
- Information Technology

2.0.4 Demonstrating Assurance of HSE Management Objectives

The objectives of the Health and Safety and Environmental Management Systems are to ensure that all of the Company's activities are planned, carried out and controlled so that Health and Safety and Environmental management objectives are met. The Transocean Management System is a quality system for managing risks within the Company to assure the protection of people, the Company's assets, the environment and the reputation of the Company.

Health and Safety and Environmental Management require a systematic approach to achieve continuous improvement in performance which can be audited and verified.

In setting objectives, management has considered the overall risk levels of its activities and identified those critical operations and activities which require a fully documented demonstration that risks have been reduced to as low as reasonably practical (ALARP).

This OIC is a rig specific demonstration of the Company's Health and Safety and Environmental Management Systems in action. It clearly demonstrates how the Company's Management objectives are implemented in practice and how local risk management objectives are achieved. It describes controls in place to manage hazards and meet Company objectives. Shortfalls in meeting these Management Objectives and corrective actions and or improvement opportunities relevant to those shortfalls have been identified.

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2.1 POLICIES AND OBJECTIVES

2.1.1 Health and Safety and Quality Policies

The Corporate Health and Safety and Quality Policy Statements represent the Company's leadership commitment to provide client, employees and suppliers with a safe environment and clear expectations and values that enable people to achieve desired business results. The Company's Corporate Policy Statements identify fundamental expectations of how leadership requirements will be met as outlined in the Company Management System.

Health and Safety Policy Statement

Management at Transocean is fully committed to conducting operations in an incident-free workplace, all the time, everywhere. Proactive individual involvement, personal responsibility, accountability, and continuous improvement are expected of all employees, clients and subcontractors. The Health and Safety Management System is designed to align all stakeholders' efforts to enable attainment of these objectives.

HSE Management is a line management responsibility. Visible management commitment and involvement is essential at all levels.

The fundamental elements of the HSE Management System are:

1. Employees will know and abide by our Core Values **FIRST**.
2. Each employee is responsible to know and act in accordance with the Company's HSE Management System to protect self and others, the environment, and the property of the Company.
3. Effective planning and communication using the **THINK** Planning Process will be the foundation of all Company risk management processes.
4. Effective HSE performance will be recognized.
5. The **START** Monitoring Process will be used for enhancing awareness through observations and effective feedback.
6. Each employee has the obligation to interrupt an operation in order to prevent an unsafe act or condition. Failure to interrupt is not acceptable.
7. All incidents will be reported.
8. Employees are encouraged to identify improvement and corrective opportunities and participate in developing action plans using **FOCUS**.

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Quality Policy Statement

Transocean is committed to providing high quality well construction services which meet or exceed the needs of our customers and comply with the requirements of the company.

The Company will manage systems and processes which are designed to deliver value and prevent deficiencies in quality. Quality means:

Compliance with applicable laws and regulations

Compliance with Company policies procedures and standards

Conformance to agreed customer requirements

The quality system will promote and maintain service quality and facilitate continuous improvement within each business process.

All employees are responsible for quality of service to internal and external customers. All employees shall be familiar with and apply the policies and procedures of the Company

2.1.2 GOALS AND OBJECTIVES

Corporate annual goals and objectives and long-term strategies are determined by Executive Officers (Executive Management).

Annual goals and objectives support the Company's strategic plans and enable the Company to execute its mission and achieve its vision.

Corporate departmental goals and objectives are aligned with Corporate goals and compliment Region goals and objectives. Region goals and objectives are also aligned with Corporate goals and objectives.

Goals are a statement of the performance standards, which represent the desired result. Goals should be measurable if possible.

Objectives are performance measures that are used to determine the degree to which a goal has been achieved. Not all performance measures can be clearly quantifiable, due to the nature of a changing business environment. In those exceptional cases there may be a qualitative element.

2.1.2.1 Defining Annual Goals and Objectives

Corporate Goals and Objectives

The Executive Management sets Corporate goals annually based on short and long term strategies designed to achieve the mission and vision. These goals are related to key result areas established by Executive Management after review of the global environment and Region specific strategies. The goals and objectives are aligned with the annual budget and the Board of Directors approves both.

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Corporate Department Goals and Objectives

Corporate departmental goals and objectives support Corporate goals and need to be specific and measurable. These goals and objectives are interdependent with the Region goals and objectives and represent aligned performance standards and measures.

Each Corporate department designs their own goals and objectives to enable them to achieve the Corporate goals. In some cases, it may be necessary for a Corporate department to translate or extrapolate a Corporate goal in order to achieve some clear and measurable objective.

Region Goals and Objectives

Region goals and objectives are aligned with Corporate goals through the planning and guidance of the Corporate Operations department. The focus at this level is the balance between Corporate objectives and the potential variations in performance based on the business environments each Region competes in. Because of the diversity of the business environment, measurement and evaluation of the Key Performance Indicators (KPIs) is critical.

District and Installation Plans

Normally, Districts and Installations do not develop their own specific goals and objectives since they are involved in the development of the Region goals and objectives. However, District specific goals may be established to meet local business conditions. District and installations are instrumental in planning and achieving the desired results to meet Region goals and objectives.

Relationship to the Company Management System

The Company Management System represents the way in which people and processes enable the Company to accomplish annual goals and objectives, implement strategy and achieve performance excellence.

The Company's Management System does this by managing business and operational risk while allowing people to optimize resources through the development and improvement of Core Management Functions (e.g., Operations, Human Resources, QHSE, etc) which are the fundamental components of our management system. The key activities of these Core Management Functions are represented by the activities performed and managed by both our offshore installation and onshore personnel.

Leadership and management represent two key elements for successfully achieving annual goals and objectives. Leadership (direction) and management (implementation) form a combined system of controls that manages business and operational risk while allowing people to be innovative, creative and add value.

Leadership

Leadership provides the basic strategy of the Company. Leadership describes the boundaries of influence, the mission of the Company, and the nature of organizational goals, values and requirements (expectations).

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Management

The role of management is to define, develop, communicate, implement, monitor, evaluate and improve people and processes to achieve performance excellence. Management translates goals, objectives and expectations of the Company into actions within the framework of the core values. Management and personal principles guide people in their decision-making, behavior and conduct to ensure people and processes meet the expectations established by Executive Management. Management enables people to develop, implement and optimize processes that contribute to meet Corporate goals and objectives.

2.2 ORGANIZATION, RESPONSIBILITIES AND RESOURCES

2.2.1 Organization

Transocean is organized and staffed to operate globally in all major areas of offshore operations. In order to manage a large fleet effectively and to achieve the Company's mission, corporate leadership has developed a management organization that enables the Company to achieve the desired results through leadership, essential management processes and personal accountability.

The C.E.O. is ultimately responsible for the safe and efficient operation of the Company. The Chief Operating Officer is responsible for the day to day operations of the Company. The Vice President QHSE is responsible for the activities of the QHSE Department to achieve global QHSE management objectives. The Director of QHSE is responsible for the overall planning, maintenance and implementation of the HSE Management System in order to achieve QHSE objectives.

Transocean has six management levels that apply to operations in the Gulf of Mexico (the sector within which the Deepwater Horizon currently operates):

- Transocean Corporate Management (Headquarters)
- North and South America Business Unit Management (AMU)
- North America Division (NAM), Gulf of Mexico Sector (GOM)
- Operations Management (Manager-Performance and Manager-Assets)
- Rig Management (Rig Manager Performance and Rig Manager Assets)
- Installation Management (Offshore)

2.2.1.1 Roles and Responsibilities

HSE management is a line management responsibility and visible management commitment and involvement at all levels is essential for successful HSE performance.

All Company personnel at all levels of the organization have the responsibility to comply with policy and procedures and participate in the achievement of annual goals. All personnel are also responsible to:

- Visibly conduct themselves in line with the FIRST core values
- Be responsible and accountable for their behavior and for their own safety
- Have the obligation and the responsibility not to participate in an unsafe act and also the obligation and responsibility to interrupt any operation to prevent an unsafe act or unsafe condition from causing an incident. Each individual also has the obligation and responsibility to take action to correct any unsafe behavior or condition.

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- Provide support by removing barriers that prevent achieving the Company Safety Vision: "Our operations will be conducted in an incident-free workplace – all the time, everywhere."
- Become familiar with and implement all applicable HSE policies and procedures
- Actively support and practice the Company **THINK, START, and FOCUS** processes in order to effectively plan, monitor and improve the HSE aspects of the operation.
- Immediately report all incidents to a Company Supervisor
- Actively participate in the various Company plans to improve HSE aspects of the operation (HSE Meetings, QHSE Steering committees, Emergency drills, HSE plan development and implementation, etc.
- Actively mentor co-workers to help them improve their HSE performance
- Be aware and understand their responsibilities and authority levels as documented in their job description and HSE Manual
- Treat people as THEY NEED to be treated.

Chief Executive Officer:

The Chief Executive Officer is ultimately responsible for the health, safety and welfare of all personnel working at Company installations, facilities and offices. Specific responsibilities include:

- Establishing and supporting the Company Safety Vision.
- Reviewing and giving approval of the Company Quality, Health and Safety, and Environmental Policy Statements applicable to worldwide operations.
- Give final approval of the necessary resources to maintain and improve the HSE performance throughout Company operations
- Attend corporate QHSE Steering Committee meetings and participate in regular review of overall HSE performance to ensure effective HSE plans are in place to achieve the Company Safety Vision
- Ensure that the value place on HSE is never compromised and safety is placed on at least and equal footing to operations performance.

Chief Operating Officer

The Chief Operating Officer is responsible for the day-today operations of the Company. Specific responsibilities include:

- Review of critical incidents with line management to ensure appropriate lessons are learned and adequate action plans are implemented
- Review of HSE indicators to ensure preventive action implemented are providing adequate results
- Responsibility of safe and efficient operation in worldwide operations
- Ensure that adequate resources are dedicated to effectively support line management with regard to HSE issues in worldwide operations
- Review and give approval of the Company Quality, Health and Safety and environmental Policy Statements applicable to worldwide operations.
- Participate in the annual review of HSE performance to identify gaps and any needed modification of HSE plans to achieve the Company Safety Vision

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- Issue guidelines to the Business Units regarding their HSE plans and give final approval of those plans
- Ensure implementation of Company HSE policies and procedures in worldwide operations

Vice President QHSE

The responsibilities of the VP QHSE include:

- Ensuring adequate resources are available to support Business Unit Vice presidents on HSE issues that are applicable worldwide
- Participation in the annual review of HSE performance to identify gaps and any needed modification of HSE plans to achieve the company Safe Vision
- Review and give approval of Company QHSE policies applicable to worldwide operations
- Responsibility for the activities of the QHSE Department to achieve global QHSE objectives

Business Unit Vice President (AMU)

The Senior VP North and South America Business Unit is responsible for managing Transocean's offshore activities in the Americas. Specific responsibilities include:


- Participation in the annual review of HSE performance to identify gaps and any needed modification of HSE plans to achieve the Company Safety Vision
- Ensure that adequate resources are dedicated to effectively support line management with regard to HSE issues within the Business Unit
- Assist with analysis of incidents as required
- Provide authorization to Business Unit, Division, Sector and Branch department heads for development of respective manuals
- Establish approval authority limits or policies, procedures and standards applicable only within the Business Unit
- Assure implementation of Company HSE policies and procedures in their area of operations
- Support and monitor installation HSE plans to achieve the Company Safety Vision
- Recognize effective performance and execution of installation HSE plans

Director Assets (AMU)

The Director of Asset Management is responsible for the management of assets in accordance with Transocean policies and procedures. He coordinates with the Unit Director of Operations Performance in establishing shared goals which support the Transocean vision and mission. He reports to the Vice Presidents of Asset Management and the Business Unit Sr. Vice President. Specific duties include but are not limited to:

- Acting as champion within the Unit to develop an effective rig safety and asset management culture
- Communicating clear expectations and goals to the Asst Management organization

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- Ensuring that assets are maintained in accordance with the assets maintenance plan and budget
- Coordinating with the Director of Operations and Performance on a regular basis to discuss significant rig maintenance and equipment issues as well as sharing planning, goals and objectives to be communicated to the Asset and Performance teams
- Ensuring the implementation of the approved long term strategy for the class of assets
- Implementing various plans and targets driven by Corporate in particular for the respective class of assets
- Ensuring that the Unit has access to the necessary subject matter experts to support asset types and locations
- Supporting division Manager and Operations-Manager --Performance in their role to provide client service delivery for all asset management related matters
- Assisting Division Managers and Operation Managers-Performance in maintaining client relations
- Communicating with Unit Director --Operations and Performance any operational requirements which may potentially require rig modifications or installation of new equipment
- Assisting Unit Director Human Resources in selecting and recruiting personnel for asset management positions
- Approving the assignment of Asset Management personnel (Asset Manger and up) within the Unit

Division Manager


The Division / Sector Manager is responsible for managing resources and support to offshore rig operations and ensuring adherence to the Company's policies and procedures, mandatory regulations and applicable codes and industry guidelines. He is also responsible for establishment and maintenance of a productive business relation ship with clients, ongoing marketing efforts, contract negotiations and contract administration. He reports to the Business Unit Vice President. Specific duties include but are not limited to:

- Ensuring that company and area policies are actively pursued and goals are achieved by area personnel
- Ensuring that the department is properly staffed with qualified and trained personnel
- Managing by demonstrating leadership, motivating, planning, feedback and delegating as appropriate
- Coordinating with QHSE and HR departments in setting standards for employment, training and career planning of department employees
- Advising management on new innovations and technology in the offshore drilling field.

Operations Manager Performance

The Operations Manager Performance is responsible for the provision to deliver rig based well construction services and contract execution with the client in accordance with Transocean's core processes and performance standards. He coordinates and collaborates with the Operation Manager Assets in establishing shared rig goals which support the delivery of well construction services. He leads by example and show visible demonstration of Transocean Core Values. He reports directly to the Division / Sector Manager and functionally to the Unit Director of Operations and Performance. Specific duties include but are not limited to:

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- Reviewing and monitoring rig specific HSE plans
- Ensuring adequate resources are applied to address HSE risks
- Ensuring Emergency Response Plans are maintained up to date and that performance and emergency response is maintained through effective drills
- Reviewing and approving Request for Exemptions prior to submitting to Division Manager
- Reviewing and monitoring well construction progress to ensure proposed well design is being executed properly
- Ensuring rig operating procedures, work processes and rig equipment/systems are operated within performance criteria
- Ensuring Operations and Performance related policies and procedures are implemented
- Providing oversight to Rig Manager-performance to ensure vessel certification is maintained up to date
- Ensuring delivery of all rig based services including but not limited to well construction
- Identify and communicate to Operation Manager-Asset operational requirements which may potentially impact proposed rig modifications, design and installation of new equipment
- Ensuring key rig personnel are trained, competent and licensed in all safety critical areas including marine licensing, DPO, Management of Major Emergency training, Well Control, Stability and Ballast Control
- Communicating with Operation Manger Asset on any recommendation to address specific rig operation issues or optimizing rig operations b contributing to the development of annual rig operating budget and capital improvement budget

Operations Manager Assets

The Operations Manager Assets is responsible for the management of assets in accordance with Transocean policies and procedures. He coordinates and collaborates with the Operations Manager performance in establishing shared rig goals which support the effective delivery of well construction. He reports to the Division Manager and functionally to the Unit Director of Asset Management. Specific duties include but are not limited to:

- Supporting rig specific HSE plans with Rig Manager Assets
- Coordinating with Operations Manager Performance on a regular basis to discuss rig maintenance and equipment issues, as well as shared planning, goals and objectives to be communicated to the rig Asset and Performance teams
- Ensuring that assets are maintained in accordance with the Division asset maintenance plan and budget
- Ensuring Asset Management related policies and procedures are implemented within the Division
- Reviewing resource requirements for overdue critical maintenance and major maintenance with the Rig Manager – Assets to ensure availability
- Ensuring that the Maintenance Management System is understood by all
- Ensuring that Hardware and PMAA audits and assessments are carried out and that corrective action are scheduled and completed
- Ensuring Key Asset Personnel are mentored, trained , competent and receive any necessary specialist training

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Rig Manager Performance

The Rig Manager Performance is responsible for contractual and regulatory compliance, project coordination and management for all activities associated with operations of the MODU. He monitors safety performance and maintains adherence to all mandatory regulations and to company & industry codes and guidelines. He reports to the Operations Manager Performance. Specific duties include but are not limited to:


- Developing rig specific HSE plans with rig supervisors
- Participating in HSE incident analysis and ensuring corrective actions to improve HSE performance are developed and closed out
- Coordinating and directly supporting the Offshore Installation Manager during Major Emergency events
- Attending DWOP and CWOP reviews and providing recommendations to clients to optimize rig and well operations to achieve safe performance efficiencies
- Ensuring rig operating procedures, work processes and rig equipment/systems are operated within performance criteria
- Participating in HAZID and HAZOP review by providing expert advice related to rig and well operation performance standards
- Reviewing and approving rig specific operating procedures (except for maintenance tasks)
- Ensuring applicable mooring system analyses and riser analyses are completed and received from HQS Engineering for each location
- Ensuring rigs housekeeping, rig/deck organization and overall appearance is maintained
- Effectively monitoring and evaluating client concerns and responding quickly to meet customer needs and resolving problems
- Ensuring rig equipment and systems are operated within technical and design capabilities
- Ensuring people development and succession planning is established for performance personnel on the rig
- Understanding the OJT program and ensuring it is being applied effectively to support development and succession plans for performance personnel at the rig site
- Communicating with Rig Manage Asset on any recommendations to address specific rig operation issues or to optimize rig operations by contributing input to the development of annual rig operating budgets and capital improvement budgets

Rig Manager Assets

The Rig Manager is responsible for contractual and regulatory compliance, project coordination and management for all activities associated with operations of the MODU. He monitors safety performance and maintains adherence to all mandatory regulations and to company & industry codes and guidelines. He reports to the Rig Operations Manager. Specific duties include but are not limited to:

- Supporting rig specific HSE plans with asset department supervisors
- Supporting the Rig Manager Performance during Major Emergency events
- Ensuring a continuous assessment of the rig is completed and action plans are prepared to assure asset integrity
- Ensuring that an adequate level of inventory and consumables is maintained on the rig to meet day to day requirements and the emergency repair of safety and operations critical equipment
- Preparing plans for major shutdowns and out of service periods
- Coordinating regulatory, class and flag state surveys to ensure that out of service time is minimized

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- Approving the procurement of materials and services required for the maintenance of the rig in line with authority limits
- Ensuring that the Company Maintenance Management System is operated in accordance with company procedures
- Ensuring that Maintenance Key Performance Indicators are reviewed monthly and rig specific improvement plans and risk assessments are developed to address any maintenance issues
- Communicating improvement plans to Operations Manager-Asset
- Reviewing, monitoring, investigating and following up and closing out any Operational even t Report for assets that impact the operation of the rig.
- Providing direct support to the rig Manager - Performance in situations involving significant equipment downtime or equipment /operational incidents
- Ensuring new or replacement equipment is in compliance with company equipment standards
- Ensuring objective and meaningful appraisals of direct reports and asset personnel are completed and development areas are followed up

Offshore Installation Manager

The Offshore Installation Manager manages the manpower and resources of the MODU to achieve optimum performance so as to ensure the well program is carried out in a safe, efficient and productive manner. He promotes and ensures that all Company policies and procedures are communicated to an understood by all personnel onboard. He also ensures compliance with flag states and certifying regulatory body requirements. He reports directly to the Rig Manager - Performance

Installation Supervisors

Supervisors have the responsibility to:

- Participate in the development of installation HSE plans to achieve the Company Safety vision
- Implement HSE policies and procedures within their departments
- Ensure crewmembers are properly trained and fully understand plans for upcoming tasks and their responsibilities within those plans
- Provide advice and guidance to crewmembers and act as a positive role model
- Take a leading, participating role in the Performance Monitoring Audit and Assessment (PMAA)
- Conduct and facilitate effective HSE meetings

2.2.1.2 Reviews of Management Organization

Transocean's offshore (installation level) management organization, generally, can be considered static or fixed whereas the onshore organization is dynamic, subject to change and, based on periodic business reviews, has been changed to enable the Company to meet operational, safety and environmental goals. Management at each level of the organization is responsible for the managing the organization of that specific level whether Corporate, Business Unit or Division/Sector and in turn, is responsible to the level directly above. Executive Management (Corporate) is ultimately responsible for the entire management organization of the company and is responsible to the Board of Directors.

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2.2.1.3 System Management and Review Team (SMART)

Changes to the Company Management System are formally captured, reviewed, communicated and executed through the System Management and Review Team (SMART) process.

Proper utilization of the SMART Process ensures changes to the Company Management System are clearly understood by people at each level by:

- Developing people's ownership and commitment to change
- Sharing and capturing lessons learned to develop and execute change effectively
- Enabling the change to be efficiently managed and implemented utilizing available resources

The SMART process enables people at different levels in the Company (Corporate, Region and Installation) to propose and implement changes to the Company Management system through the individual Core Management Functions.

Overview of SMART Process

The SMART process is summarized as follows:

SMART defines the process for communicating and participating in the review, feedback, commissioning (where applicable) and implementation of change to the Company Management System upon a Corporate or Region SMART request.

SMART provides the means to log, track, report and communicate the status of proposed Region and/or Corporate changes to the Company Management System.

SMART provides feedback to the Corporate and Region QHSE Steering Committees as well as to the Corporate Assurance and Advisory Services Department on the changes to the Company Management System.

The SMART process addresses review, communication and execution of change between the following groups:

- Corporate to Corporate Departments
- Corporate to Region Departments
- Within a Region Organization
- Region to Corporate Departments

The two ways to apply the SMART process involve either a Region or Corporate request.

Region SMART Request – A request for change and/or clarification regarding the Company Management System originating from the Region (Region, District and/or Installation) and requiring action from Corporate department(s).

Corporate SMART Request - A request for change to the Company Management System (including business processes) originating from Corporate departments that requires Region(s) to review, provide feedback, commission (where applicable) and implement change.

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2.2.1.3 Document Management

Transocean maintains a document structure of the Company Management System to ensure that management expectations are communicated, understood and implemented effectively.

The Management system Document organization describes the hierarchical organization represented by Corporate, Region, Installation and the Document Classifications to be applied. This organization describes the relationship of documents within each corporate Department Management System. It provides employees and organized approach to recognizing which corporate Departments are responsible for particular Policies and Procedures and for locating and retrieving this information easily.

There are three levels within the documents organization:

Level 1 – Company Management System Manual

- Governing Manual

Level 1A Corporate Department Management System Manual

- Policies and Procedures

Level 1B Corporate Department Support Documents

- Procedures
- Standards
- Handbooks
- Recommended Practices
- User Manuals
- Advisories
- Alerts
- Bulletins

Level 2 – Region Manuals consist of Region specific documents which follow the Management System Document Classification System and do not conflict nor contradict Level 1A and 1B Corporate documents. Level 2 documents are those deemed by the Region Manager necessary to address local specific business process requirements, local regulatory authorities and/or local client requirements not already represented in the Corporate Levels 1, 1A, and 1B.

Level 3 – Rig procedures are Rig specific documents which describe the steps, activities, tasks, and work processes required to safely, responsibly, consistently and reliably execute work to meet Corporate, Region, Client, operation and regulatory requirements.

Examples of Level 3 documents are:

- Rig Operating Procedures (ROP) or Task specific THINK procedures (TSTP),
- Marine Operations Manual
- Shipboard Oil Pollution and Emergency Plan
- Emergency Response Plan
- Environmental Management System
- Rig Specific Maintenance Tasks
- Safety Case, Operations Integrity Case or Major Accident Hazard Risk Assessment

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The Company has control requirements for the revision, creation, review, approval, distribution, notification, withdrawal and retention of documents related to the management system.

Revisions / Use of SMART Monitor

Revisions to manuals are identified, logged, tracked, and reviewed throughout the company by the use of the "System Management and Review Team" (SMART). A corporate SMART Monitor is maintained by Corporate Quality Services for questions, comments and feedback related to Level 1, 1A and 1B documents. A Region SMART Monitor is maintained at the Region level for all requests for change, comments and questions that require action and originate at the Region level for the Corporate and region Management System.

Authorization, Development and Approval of Documents

Level 1 -- Executive Management (Corporate Department Vice Presidents) determine the development of any new documents to support the Corporate department Management system and provide authorization. Corporate Department Heads ensure specified manuals are developed, for development of corporate manuals. Executive approval is required for all Corporate Management System Manuals.

Level 2 -- Region Managers determine the development of any new documents to support the Region Department Management System and provide authorization and approval for all Region Manuals that apply to the respective Regions where they originate.

Level 3 -- Offshore Installation Managers (OIMs) are responsible for the development of Level 3 documents according to defined document control requirements. Rig Managers approves Level 3 documents as prescribed.

Commissioning and Implementation of Revised Documents

Revisions to manuals are identified, logged and tracked throughout the review and approval process prior to dissemination to end users.

Commissioning is the step taken to ensure key changes are communicated effectively and is taken only when the changes will have a significant impact on people, the environment or activities.

Implementation involves applying specified changes in the workplace to achieve compliance. Implementation is required to ensure that end users have been adequately notified and understand the changes that may impact their operations or activities.

2.2.1.4 Workforce Participation

Transocean recognizes that the proactive involvement of all personnel is essential to devise, implement and maintain an effective safety program. The involvement of personnel begins with the offshore induction orientation which makes it clear to the employees that he is expected to play his part and be involved in the effort to achieve safe operation.

All Company personnel at all levels of the organization have the responsibility to comply with policy, foster positive, proactive attitudes and behavior with regards to HSE. QHSE Responsibilities are detailed within the Offshore Job Descriptions for each position and in the Health and Safety Policies and Procedures Manual.

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Transocean recognizes effective HSE performance in order to motivate personnel to take a proactive role in all HSE efforts and processes. These proactive efforts are demonstrated by attendance at pre-tour and weekly safety meetings, QHSE Steering Committee meetings and participation in the **THINK** Planning Process, the **START** Monitoring Process and the **FOCUS** Improvement Process. Personnel also become involved in HSE efforts through participation in the Mentoring Program and the "buddy system".

2.2.1.5 MODU Organization and Management Responsibilities

Organization

Onboard the Deepwater Horizon the Offshore Installation Manager (OIM) has the overall responsibility for the command, activity co-ordination and control of the management, organization and support structure. He is directly supported by supervisors and department heads. A chart of the Deepwater Horizon organization is included at the end of Section 2.

Responsibilities

Offshore Installation Manager

The OIM's basic functions are to manage the manpower and resources of the rig to achieve optimum performance so as to ensure the well program is carried out in a safe, efficient and productive manner. He also promotes and ensures that Company policies and procedures are communicated and understood by personnel onboard. His responsibilities include:


- Taking an active part in weekly safety meetings, quality improvement plans and all other Company safety management systems
- Ensuring new arrivals receive a full safety briefing and induction
- Ensuring that required drills are regularly conducted
- Ensuring that a high standard of hygiene and housekeeping is maintained
- Ensuring that the Emergency Response Plan is in place and understood by all personnel
- Ensuring compliance with Flag State and certifying Regulatory Body requirements
- Managing the rig's training program to ensure all personnel are competent to perform their allocated job
- Ensuring pre-job meetings are carried out for hazardous situations and non-routine operations
- Monitoring and supervising testing of critical equipment and systems and ensuring operational limits and parameters are observed

Master

The basic function of the Master is to provide marine support to the industrial operation of the vessel. He exercises authority and discretion to take whatever action is required for the safety of the crew, vessel and protection of the environment. His responsibilities include:

- Ensuring the rig is seaworthy at all times and maintained/operated in accordance with guidelines in the Marine Operations Manual
- Supervising the maintenance of deck equipment, fire fighting and life saving equipment, lifting equipment and maintenance of the rig's exterior
- Ensuring conformance to local/international laws relating to the rig's operation and strictly complying with current pollution regulations

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- Exercising overall control in maintaining the watertight integrity of the rig, loading and storage of consumables, securing of supply vessels and safe helideck operations
- Ensuring the rig is maintained within normal safe limits of intact and damaged stability, shear stress and bending moments
- Supervising the various stage of rig moves and dynamic positioning operations
- Administering the rig's continuous surveys and renewal of statutory certificates as required by classification society and statutory regulations

Senior Toolpusher / Toolpusher

The basic functions of the Senior Toolpusher are to supervise drilling operations and associated activities, planning and scheduling in accordance with the well program and ensuring operations are carried out in a safe, efficient and productive manner. His responsibilities include:

- Ensuring pre-job meetings are carried out for all non-routine operations
- Keeping the OIM informed of all events and occurrences likely to cause or have caused a deviation from the operational schedule
- Partaking in daily operations meetings
- Reviewing and approving all drilling related work permits
- Ensuring well control requirements are in place
- Coordinating third party activities
- Ensuring subordinates understand and apply guidelines of the Health and Safety Manual and rig specific procedures
- Actively participating in weekly safety meetings and all other safety management systems
- Ensuring that required drills are regularly conducted
- Ensuring a high standard of hygiene and housekeeping is maintained onboard
- Assisting in training to ensure the competency of all personnel

Maintenance Supervisor

The basic function of the Maintenance supervisor is to supervise and control the maintenance and repair of mechanical, electrical, electronics, subsea and information technology equipment on the rig. His other responsibilities include:

- Ensuring that the permit to work to work and isolation systems are strictly adhered to the maintenance department
- Informing the OIM and other department heads of any technical problems that may affect the safe operation of the rig
- Carrying out classification surveys
- Liaising with the OIM on installation and use of third party equipment
- Implementing follow up requirements to audits
- Demonstrating commitment to safety policies through leadership
- Ensuring requirements for environmental protection are complied with
- Participating in safety meetings and pre-job meetings
- Reporting incidents, potential hazards or abnormal situations
- Preparing risk assessments for hazardous operations
- Mentoring, developing and training crew members

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Senior Subsea Supervisor

The basic function of the Senior Subsea is to supervise maintenance and repair of all subsea BOP and riser systems, multi-plex electro-hydraulic control systems and all associated surface equipment and systems. His other responsibilities include:

- Ensuring Supervisor is informed of any issues related to the subsea equipment which may affect the safe and efficient running of operations
- Ensuring that the permit to work system is in place and followed
- Ensuring regulatory requirements for environmental protection are complied with
- Participating in safety meetings and per-job meetings
- Preparing risk assessments for hazardous operations
- Reporting incidents, potential hazards or abnormal situations
- Ensuring hygiene and housekeeping standards, are maintained
- Mentoring developing and training crew members
- Supervising, instructing and training subordinates

Senior Materials Coordinator

The basic functions of the Senior Materials Coordinator are to coordinate materials requisitions, organize and control the warehouse and maintain inventory levels while ensuring warehouse activities are carried out in a safe and prudent manner. His other responsibilities include:

- Demonstrating commitment to safety policies through leadership and guidance
- Participating in weekly meetings and other safety management systems
- Ensuring the cleanliness and housekeeping of the warehouse area is maintained
- Supervising and training subordinates

Rig Safety Training Coordinator (RSTC)

The basic functions of the RSTC are to work with rig supervisors to ensure compliance with the Safety Management System and provide in-house training per the Company training matrix. His other responsibilities include:

- Maintaining safety training and OJT personnel record
- Supervising the OJT program
- Performing onboard rig-specific orientations
- Assisting in conducting audits
- Assisting in and planning safety meetings
- Conducting emergency preparedness training
- Conduct random inspections of safety equipment
- Ensure the permit to work system is audited for compliance

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2.2.1.6 Regulatory Requirements

It is Transocean policy that all installations must comply with applicable Classification Society Rules, flag State requirements and Coastal State regulations.

Regulatory Compliance is part of the Corporate Engineering and Technical Services Department and provides guidance and support for regulatory compliance, certification and survey issues that affects field locations and the MODUs they operate. The department maintains an active professional relationship with Class Societies, Flag State and Coastal State Administration officials and monitors proposed changes to regulations and codes of practice and ensures that the appropriate personnel are informed. The department also participates as requested in industry association meetings relating to pending matters.

Regulatory compliance maintains Class, Flag state, and coastal State regulatory documentation and a Regulatory Compliance library. They monitor the validity of vessel certification and advise vessel and area office management as necessary.

Regional Field Support assists Rig Managers in developing survey requirements (timing and work scope) liaises with authorities as required, give guidance on outstanding recommendations and non-compliances and assists with any follow up and close out.

Rig Managers are responsible for ensuring that the installations are maintained and operated in accordance with applicable regulations. The Rig Managers are also responsible for ensuring that installations are made available and prepared for required surveys and inspections in good time before the expiration of certification. Further, the Rig Manager is responsible for ensuring that conditions placed on the installation as a result of surveys inspection and or audits are performed or met within the due dates.

The OIM or designate is responsible to schedule surveys and inspections and inform the Rig Manager when the survey window begins and any requirements that must be met for the surveys and inspections. He plans the surveys and inspections and ensures that appropriate assistance is given to surveyors, inspectors and audit teams. It is also his responsibility to advise the Rig Manager on non-compliances and outstanding recommendations.

2.2.2 Resources

2.2.2.1 HSE Resources and Support


The HSE Department is independent of line management and provides support and advice on all matters related to HSE

The role of HSE includes three main areas, namely the Corporate HSE Policies and Procedures, HSE support for global operations which includes deployment of Corporate Operations Safety Advisors where needed to provide the most benefit to the Company.

Health and Safety Policies and Procedures Manual

- Communicate clear HSE expectations through the Corporate HSE Policies and Procedures.
- Review and act upon HSE related SMART feedback to ensure effective understanding of expectations and capture lessons learned.

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- Participating in and evaluating industry best practices for continuous improvement.

HSE Support for Global Operations

- Facilitate and manage ISM and ISPS aspects at the corporate level.
- Facilitate and coordinate the follow up of critical incident analysis as requested.
- Communicate critical safety issues through HSE Alerts and various safety related reports.
- Communicate lessons learned from Regional QHSE.
- Manage the Med-Track Program in conjunction with Human Resources and Risk departments.
- Corporate Medical Advisor oversees management of medical Topsides Support in the Regions.
- Corporate Medical Advisor directly supports Medical Emergency Response Plans.
- Develop and/or review, support and carry out HSE related training.
- Monitor worldwide health, safety and security risk issues and communicate pertinent matters to affected personnel.
- Monitor environmental legislation and communicate pertinent matters to affected personnel.
- Monitor global environmental performance.
- Work with Procurement and Standards reviewing and evaluating potential HSE related products.
- Review HSE lessons learned from **FOCUS** and communicate them through SMART to improve the Company Management System.
- Maintain Corporate QHSE web-site and provide up-to-date information about health, safety, security and environmental issues.
- Monitor Key Performance Indicators and review and analyze HSE trends to communicate recommendations to Corporate and Region Management.
- Issue HSE Reports, Monthly Incident Rate Chart, Weekly HSE Performance and Excellence Graph.
- Provide HSE information and statistics internally, to industry and to clients.
- Corporate Operations Safety Advisors
 1. Teaching and coaching Region and Corporate management in how to perform a Performance Monitoring Audit and Assessment at Corporate, Region and Installation levels.
 2. Providing coaching in key company process, **THINK** and **START** individually and together (Management of Change)
 3. Teaching and coaching individuals on safety leadership and accountability
 4. Assisting and coaching incident analysis as requested by Region Management
 5. Evaluating the planning and readiness of installation Major Accident Hazard Risk Assessments, Security Plans, Emergency Response Management and assisting implementation and performing HSE training as requested
 6. Participate in or carry out Performance Monitoring Audits and Assessments at Corporate, Region and installation levels when specifically requested and assisting in development of corrective action plans and follow up to close out those plans

2.2.2.2 QHSE Steering Committees

The Company QHSE Steering Committee System provides a forum by which personnel from all levels of management and the work force can be:

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- Involved in developing, reviewing and revising policies and procedures.
- Involved in developing and setting health, safety and environmental goals.
- Informed and knowledgeable of the health, safety and environmental efforts and activities of the Company.

The system empowers all levels of the organization to be responsible for taking action to prevent injuries, occupational illnesses, environmental incidents and property damage to achieve an incident free environment.

QHSE Steering Committee Meetings are held at the Corporate, Region/District and Installation levels.

Corporate QHSE Steering Committee

The Corporate QHSE Steering Committee must meet as required, at a minimum of two times a year.

Suggested Composition

- President and Chief Executive Officer
- Executive Vice President and Chief Operating Officer
- Vice President QHSE
- Senior Vice President General Counsel and Corporate Secretary
- Vice President Marketing
- Vice President Human Resources
- Vice President Engineering and Technical Services
- Vice President Performance and Technology
- Director QHSE Services
- Manager Quality Services
- A minimum of one offshore personnel
- Any relevant invitees

Responsibility:

- Provide guidance and assistance to Corporate QHSE Services.
- Review and approve Company QHSE policies and procedures.
- Set Company QHSE goals.
- Review minutes of Region/District QHSE Steering Committee meetings, as appropriate.
- Review newly approved exemptions from Company QHSE policies and procedures.
- Review minutes of installation QHSE Steering Committee meetings as deemed appropriate by Region/District Steering Committees.
- Forward minutes of the Corporate QHSE Steering Committee meetings to the Region/District QHSE Steering Committee, for review and distribution to installation QHSE Steering Committees.
- Review QHSE performance.
- Review Regional audit, assessments, compliance, non-conformity tracking and close out status.
- Any other business relating to QHSE matters.
- Review security issues related to planning, mitigation and response.

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Region/District QHSE Steering Committee

Region/District Steering Committee must meet as required, at a minimum of two times a year.

Suggested Composition

- Region/District Manager
- Operations Manager
- Rig Managers
- HSE Manager - Region/District
- Other Region/District personnel as designated by Region Manager
- A minimum of two offshore personnel
- Any relevant invitees

Responsibility:

- Provide guidance and assistance to the Region/District QHSE department.
- Review and approve Region/District QHSE policies and procedures.
- Set Region/District HSE goals to support Corporate QHSE goals.
- Forward minutes of the Region QHSE Steering Committee meeting to the Corporate QHSE Steering Committee for review.
- Review minutes of Corporate QHSE Steering Committee meetings.
- Review minutes of installation QHSE Steering Committee as appropriate.
- Review Region/District QHSE performance, e.g. audit reports, incidents, client feedback, etc.
- Review status of audit follow up/close out of non-conformities for all installations within that Region.
- Review newly approved exemptions from Company HSE policies and procedures.
- Review security issues related to planning, mitigation and response.

Installation QHSE Steering Committees


Installation QHSE Steering Committees must meet as required to allow each crew the opportunity to attend a minimum of two meetings per year.

Suggested Composition

- OIM/Master
- Department Heads
- Rig Safety Training Coordinator (where applicable)
- Safety Representative as designated by the OIM/Master
- A minimum of two non-supervisory personnel
- Any relevant invitees

Note: A minimum of one representative from each department on the installation will be present at the QHSE Steering Committee meeting.

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Responsibility:

- Review Company QHSE policies and procedures.
- Set installation QHSE goals to support the Corporate and Region/District QHSE goals.
- Ensure installation QHSE goals address both incident rates and proactive measures such as: housekeeping, **THINK**, **START** and **FOCUS** processes, safety meetings, etc.
- Review minutes of Corporate and Region/District QHSE Steering Committee meetings.
- Forward minutes of the installation QHSE Steering Committee meeting to the Region/District QHSE Steering Committee for review.
- Review and discuss QHSE improvement opportunities for the installation, Region/District and Company.
- Post minutes of the Corporate and Region/District QHSE Steering Committee meetings in an appropriate area suitable for review by all personnel
- Review QHSE performance.
- Review newly approved exemptions from Company QHSE policies and procedures.
- Review security issues related to planning, mitigation and response.
- Review status of installation's audit follow up/close out of non-conformities.
- Tracking Action Items and Documentation
- Action items from meetings at each level are entered into Transocean's planning and tracking program, **FOCUS**.

The Health and Safety Policy and Procedures Manual prescribes retention periods and file locations for both Steering Committee agendas and minutes.

2.2.2.3 Clients, Client's Third Parties and Equipment Installations

Where possible, a proactive approach to assess the suitability of client and subcontractor personnel and equipment is taken to ensure an acceptable standard of personnel and/or equipment. The OIM is required to be notified before any client or subcontractor personnel or equipment is brought onboard the rig.

Clients and their subcontractor personnel must be encouraged to participate and take an active part in the Company's HSE system including the **THINK**, **START** and **FOCUS** Processes. All permanently assigned subcontractors must be introduced to the Colors Process and encouraged to take an active part in the process.

Company subcontractor personnel must be assessed, monitored and recognized for working to a system equivalent to the HSE system of the Company and must perform a risk assessment appropriate to planned tasks. Departmental supervisors must monitor subcontractors working in their area of responsibility to ensure they are working to such as system and are performing appropriate risk assessments and have adequate control measures in place for all tasks.

Subcontractor personnel performing specialized work must be able to demonstrate completion of industry recognized training applicable to the type of work performed and the OIM must approve these personnel to perform the work.

The placement, installation and operation of any client or subcontractor equipment must have prior approval from the OIM or designee and the approval does not preclude the application of the Permit to

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Work policy. In addition, qualified personnel, using an appropriate checklist inspect the equipment for the OIM's approval. Equipment must be maintained to an acceptable standard while onboard.

Interfaces with Clients

Prior to commencement of drilling operations, HSE management personnel from the Region level meet with Client HSE personnel to develop a Bridging Document for MODU site-specific operations.

The purpose of the Bridging Document is to demonstrate that interfaces between the two HSE management systems covering well and site operations are clearly stated, understood and agreed upon by all parties. The Bridging Document clearly defines roles, responsibilities, organizations, operating procedures and reporting structures for all personnel.

At a minimum, the Bridging Document addresses:

- Health Policies
- Risk Management
- Emergency Response
- Management Procedures
- Operational Procedures
- Design, Construction and Commissioning
- Environmental Management

It is the responsibility of the Offshore Installation Manager to ensure that the identified interfaces are properly communicated to all personnel on the MODU and that the interfaces are properly monitored

In addition to the Bridging Document, Transocean utilizes Service Quality Appraisals (SQA) to facilitate communications between the Client Representative onboard and the OIM as well as the Client representative onshore and the Rig Manager.

The OIM meets each day with the Client Representative and determines any service quality issues to address. An SQA form is filled out and client feedback is communicated to management and MODU department supervisors. FOCUS planning and tracking software is used to ensure action items are tracked, followed-up and closed out.

Client Third Parties

Client Third Parties as appropriate are included in pre-spud meetings where client and contractor issues and responsibilities are identified and addressed. Client third party responsibilities are included in the Bridging Document as appropriate. All third party personnel undergo either the long term or short term rig induction and while onboard the rig are subject to and monitored for compliance with Company policies and procedures.

2.2.2.4 Sanitation, Hygiene and Catering

It is Transocean policy that accommodation, food preparation and service areas are maintained to high standards of sanitation and hygiene and that smoking is permitted in designated areas only. This is to ensure that all personnel are adequately protected from the harmful effects of unsuitable sanitation/hygiene practices and unfiltered second hand smoke. The OIM has overall responsibility for the

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implementation of this policy and he is directly supported by the Camp Boss / Chief Steward and the Installation Medical Person.

Transocean's policy addresses:

- Inspections
- Training of catering personnel
- Food transportation
- Food storage
- Food preparation
- Food protection
- Food leftovers
- Cleaning and sanitizing utensils/equipment
- General cleanliness of the accommodations
- Personal hygiene
- Smoking limitations

The Camp Boss is responsible for joint conduct of weekly sanitation and hygiene inspections. He is also responsible for the training of all catering personnel and ensuring that a system is in place to meet the requirements of the food handling and sanitation policy.

The RSTC is responsible for joint conduct of the weekly hygiene and inspection and inspection of all food items arriving on the rig.

2.2.2.5 Medical Support

The hospital area of the Deepwater Horizon is outfitted with six berths and office and a triage table. It is staffed by a qualified paramedic who holds current certification and is onboard at all times and on call on a 24 hour basis.


The outfitting of the hospital is in accordance with Transocean's standards which have been approved by the Corporate Medical Advisor. All equipment is maintained in a state of operational readiness at all times and all major equipment is function tested every crew change.

The Medic is responsible to provide first aid and medical assistance as necessary. For patient treatment the Medic follows Transocean Medical Protocols which have been approved by the Corporate Medical Advisor. These protocols support the paramedics their decision making.

Transocean retains the services of an MD approved by the Corporate Medical Advisor to provide Topside Support in the Region. Topside Support provides medical advice and resources which support the decision making and medical treatment provided by the Medic. Topside support communicates guidance, advice and/or authorization to the Medic upon requests for any of the following:

- Medical assessment related to monitoring and treatment of patients to determine if they should remain onboard or be non-emergency medically evacuated from the installation
- Medical assessment related to monitoring and treatment of patients to determine if they should remain onboard or be emergency medically evacuated from the installation
- Review and validate the urgency for disembarking personnel
- Authorization of specified medications

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- Advise on specified advanced medical procedures
- Facilitate logistics to medically evacuate patients

In addition, the Topsides Support, Region Management has identified Local Medical Providers in the area of operations. The Local Medical Providers (approved by the Corporate Medical Advisor) are responsible for providing local medical support onshore.

The Offshore Installation Manager is in complete charge of arrangements for medical evacuation as advised by the Medic and/or Medical Director. The OIM coordinates evacuation with the Client Representative.

The Rig Manager is responsible to ensure Topsides Support's role is integrated into the rig's Medical Emergency response Plan to ensure clear and effective communications between the MODU, local management and the emergency medical alarm center. Appropriate emergency evacuation drills are conducted to ensure timely and effective response.

Medical arrangements onboard the Deepwater Horizon are subject to auditing by the Region's Manager of Medical Services and/or Topsides Support using the Company Standard Medical Audit. Audit frequency is determined from a system of risk ranking.

2.2.3 Competence and Training

2.2.3.1 Recruitment and Selection of Drilling Contractor's Personnel

The Transocean policy on recruiting is to provide for the recruitment of the most qualified candidates for employment and nothing in the Company's policies will overrule any government regulations.

The primary mean of recruiting is through the company's website. There, positions are advertised and applicants are able to obtain an overview of the Company and submit resumes.


Transocean has established a criteria of qualifications and competency levels for all offshore job positions based on the company's knowledge and experience, industry guidelines and statutory requirements.

During the recruiting process, the suitability of applicants for positions is assessed against these criteria (experience, industry/job-specific experience (including types of installations, equipment, water/well depths, etc.), and supplemental training, schools and certification and their skill level is matched to a particular job opening. Transocean also seeks personnel without offshore experience but with related industrial, maritime or military experience.

Applicants undergo an extensive background check before being brought in for interviews. They undergo a pre-employment physical including drug-screen and are assessed by an occupational therapist to ensure that they are physically capable of performing the job for which they have applied. Entry level candidates undergo an interview with a recruiter and skilled workers undergo an interview with a recruiter and operational personnel from their discipline whether marine, maintenance or drilling.

Upon hiring, all applicants are given a copy of their job description and sign a form acknowledging receipt of the same. The signed form is filed with their personnel records onshore.

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2.2.3.2 Induction and TOPs School


TOPs School (Training for Optimum Performance)

Transocean has established the TOPs school for new hires/entry level personnel to provide basic training and to familiarize them with life offshore and to introduce them to the Transocean Management System. The school normally runs for 11 days and consists of classroom work and practical hands-on experience. Attendees normally live in a dormitory situation to simulate living conditions on a typical rig. The primary instructors are highly experienced personnel chosen for their knowledge and competency. Ad hoc instructors from the North American region office are used for portions of the course and offsite training in offshore survival, rigging and firefighting is provided by contract companies. Attendees undergo a competency assessment and take a final examination at the end of the course and the results are forwarded to management.

The TOPs course outline is as follows:

- Course Orientation
- The Transocean organization and living CORE values
- Introduction to Colors
- Transocean Safety Requirements
- Life Offshore
- Personnel Basket Safety
- Surface Preparation and Painting
- No-drop Hand Tools and Power Tools
- Lessons Learned in Accident prevention
- Prevention of Back Injuries
- Emergency Equipment and Procedures
- Permit to Work
- Fall Protection
- Helicopter safety
- Offshore survival
- Rigging
- Pool Survival Exercise and Marine fire fighting
- Compensation and Benefits
- Safety Leadership
- International Safety Management
- Accident Prevention/Cause and Cure
- HazComm
- Overview of Subsea
- Stored Pressure
- Hands-on Training in Yard
- Yard tour and Practical Exercise in Rigging and Fall Protection

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2.2.3.3 Transocean Training Matrix and HSE Training

Personnel onboard the Deepwater Horizon are provided with HSE training in accordance to ensure they are adequately trained to perform their duties in the safest manner possible and to prevent incidents or injuries. The objectives of the Transocean training systems are to:

- Enhance individual capabilities
- Build and retain a skilled and effective workforce
- Improve organization performance
- Maintain professional, technical and management proficiency

In order to achieve these objectives, Transocean has developed a Worldwide Training Matrix for its offshore work force and the North American Region has developed a region specific matrix. The content of these matrices is based on meeting regulatory requirements and training needs identified by operations. All employees are provided with and required to successfully complete within a reasonable time frame mandatory training for their position. The training requirements within the matrix include On-the-Job Training (OJT) Modules and both internal and external shore-based courses. Specific courses may be required by the regulations of the country of operations, the Flag State of the installation or the client.

OJT modular training is a task based training program and addresses competency at each job level. It consists of computer-based training, DVD viewing, practical hands-on and supervisor-led instruction supported by an extensive library of in-house and out-sourced training materials. Web based access to the OJT program is available through the company intranet. The course of progression through the OJT program is to first complete the Induction and Safety Modules and then complete any job-specific module.

Shore-based internal training courses are instructor led and facilitated by the region. Shore-based external courses are out-sourced to external training providers and conducted at external facilities.

Discretionary training courses are approved only after compulsory training has been completed.

Training records for all positions on the training matrix are maintained within an electronic database which provides for efficient training administration, statistical analysis and easy accessibility by employees, supervisors and management. Non-compliances with training requirements are identified through the use of this database. The annual performance appraisal is also used to identify individual career development needs.

The development of new training and the revision of existing training is an on-going process shared between the Corporate and Region training departments and the departments associated with the subject matter. Training needs are identified by review of OJT feedback, and consultation with field personnel, regulatory bodies, QHSE managers, maintenance managers and operations managers.

Transocean maintains awareness of and monitors changes of training requirements of industrial, governmental and flag State regulatory bodies by attendance at meetings such as IADC, AMA, etc.

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Table of HSE Training

Subject	Affected Personnel	Location of Training
Pathogen Awareness	Person whose duties may bring them into contact with blood or bodily fluids	RSTC Toolbox
Periodic theoretical and practical refresher training	Installation Medical Person	Advanced Medical Care Course- Worldwide Training Matrix
Principles of food-borne illness	All food handlers	Catering Contractor
Transmission of communicable diseases	All catering personnel	Catering Contractor
Personal hygiene / First aid for choking		
Refresher for above at the discretion of the Region Manager	All catering personnel	Kitchen Hygiene and Safety RSTC Toolbox
Emergency drills /duties, Fire prevention, Fire fighting equipment associated with the galley, mess hall, accommodations and laundry areas	All catering personnel	Installation specific
Completion of the Task Risk Assessment Worksheet	Anyone using a Task Risk Assessment	Safety Leadership Training
Firewatcher Training	Anyone prior to being assigned as a Firewatcher	Firewatcher CD-ROM
Confined Space Awareness	Any personnel entering confined spaces	Confined space awareness – RSTC Toolbox /Practical skills – Installation specific equipment
Proper use of the installation specific confined space rescue and retrieval equipment	Responsible persons and the Emergency Response Teams	Installation Specific
Use of PPE	All Company personnel	Manufacturer's recommendations/instruction and Safety OJT Module
H2S Awareness Training	All Company personnel	Safety OJT Module
START	All Company personnel	Safety Leadership Training CD-ROM
Helicopter safety	All company personnel who travel to the rig by helicopter	Emergency Helicopter Abandonment Video
Defensive Driver Training	All personnel driving Company vehicles	Region specific training
Safe work practices associated with hand tools	All company personnel	Hands-on training provided on the rig
Ladder Safety	All company personnel	RSTC Toolbox
Energy isolation	All Company personnel who perform maintenance or	Electrical OJT Worldwide Training Matrix
Fall Protection Awareness	All company personnel	Awareness Training, RSTC Toolbox Practical skills with installation specific equipment
Fall Protection Competent Person	One person on board at all times	Region approved training
Confined Space Rescue Competent Person	One person on board at all times	Region approved training
Rescue From Heights Competent Person	One person on board at all times	Region approved training
Scaffold Training	All Company personnel that erect scaffolding	Region approved training

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2.2.3.4 Onboard Orientations and New Personnel

Onboard the Deepwater Horizon all personnel receive an HSE Orientation suitable for their work environment prior to commencing work/accessing a work site or during a visit. Two orientations are in place; one for new hires, first time arrivals or personnel who have not been on the rig for six months and a condensed version for personnel considered short term i.e. departing on the same day as arrival. The RSTT determines which orientation personnel are to receive prior to their arrival onboard. All personnel are given an orientation and during both types of orientations, critical safety information and site specific safety hazards are communicated by the RSTT. At the end of the orientation, the new employee receives and is required to sign an HSE Orientation Verification Card acknowledging that the required information was provided and explained and has been understood. This section gives an overview of the installation specific policy for full length orientations.

All personnel must receive information on the following: (unless receiving a Short Term Visitor Orientation)

- An overview of the core values, Mission Statement and Health and Safety Policy Statements to ensure understanding the importance of these documents and what they represent
- Information on current operations and the individual's obligation to interrupt the operation or raise Justifiable personal HSE concerns
- A written installation-specific "Welcome Onboard Card".
- Information on emergency signals and muster stations, station bills including roles and responsibilities.
- Explanation of emergency preparedness, which must include reference to donning instructions for life jackets, personnel escape equipment, smoke hoods, and PPE.
- Introduction to **THINK, START** and **FOCUS** Processes.
- Explanation of the Colors process
- Information on HSE meetings -- weekly, pre-tour, pre-task.
- Explanation of how and where to receive QHSE and ISM information. (Bulletin Boards, training material, SOLAS Training Manual)
- Instruction on reporting of incidents – all injuries and incidents to be reported and who to report them to
- Explanation of the requirements to report any known allergies or current medication.
- Explanation of the requirements to report possession of any mobile phones
- General HSE information, including designated smoking areas, high noise areas, housekeeping, jewelry and PTW.
- Installation-specific safety information, procedures and hazards (H₂S, asbestos, and so forth).
- Information on hazards associated with, and the safe operation of power-operated and/ or remote-controlled equipment, such as watertight doors, hatches, winches, and so on.
- Information on restricted or controlled access areas, such as columns, lower hulls and transformer rooms.
- Explanation of drugs, alcohol and weapons policy. (They are not allowed.)
- Explanation of the personal impairment policy
- Information on environmental awareness and waste management procedures.
- Information of the safety representative (if applicable) and QHSE Steering Committee.
- Explanation of current lifting gear color code.
- Introduction to the OIM and review the organization chart for the installation.

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Crew Change Briefing

All returning crew members to the installation are required to undergo an HSE review briefing with the OIM or his designated representative within 6 hours of arriving onboard. The briefing must include (but is not limited to) the following:

- The installation's current HSE performance, inclusive of progress and status of installation specific HSE plans
- All HSE incidents which have occurred since personnel last departed the installation on field break, inclusive of corrective actions
- Each individual's training compliance status, inclusive of planned schedule to achieve or maintain compliance

Job Specific Orientations

Individuals are introduced to their supervisor and are responsible to familiarize themselves with their work area, emergency equipment layout and emergency exits. Key personnel with specific HSE duties, for example, Installation Medical Person, emergency response teams, and so on, receive additional specific instruction on their duties.

The Buddy System

All personnel new to the Deepwater Horizon, whether newly hired or transferred from another installation, and newly promoted personnel participate in the "buddy system" to become familiar with the installation, policy and procedures manuals and instruction manuals specific to their position. Personnel in the "buddy system" spend time together before, during and after tour.

The OIM or designee determines the content and the duration of the "buddy system" for personnel transferred between installations and newly promoted personnel, taking into account the individual's knowledge and experience.

Identification of New Personnel

The Deepwater Horizon requires that personnel new to the rig or promoted to new positions wear orange hard hats so they can be easily identified.

The OIM or designee determines how long an individual is identified as new or visiting and any further training requirements that are required to ensure effective understanding of HSE procedures (for example, permit to Work, Fall Protection and Emergency Response Duties)

2.2.3.5 Competence Assessments, Appraisals and Promotions

Competency Assessments

Competency is a specific range of knowledge, skill and ability that is necessary in order to perform a task or function to achieve a defined performance standard. Transocean has defined competencies and identified performance standards for all offshore job descriptions based on experience, industry guidelines and statutory/regulatory requirements.

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Supervisors onboard the Deepwater Horizon are responsible and required to satisfy themselves that the people reporting to them are competent and able to achieve required levels of performance. Assessment of competency is done on both an informal and a formal basis. On an informal daily basis Supervisors are able to assess the competency of their crew through casual observation on the work site. Supervisors actively participate in and guide the on-the-job training program for personnel under their supervision and on a formal basis assess the competency of their crews at every step of the program through observation and questioning related to the completion of each task within a specific module. Task List Evaluation Guides have been developed for the OJT modules relating specific guidelines to each task. The guidelines detail the level of knowledge or the practical demonstration required to ensure competency for each task. The supervisor is required to sign-off on the completion of each task and a certificate is awarded upon completion of each module.

Competency is also assessed by the successful completion of the courses within the training matrix, during the conduct of company and regulatory required drills and through the performance appraisal process. Many of the courses only require passing written examinations and other require examinations plus practical demonstration of ability. Observations during and de-briefing required drills enable supervisors to assess the competency of personnel on an individual basis and as a member of a crew or team in and emergency situation. The formal competence assurance program within Transocean is the Performance Appraisal Process.

Appraisals

The purpose of the performance appraisal is to improve current job performance and prepare the employee for future jobs within the Company. Managers and supervisors appraise their people utilizing frequent one-on-one feedback in conjunction with the annual appraisal. Feedback on performance is provided in an appropriate setting as events occur rather than waiting for the annual formal appraisal.

The formal appraisals enable Managers and Supervisors to determine how their people measure up against the personal goals and objectives they have developed. The specific form used depends on job position and the appraisals for personnel that have the greatest impact on HS&E such as OIM's, Toolpushers and other supervisory personnel are the most in-depth. At a minimum all personnel are evaluated in the following areas:

- Job knowledge
- Quality of work
- Teamwork
- Supervision/initiative
- Adaptability
- Use of the THINK Planning Process
- QHSE
- Policy and Procedures/Safety Meetings
- START Process
- Core Values
- Training and Development

Each of the aforementioned categories is ranked as a Significant Strength, Meets Expectations or a Development Area. The appraiser also makes comments on strength, areas for improvement and development needs of the employee. The OIM or Rig Manager (depending on the level of appraisal) reviews the appraisal and makes comments as required and the person being evaluated has the opportunity for review and commentary. An overall rating is given for each individual as Outstanding, Superior, Fully Acceptable, Conditional or Unsatisfactory.

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The Performance Appraisal is signed by all personnel and copies are entered into the employee's file and forwarded to the Rig Manager.

Selection of Personnel for Promotion

Onboard the Deepwater Horizon, in accordance with Transocean policy, personnel are promoted from within on so far as possible. Suitability for any position is judged upon required levels of qualification and experience. Employees are evaluated for promotion based on their performance, competency, professional qualifications, abilities, potential, and completion of required On-the-Job Training (OJT). Personnel considered for supervisory positions are required to demonstrate leadership and management skills appropriate to their position. Informal and formal appraisals are used to assess these qualities. When a vacancy occurs there is discussion between the Rig Manager and the relevant offshore supervisory personnel who identify personnel eligible for promotion through review of the appraisals in consideration of the appropriate job description.

2.3 STANDARDS AND PROCEDURES

2.3.1 Planning and Risk Management

To ensure that hazards onboard the Deepwater Horizon are identified and risks are effectively managed and controlled at all times, ***"a suitable plan with a risk assessment and appropriate controls must be confirmed in place, prior to all tasks"***. This policy covers all personnel that work on the rig.


The Transocean **THINK** Planning Process is utilized for risk management of all activities and tasks carried out onboard the vessel. All Company personnel are required to incorporate the **THINK** Planning Process into all tasks performed, whether working individually or in teams.

The **THINK** Planning Process for Risk Management consists of the following steps:

- Correctly identifying the hazards and associated risks involved in an activity or task through risk assessment.
- Utilizing knowledge and experience to demonstrate risks are as low as reasonably practicable (ALARP) by applying the appropriate level of risk assessment (**THINK** Planning level).
- Determining the controls (policies, procedures, standard and work practices) required to ensure the risk to people, the environment and property is as low as reasonably practicable throughout the task or activity:
 1. Preventive controls – prevent an incident by reducing the likelihood an incident will occur
 2. Mitigating controls – reduce the consequences of an incident if preventive controls fail or are not effective
- Communicating the risks and controls to personnel who may be affected.
- Anticipate possible deviations from the **THINK** plan by identifying changes, conditions, and inactions (What if?)

It is essential for managers, supervisors and individuals to demonstrate risks are ALARP prior to performing activities or tasks. Verifying controls (preventive and mitigating) are in place and effective helps ensure identified risks are maintained as low as reasonably practicable.

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Personnel must have the necessary knowledge, skills and experience to perform the activities or tasks assigned to them including any activities to control risks. This cannot be determined without a correctly developed **THINK** plan.

All Company personnel are required to be trained in the **THINK** Planning Process. Supervisors must take an active role in the training to ensure effective understanding. Transocean's Safety Leadership Training provides tools for training in and implementation of the **THINK** Planning Process. Supervisors utilize these tools to coach, mentor and monitor the effectiveness of their employees' **THINK** plans.

Demonstrating Risks are ALARP

Onboard the Deepwater Horizon, personnel reduce risks to as low as reasonably practicable (ALARP) by completing a qualitative risk assessment at the appropriate **THINK** Planning level and applying appropriate controls available in the Company management system (policies procedures and standards), site specific work practices and regulatory requirements.

All **THINK** plans include the requirement to reduce risks to as low as reasonably practicable. Reducing risks to as low as reasonably practicable requires personnel to consider the various additional risk reduction measures (additional controls) and determine if the effort and cost of those measures justify the additional amount of risk reduction obtained.

Levels of Risk Management

The **THINK** Planning Process includes hazard identification and provides various levels of risk assessment to demonstrate risks are as low as reasonably practicable. The level of risk assessment applied is dependent upon the:

- number of people involved in the assessment
- Knowledge, experience and skill of the people participating in the assessment and developing the plan
- Criticality and complexity of the task or activity
- Potential negative consequence that may occur during the task or activity

The levels of **THINK** planning used within the company include the following:

- **THINK** Planning Process – Individual, Verbal and Written
- Task Specific **THINK** Procedure
- Task Risk Assessment (TRA)
- HAZOP / HAZID (Hazard Operability Study/Hazard Identification)
- Major Accident Hazard Risk Assessment (MAHRA)
- Safety Cases and Operations Integrity Cases

The steps of the **THINK** Planning Process are:

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- **PLAN** What is the desired/required result? How will the activity and task be performed, in what order and steps? Who has the necessary skills and experience to safely perform the tasks and steps? When are the tasks and steps required to be performed?
- **INSPECT** What tools, equipment or work areas require inspection? Who will do the onsite inspection? What were the results of the onsite inspection?
- **IDENTIFY** What hazards are people, environment or equipment exposed to? What are the potential causes and consequences related to these hazards? How likely are they to happen? What are the risks involved and are you able to clearly demonstrate they are ALARP?
- **COMMUNICATE** What is required to be communicated regarding the hazards identified? With whom do we need to communicate? Have the risks been communicated to the appropriate level of authority and supervision?
- **CONTROL** What controls (procedures, work practices or resources) are required to reduce the identified risks to ALARP? Have appropriate controls to reduce the likelihood of an incident occurring (Preventive) and reduce the consequences (Mitigating) of an incident occurring been effectively implemented? Have the appropriate controls from the Company Management System been clearly identified and applied? Are personnel involved constantly aware?

Creation of an effective **THINK** plan requires individuals or groups to be competent to perform the task and ask themselves:

- Have I identified the changes, conditions and inactions (What if?) that could lead to possible negative consequences?
- Did I consider the likelihood that the negative consequences may occur?
- Even though the risk in my plan is within my risk tolerance, have I demonstrated it to be as low as reasonably practicable?
- Do I understand what I need to do to recognize and manage change?

The **START** observation card can be used at the work site as a prompt to assist in developing effective **THINK** plans

Rules of Task Planning

When **THINK** plans are developed, the rules for task planning have to be followed. This provides assurance that the personnel developing the plan have the knowledge, personal experience, skill and authority necessary to develop an effective plan, manage change and successfully complete the task without incident and injury. The approach for managing change while carrying out the plan can be determined.

The rules of task planning are:

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- The plan, and all its steps must comply with the company's Management System procedures. Expectations communicated by supervisors and described in the procedures must be met.
- Personnel must have the knowledge of the steps needed to perform the task safely and correctly. The steps needed to complete the task must be understood.
- Personnel must have the experience to anticipate what should happen next and what could go wrong
- Personnel must have the skills to be able to perform the steps of the task safely and correctly
- Personnel must have the approval authority to plan and perform the task before proceeding

THINK Planning Process – Individual

The Individual **THINK** Plan is the level of the **THINK** Planning Process most often used onboard the rig to assist individuals to plan what they are about to do. Individuals use the **THINK** Planning Process to Plan, Inspect, Identify, Communicate and Control all tasks and associated hazards and risks. Individuals must apply **START** Monitoring during execution of the planned task in order to recognize any deviation from the **THINK** plan, which may create new hazards and risks.

THINK Planning Process – Verbal

The verbal **THINK** Planning Process is used onboard when more than one person is involved in a task. Joint participation in developing the **THINK** Plan is required. Adequate communication between the personnel involved ensures all aspects of the activities, tasks, risks and controls in the **THINK** Plan are reviewed and understood.

When each person involved fully understands and agrees on the **THINK** Plan and the necessary controls are implemented, the task may proceed.

THINK Planning Process – Written

The Written **THINK** Plan is provided for supervisors to manage risk associated with tasks carried out by their crew using the Rules of Task Planning and by:

- Creating experiences that provide learning opportunities.
- Ensuring that people practice effective individual and verbal **THINK** planning skills on the job.
- Reinforcing the practice of hazard identification (What if?) and assessment on the job
- Evaluating and assessing people's knowledge and skills in the **THINK** Planning Process.
- Satisfying themselves people have learned and developed necessary skills to carry out their job in a safe and responsible manner.
- Understanding and implementing available preventive and mitigating controls
- Identifying the hazards and assessing the risks (What if?).
- Understanding what is needed to anticipate, recognize and manage change.

The supervisor is responsible for the quality and completion of the Written **THINK** Plan.

The **START** observation card can be used at the work site as an additional tool to prompt and assist in the development of written **THINK** plans.

If appropriate, the planning stage or development of a written **THINK** plan may take place in an area other than the work site. The work site must be visited for the Inspect, Identify, Communicate and Control stages. Visitation of the work site allows the personnel assessing the risks and developing the plan to:

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- Get a clear understanding of the environment including the layout of and safe and possible unsafe conditions in the area
- Identify hazards, actual and potential, and their consequences
- Inspect tools and equipment in the area and those that will be or may be required for the task.
- Communicate with people directly and indirectly involved with the planned task who may be affected by the task.
- Make an initial plan of control measures required to be implemented for the task, people and work area

Task Specific THINK Procedures

Task Specific **THINK** Procedures are utilized to execute tasks that have been identified to have a higher level of criticality, complexity, or risk, based on the hazards identified for the tasks within the activity. Task Specific **THINK** Procedures document the safest and most effective way to perform a task, incorporating the experience of personnel involved.

The Task Specific **THINK** Procedure is comprised of task steps, critical task steps or both. A critical task step is a task step that, if not performed correctly, can cause significant loss.

Task Specific **THINK** Procedures represent Level 3 Installation Specific Procedures that are the basis for establishing effective and reliable preventive and mitigating controls for all task steps. Personnel must determine the necessary controls (including ones in the Company Management System) for each step in a Task Specific **THINK** Procedure.

Task Specific **THINK** Procedures are required for all hazardous operations as determined by the Operations Integrity Case.

Crew members involved in or affected by the task should participate in the development of the Task Specific **THINK** Procedure. This will assist them in identifying hazards and incorporating controls to reduce the risk of injury or incident.

Application of a Task Specific **THINK** Procedure requires individuals or groups to:

- Review and discuss the Task Specific **THINK** Procedure, prior to commencing the task.
- Confirm the control measures for all tasks within the procedure.
- Ensure personnel understand their responsibilities to carry out the tasks.
- Understand the hazards and the consequences of those hazards.
- Ensure the expected results are understood prior to commencing the activity.
- Determine individual requirements through their own individual **THINK** plans after understanding the Task Specific **THINK** Procedure.

If it is determined that a Deepwater Horizon Task Specific **THINK** Procedure needs to be developed or an existing one revised, a Written **THINK** Plan is required for the task to proceed until such time as the new or revised Task Specific **THINK** Procedure is approved.

Task Specific **THINK** Procedures require initial review and approval from the OIM and final approval of the Rig Manager. This approval process is required prior to the Task Specific **THINK** Procedures being included in the company management system on the rig. (Level 3 Installation Specific Procedures)

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Task Risk Assessment

The Task Risk Assessment provides a more detailed risk assessment to demonstrate that risks related to specific tasks are as low as reasonably practicable. The potential consequences for all critical task steps must be clearly identified in the assessment so existing control measures can be verified and/or new control measures implemented to reduce the identified risks to as low as reasonably practicable.

A Task Risk Assessment is required for all exemption requests and to assess critical tasks steps in Task Specific **THINK** Procedures

The Task Risk Assessment is available to provide a higher level risk assessment of the critical tasks listed in Task Specific **THINK** Procedures, or Written **THINK** Plans.

Hazard Identification

A HAZID (Hazard Identification) study is the structured, systematic assessment of an activity in order to identify the hazards associated with it. The activity, for example, drilling a high pressure/high temperature well, would normally be split into a number of smaller tasks. Each task should be reviewed in turn, asking, "what could go wrong?" or "what if this happened?"

Hazard and Operability

A HAZOP (Hazard and Operability) study is used to identify HSE hazards and operability issued for equipment or systems to reduce risks to ALARP. HAZOPs are primarily used during the design stage.

A HAZOP team should consist of personnel familiar with the equipment and systems and be lead by a facilitator trained and competent in the HAZOP process.

Other Risk Management Procedures

Onboard the Deepwater Horizon, the additional, policies and procedures available within the Transocean HSE MS are utilized to address risk management for hazardous operations, health, the environment, subcontractor's personnel and their equipment.

Permits to Work

The rig has a Permit to Work system in place to control hazardous operations. Personnel on board including Transocean lease personnel, direct contractors, Clients and Client subcontractors are trained in the use of the Permit to Work system prior to use of the system. Complete details of the Permit to work process are found in the Health and Safety Policies and Procedures Manual.

The purpose of the Permit to work system is to ensure that authorized personnel, who are knowledgeable of the hazardous operation to be performed, have planned the work, inspected the work site, identified the hazards and communicated the suitable control measures to be taken to prevent the occurrence of an incident during the operation.

A Permit to Work is not required for every job. Personnel can consider other forms of control measures, such as the **THINK** Planning Process, Energy Isolations, and so on before generating a permit.

Responsible persons have designated areas of the Deepwater Horizon and relevant equipment in their sphere of responsibilities. A list of the responsible people, by position, their designated areas of responsibilities and equipment is posted onboard. They are responsible for ensuring all control measures and procedures are in place, prior to signing the Permit to Work.

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Objectives and functions of the Permit to Work system onboard the rig are to:

- Ensure that proper authorization is given to carry out specific work at a certain time and place.
- Ensure that personnel carrying out the work clearly understand the nature of the job, the hazards involved and the limitations on the work and the time.
- Specify the control measures to be taken before starting the work, during the work and after completion of the work.
- Ensure the OIM or designee is fully aware of and approves the work to be done.
- Provide a record showing the type of work and indicate that a responsible person is assigned.
- Provide a procedure for times when work must be suspended.
- Provide procedures for other activities that may interact.
- Provide a formal hand-over procedure if work overlaps a shift change.
- Provide a formal hand-back procedure to ensure that any part of the installation affected by the work is in a safe condition and ready for reinstatement.
- Provide a central display of open or suspended permits.

Hazardous operations that require a permit include, but are not limited to the following situations.

- Hot Work
- Confined Space Entry
- Work Above Open Water
- Work on Supply Boats
- Work With Explosives
- Work With Radioactive Materials
- Diving Operations
- Work with Energy Sources
- Maintenance of Critical Safety Systems
- Asbestos Work
- Use of Special Straps (Webbing Straps)
- Work with Dangerous Liquids
- Manriding
- Pressure Testing
- Work Requiring the Opening or Potential Opening of Overboard Dump Valves
- Other Identified Situations where the OIM, a supervisor or any risk assessment identifies the requirement of a Permit to Work.

2.3.2 Management of Change


Transocean's Management of Change policy is implemented onboard the Deepwater Horizon to ensure that change to plans, situations or unexpected events is recognized and the associated risks managed. The purpose of this policy is to ensure personnel understand what is required to plan, recognize change and react by interrupting before the change leads to an incident.

2.3.2.1 General

Management of Change is:

- planning, monitoring, recognizing change,

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- interrupting to evaluate the effect of change, and
- modifying the plan as necessary

The requirements and/or complexity of a task determine the level of management and supervision necessary to ensure appropriate expertise and resources are used to assess the risk, apply controls and develop the plan.

Change cannot be recognized or managed without an effective plan.

Management of Change is used to effectively recognize and manage risks when changes, conditions and inactions in a given situation or unexpected events are experienced.

THINK is used to formulate and communicate the plan.

START is used to monitor the plan and recognize when the plan is no longer suitable.

Managing change while performing the task is simply the effective use of **THINK** and **START**.

FOCUS enhances the execution of **THINK** and **START** within the Management of Change process by providing a consistent means to request, track and receive additional expertise (knowledge, experience, skills) and approval from within the organization.

If, while monitoring a plan, a change is recognized, the task must be interrupted to assess the change and any new risks.

2.3.2.2 Management of Change Process

The following steps represent the Management of Change process:

- Develop a plan for a task (**THINK**)
- Monitor the plan (**START**)
- Recognize the changes (**START**)
- Interrupt the task to evaluate the change (assess the risk) (**START** and **THINK**)
- Revise the current plan or develop a new plan (**THINK**) and initiate the (**FOCUS**) improvement process if required
- Continue with the task using the revised plan

2.3.2.3 Carrying Out the Management of Change Process

The Management of Change process is executed using one of three approaches.

- Simple
- Enhanced
- Exemption

To determine which approach applies to a given situation, the following questions must be answered by the person(s) involved in creating the new or revised plan.

- Does the new or revised plan comply with the Company Management System Procedures?

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- Do I/we have the knowledge, experience, skills and approval authority to assess and implement the new or revised plan.

If the answer to ALL of these questions is yes, the Simple Approach may be used.

If the new or revised plan complies with the Company Management System procedures but the knowledge, experience, skills, or approval authority is NOT available, the Enhanced Approach must be used.

The Enhanced Approach may be used even if the Simple Approach has been determined to be acceptable, at the discretion of the personnel performing the risk assessment.

If the new or revised plan does not comply with the Company Management System procedures, an Exemption must be requested.

Simple Approach

Control of the risks identified is accomplished utilizing an appropriate risk assessment from the individual THINK Plan up to the Task Risk Assessment.

If it is determined that a Task Specific THINK Procedure needs to be developed or an existing one revised, a written THINK plan is required for the task to proceed until such time as the new or revised TSTP is approved.

Enhanced Approach

The Rig Manager must review the FOCUS proposal and risk assessment to determine if it is required and adds value, and if further assessment or additional expertise is required.

The Enhanced Approach requires the use of the FOCUS tracking software to develop plans, obtain approvals, monitor the progress and track the progress to completion.

Approval may be granted verbally or via email in urgent and exceptional situations but must be followed up with the required documentation within seven days.

A Management of Change log is maintained on the rig and in the Region office for completed MOCs.


2.3.2.4 Exemptions

Exemptions from Company Management System policies are not approved; however, exemptions from procedures are reviewed and approved on a case-by-case basis. Management System procedures are the Company approved methods for achieving the intent of Company policies.

If a new or revised plan does not comply with procedures and exemption from those procedures is required and is approved only after the Business Unit Vice president has reviewed, assessed and confirmed that the alternative procedure meets the intent of the policy.

There should never be an occasion when an alternative procedure in an approved exemption does not achieve the intent of a Corporate or Business Unit policy.

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If the change exceeds the authorized operational limits, the exemption is no longer valid and a new exemption request is required. Operational limits on an exemption define specific boundaries or criteria for execution of the plan.

A Task Risk Assessment and Request for Exemption form must be completed and submitted with each exemption to verify all associated risks are identified and the control measures to prevent and mitigate those risks are clearly listed.

The Request for Exemption progresses through line management and if not approved at any level, the request ceases and the original procedure is complied with or the operation is not carried out.

The Business Unit Vice President may appoint a designate to approve exemption requests.

The final approval authority must be satisfied that:

- the appropriate knowledge, experience and skills are available to execute the alternative procedure and,
- the appropriate knowledge, experience and skills were applied during the review and approval process at all levels

The final approval authority must ensure that the alternative procedure effectively monitors and controls the risks that would normally be addressed by the approved Company Management System procedures.

The final approval authority must determine if the risk is within the Company's executive leadership expectations prior to approval.

All approved Request for Exemption forms must define a set period of validity. The period of validity must include specific **START** and stop dates. Approved Request for Exemption forms are not valid outside of the specific task, operation or work scope described in the request.

The Business Unit Vice President is responsible to ensure all approved Request for Exemption forms related to the Business Unit/Division Management System procedures are reviewed and assessed by the Business Unit/Division System Management and Review Team (SMART) member(s) to determine if Management system changes are required.

The division QHSE Manager is responsible to ensure all approved exemptions related to Corporate Management System procedures are posted on the Division intranet site and readily available to the Corporate Director of QHSE. The Business Unit/Division QHSE Manager may, at his discretion, forward post approved Exemption Request forms related to the Business Unit/Division Management system.

The Corporate Director of QHSE is responsible to ensure the Request for Exemption forms forwarded by the Division QHSE Manager are reviewed and assessed by the Corporate System Management and Review Team (SMART) member(s) to determine if Management System changes are required.

Use of the **FOCUS** tracking software for Exemptions is not required but may be used. The decision to use the software is based on:

- the criticality of a QHSE related situation requiring action
- managers and supervisors requiring a defined process for review and approval of planned actions
- ensuring that specific actions related to an activity are effectively executed

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- ensuring important lessons learned are captured and made available
- tracking actions that may require an extended period of time to completed

The **FOCUS** tracking software is used with Management of Change to develop plans, obtain approvals and monitor and track the progress to completion.

Full details of the Management of Change process are found in the Health and Safety Policies and Procedures Manual.

2.3.3 Emergency Response

Transocean and the Deepwater Horizon have procedures in place to ensure effective management of emergency response and security. The purpose of these procedures is to reduce the impact of potential emergencies to personnel, the environment, Company assets and the Company's reputation. These procedures are contained in the Deepwater Horizon Emergency Response Manual, the Operating Manual and the Onshore Emergency Response Manual. Details of emergency response procedures offshore and onshore (including requirements for drill and exercises) are found in the respective manuals and are described in Section 6 of the OIC.

2.3.4 Safe Work Practices

Transocean's Safe Work practices have been developed over the years based on shared knowledge and experience within the company, lessons learnt, industry guidelines and best practices.

These Safe Work Practices are implemented onboard the Deepwater Horizon and personnel are required to follow these policies in order to avoid a risk of injury, damages to the environment or property.


Understanding risk and acknowledging that not everyone perceives risk at the same level creates the need for effective communication at all times. All Transocean personnel onboard the rig are responsible for their own safety and behavior and are required to conduct themselves in a manner to protect themselves and others who may be affected by their actions, the environment and property. They are also obligated to maintain control of operations by interrupting if someone's safety is jeopardized or if damage to the environment or property is likely correct any unsafe behavior or conditions.

The following examples are not all inclusive of all practices onboard the rig but are meant to encourage personnel to **THINK** about basic safe work practices when planning or carrying out a task. Typically, many injuries occur when basic safe practices are not followed. Injuries can be prevented when personnel proactively use the **THINK** process for planning work and the **START** Observation process for monitoring operations. Proactively using the **THINK** planning and **START** monitoring processes and incorporating basic safe practices will prevent such injuries from occurring.

Full details of the Safe Working Practices are to be found in the Health and Safety Policies and Procedures Manual HQS-HSE-PP-01. Within the Manual the following practices are addressed:

- Housekeeping
- Lighting
- Deck Management
- Safe Behavior

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- Safe Working Limits
- Safe Tripping of Tubulars
- Manual Tong Snublines
- Wireline Operations
- Dropped Objects and Dropped Objects Scheme (DROPS)
- Knives
- Hand Tools
- Portable Ladders and Steps
- Powered Watertight Doors and Hatches
- Remote Controlled Machinery
- Radio Communications (other than vessel to vessel and/or vessel to shore)
- Non-metallic Pipes

2.3.5 Environmental Management

2.3.5.1 Environmental Management Strategy

Transocean's Environmental Management Strategy focuses on five specific elements, i.e. training, performance, risk reduction, monitoring and legislation. These elements are defined as follows:

Environmental Training

The key to a successful Environmental Management System is the training provided to implement, monitor and improve the system. Capturing lessons learned and the feedback process is what makes a Management System a successful one.

Environmental Performance

Setting and attaining goals, objectives and targets and fulfilling corporate goals allows us to gauge the success of our system, the understanding of our system and how to improve it. The tools to measure performance and the data we gather are the key to improving performance through the sharing of data.

Environmental Risk Reduction

Reducing our risks centers on understanding and managing our Environmental Aspects and Impacts. The way these are controlled affects our impact or lack of, on the environment. This is the primary mechanism on which an EMS functions and develops.

Environmental Monitoring

The way we gather our data and its feedback at all levels is an essential element of the system. Monitoring tools can be used at all levels from an individual to senior management. Monitoring the system allows us to discover areas of weakness, and also areas of excellence. By applying corrective actions to areas of weakness, and through identification and promotion of practices which have led to areas of excellence we have a means with which to continuously improve our system.

Environmental Legislation

Ensuring compliance with international and local regulatory legislation requires an up to date register of that legislation that is maintained and reviewed on a regular basis. The legal register forms the foundation of the EMS and provides the minimum standard to which we need to operate.

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2.3.5.2 Department Organization

The Company's Director of QHSE services is the overall Environmental Management Representative responsible for ensuring the Environmental Management System is established, implemented and maintained in accordance with the Company's Environmental Policy Statement. He is also responsible for reporting and reviewing with Executive Management the effectiveness of the Environmental Management System, including recommendations for improvement through the Corporate QHSE steering committee.

Each office and installation establishes an Environmental Green Team that is responsible for assisting in the implementation and maintenance of the Environmental Management System for that location along with senior management. The Green team meets quarterly to discuss location-related issues, review the status of the Environmental Performance Plan and report to the Division QHSE Steering Committee.

A QHSE Steering Committee at the Corporate level establishes the overall company goals and each unit/division establishes a plan to meet those goals through the setting of objectives and also meets regularly to discuss the status of Environmental Performance Plans for each installation.

2.3.5.3 Corporate Environmental Policies

Transocean has developed seven environmental policies based on the Company's strategy

Evaluation of Legislation

It is the policy of the Company to ensure compliance with all International and Local/National Environmental Legislation related to the operations of the company in any particular location. All locations will maintain and periodically update a register of all appropriate Environmental Legislation

Evaluation of Environmental Risk

It is the policy of the Company to carry out a systematic risk assessment of all activities that pose a potential impact to the Environment. These potential Aspects and their associated Impacts must be identified in a register of Aspects and Impacts to be held, maintained and periodically updated at each location

Environmental Performance

It is the policy of the Company to develop and maintain an Environmental Performance that promotes continuous improvement in the Environmental Management System. This plan must address measures to reduce all significant risks associated to operations with potential Environmental impacts to as low as reasonably practical


Loss of Containment

It is the policy of the Company to implement a system that prevents or minimizes the risk of un-controlled discharges of any substances to the Environment at any location and to record and report all Environmental spills

Material and Product Selection and Waste Management

It is the policy of the Company to implement a system of evaluation and procurement of Green products (More Environmentally Friendly) at all locations

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Energy Conservation and Emissions

It is the policy of the Company to ensure plans are in place to reduce planned and un-planned emissions to the air from operational activities and to promote effective use of resources to promote the conservation of Energy and Efficiency

Emergency Response

It is the policy of the Company to ensure adequate Emergency Response Protocols are in place to respond to an Environmental incident at any location. This must include regular Environmental Response drills and appropriate training.

These seven general policies are summarized and disseminated throughout the company in the Corporate Environmental Policy Statement. This statement has the support of and is signed by Executive Management, i.e. the Chief Executive Officer, the Chief Operating Officer and the Vice President of QHSE.

CORPORATE ENVIRONMENTAL POLICY STATEMENT

Transocean is committed to conducting business and operational activities in a responsible manner which limits adverse impact to the Environment and promotes the effective use of resources and contributes to continual improvement.

Our Environment, Our Responsibility

All employees are expected to:

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- Work in a Safe and Environmentally responsible manner
- Work in a manner the prevents pollution
- Reduce waste and promote recycling to conserve resources
- Contribute to the improvement of operations and Environmental Performance
- Contribute to the achievement of Environmental goals and objectives
- Understand personal responsibilities that contribute to improved Environmental performance
- Assess and monitor tasks to limit the Environmental impact of their work activities
- Implement and comply with Company risk reducing controls to prevent and mitigate Environmental incidents
- Respond to and report all Environmental incidents
- Comply with all relevant Environmental legislation and client agreed requirements

Transocean is committed to Safe and Environmentally responsible operations. You have our total commitment and we require yours.

2.3.5.4 Environmental Management System Control Procedures

Legal Registers

The Corporate QHSE Department has compiled a Register of International Environmental Legislation and Other Requirements. Other requirements consist of company, client and industry global requirements which may be in addition to or in some cases exceed regulatory requirements. The Register is reviewed and updated as legislation changes or appears.

Division compiles a Register specific to each operating location using the Corporate Register as a base. Where local regulatory r other requirements differ from requirements identified on the Corporate Register, the most stringent requirement applies.


Installation procedures are assessed to assure compliance with the corporate Register. This is accomplished during an initial baseline survey and then periodically b means of monitoring, audit and inspection. Any additional requirements stipulated by clients or industry bodies will be included in this process.

Departmental Supervisors and Departmental Heads are responsible to ensure that personnel under their control comply with requirements relevant to their areas of operation. They are also responsible to review operational procedures and ensure sufficient controls are in place to ensure compliance.

Environmental Aspects and Impacts

Assessment and reduction of Environmental risk is essential to ensuring consistent and effective Environmental performance. Risks to the Environment as a result of company activities are expected to be reduced and controlled through the effective application of both preventive and mitigating controls described in the company's Environmental Management System (EMS).

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An Environmental Aspect is any element of the company's inputs, activities, products or services that can interact with the environment.

An Environmental Impact is any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organizations activities, products or services.

Environmental aspects relevant to the company's activities and operations must be identified, and any potential impacts arising from these aspects must be evaluated to determine the level of risk and their relative significance.

Environmental aspects that have been deemed significant per the Environmental risk matrix must be assessed to determine the level of risk and to ensure effective risk-reducing controls are in place to prevent and mitigate potential adverse impacts.

Where significant aspects are identified that do not include controls that reduce risks to a tolerable level, further improvement in Environmental performance is required. Establishing targets to meet objectives, as well as applying operational controls described in the Environmental Management System, are required to improve Environmental performance and reduce Environmental risks to a tolerable level.

Environmental performance plans must be developed and implemented to ensure goals and objectives contribute to continuous improvement in Environmental performance. This approach is to ensure operations are performed in a manner which minimizes risk to the Environment.

Environmental Aspects and Impacts Register

All installations, facilities and offices must develop and maintain an Environmental Aspects and Impacts Register specific to each location. The register includes a rigorous approach to identifying Environmental aspects and impacts arising from work activities, products or services related to company activities at the location. Environmental aspects and impacts at company locations arising from work activities, products or services over which the company has only indirect influence must also be considered.

The Environmental Aspects and Impacts Register must be reviewed and the results sent to the Rig Manager (Installation) and Unit/Region/Sector QHSE Advisor or by the location management (Onshore, Uni/Division QHSE Manager):


- Annually
- When an Installation changes geographical operation area
- When there is major change in Environmental Management requirements
- When a change of client occurs
- When an installation is to work in or in close proximity to an environmentally sensitive area.

Identification of Environmental Aspect and Impacts

Personnel at the location must perform a Site Survey to identify all Environmental aspects relevant to work activities, products and services at the Installation, facility or office. Green Teams at the location are required to participate in the site survey.

All identified Environmental impacts must be recorded on the register. A baseline Environmental Aspects and Impacts Register will be provided to offshore Installations to assist personnel in effectively identifying all aspects and impacts related to the location.

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Key aspects the company can influence to limit impact include atmospheric emissions, aqueous discharges, waste generation and use of natural resources. In addition, the company may influence aspects related to third party activities, i.e., qualifications of subcontractors and chemical specifications.

Environmental impacts can be negative (harmful) or positive (beneficial). When identifying Environmental aspects and impacts, positive or beneficial Environmental impacts arising from company activities, products and services must also be included.

Monitoring Marine Species on Location

When locations develop and review their Environmental Aspects and Impact Registers, consideration must be given to the Environmental sensitivities of the geographical location. Installations should consider the various local species and habitats expected to be encountered at the location.

Potential sources for determining the marine species expected to be present at a specific location include:

- Client Environmental impact assessments and associated Environmental surveys and reports
- Client oil spill contingency plans
- Local or national Environmental agencies
- Internet sources
- Scientific research studies
- Direct observations

Identification of potential species and habitats at the location contributes to a rigorous identification of the Environmental aspects and potential impacts and also raises levels of awareness at a location.

Risk Assessment of Aspects and Impacts

Personnel participating in the site survey at the location are required to assess the potential consequences (severity) and likelihood (frequency) of each identified Environmental aspect and impact.

Onboard the Deepwater Horizon the Offshore Installation Manager is responsible to ensure that adequate resources are in place to develop and review the location's Aspects and Impacts Register. He also reviews the Register after initial development and after each review and revision and approves the Register.

He is also responsible to ensure that activities with a high risk ranking are not undertaken until sufficient control to reduce the risk to medium or low have been implemented.

Environmental Performance Plans

Transocean integrates environmental performance with business performance to achieve a safer and healthier work environment resulting in reduction of costs, optimization of resources, increased profitability and an enhanced reputation.

Transocean defines Environmental performance as:

- Planning and monitoring business and operations to effectively reduce the impact of activities on the Environment.
- Complying with Environmental legislation and regulatory requirements.

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- Achieving company Environmental goals which meet all our stakeholders' expectations.
- Competent personnel achieving compliance with company Environmental policies and procedures.
- Meeting Environmental performance standards agreed to contractually.
- Selecting and applying materials and resources in the most practicable manner when performing activities.
- Limiting safety and health risk to personnel from exposure to harmful materials.

By measuring and monitoring Environmental performance, the effectiveness of the plan can be improved.

Each Business Unit must establish an Environmental Performance Plan. This plan supports the Environmental goals and objectives set at the corporate level.

Development of Company Annual Goals and Objectives

To enhance Environmental performance of the company, environmental goals and objectives are established annually by each Business Unit. These goals align with the Corporate Environmental Goals and Objectives.

The key difference between the setting of objectives for the Environmental Performance Plan and the other elements of the HSE plan is that the significant aspects identified in the location's register of environment aspects and impacts must be considered in the Environmental Performance Plan

The location Green Team's primary **FOCUS** is to help establish and achieve the targets in the location's environmental performance plan by ensuring the application of preventive and mitigating controls

Operational Control Procedures

The Deepwater Horizon's environmental operational control procedures as detailed in the Health and Safety Policies and Procedures Manual (HQS-HSE-001) are derived from the Environmental Management Strategy and the Corporate Environmental Policies and address the following:

- Containment and handling of hydrocarbons and chemicals
- Drains and discharges
- Hydrocarbon and chemicals response, controlling and reporting
- Emissions
- Product selection and waste minimization management

Containment and handling of hydrocarbons and chemicals

All hydrocarbons and chemicals on the rig are adequately contained and appropriate control is exercised when such substances are transferred.

All hydrocarbons and chemicals are stored in suitable containers which are kept closed unless contents are being removed or added. Containers and the areas where they are stored are inspected at least weekly for leaks and corrosion or other indications of potential container failure and are replaced where necessary. Containers holding ignitable or reactive materials are stored separately.

There are rig specific procedures in place to address the following transfer operations:

- Loading/backloading (over water, from rig to vessel and vessel to rig)

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- Oil transfers (e.g., transfers of lube oil from portable tanks to holding tanks and when waste oil is being pumped into drums or portable tanks)
- Bulk fluid transfers within the rig (e.g., internal brine, base oil, fuel oil and lube oil transfers)
- Transfer of fluids from drums (e.g. filling up cranes and forklifts)
- Checking transfer hoses (e.g. inspection of hoses prior to service, during service and proper disposal of damaged and replaced hoses.)
- Control of mud system to prevent unintentional discharges.

Drainage and Discharges

All overboard drainage from rigs is monitored to prevent contamination by substances harmful to the environment. Before any substance is discharged overboard, its effect on the environment is evaluated.

- General deck drainage is visually monitored on a daily basis to make sure that rainwater and wash down water does not become contaminated before draining overboard.
- Areas where hydrocarbon-based mud is likely to be found are contained, so that it is not discharged overboard.
- Areas where significant quantities of oil are present are contained and any discharges are checked to ensure that their hydrocarbon content is below the IMO limit of 15 parts per million.
- Hydrocarbon concentration is reduced by using an oily water separator before discharging or discharges are transferred to a holding tank for onshore disposal
- Discharges are monitored and amounts recorded in an oil record logbook
- Sewage discharges are monitored as part of the routine monitoring of the rig sewage treatment unit.
- Food waste is grounded to a size no larger than 25mm prior to discharging overboard.

Hydrocarbons and Chemical Spills – Response, Controlling and Reporting


The Deepwater Horizon has a written plan in place to effectively manage and respond to spills of hydrocarbons and chemicals and to ensure that any onboard spill is contained onboard. The plans define and describe actions required to address spills and include:

- Response designed to ensure that any onboard spill is contained onboard and not discharged into the sea
- Control of the spill to minimize or prevent hazards to human life and the environment by means of clean-up, temporary containment and/or isolation
- Reporting procedures written posted and communicated to all installation personnel to ensure all spills are reported.

In the event of a spill, the alarm is raised by announcement over the PA system. Response is conducted as per the Station Bill. The primary ERT (Emergency Response Team) is led by the Deck Pusher during the day and the Mate at night. They will usually be assisted by members of the ALERT Team and/or maintenance personnel, all of whom have been trained in spill response. Priority is given to stopping the discharge of contaminants and preventing oil or chemicals from reaching the sea. For this purpose, all overboard drains have plug devices built in or located by them. A plan of the vessel overboard drains is located in the Main Spill locker in the Moon Pool area, the Break Room, the Paint Locker door, on the Rig Floor, in each door in the Machinery, Mud and BOP Modules and at the Helifuel Pump area.

Spill clean up kits are located: in the Moon Pool area, at the Helifuel Pump station, at both loading stations, in the alley way between the Engine Rooms and at the Well Test area (whenever well test operations are in progress.

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The rig carries at a minimum enough material to clean up a one barrel spill on deck. Oily waste disposal drums are used to hold and transport used oil absorbent and pads.

Emissions

All equipment is maintained to ensure efficiency of operation to maintain emissions within equipment capabilities. Emissions performance is considered as an influencing factor when new or replacement equipment is procured.

Maintenance procedures are conducted in accordance with Company Maintenance standards to ensure expected performance is achieved and emissions (noise and exhaust) meet manufacturer's specifications.

Leakage of CFCs (chlorinated fluorocarbons) considered to be ozone depleting is minimized through an effective leak prevention program. Maintenance systems/equipment containing CFCs is carried out in conjunction with a recovery unit.

Product Selection and Waste Management

Transocean policy requires that installations use environmentally-friendly products where practicable and also ensure the minimization and proper disposal of waste.

Products are reviewed and environmental-friendly alternatives are chosen based on considerations for:

- Performance
- Cost vs. benefit
- Availability
- Storage issues
- Consumption vs. waste minimization

Planning of waste management is part of all operations. Waste is classified as to types and amounts and efficiencies of materials/products are evaluated to enable minimization or elimination of waste. Segregation of hazardous and non-hazardous materials is implemented per Material Safety Data Sheets.

Where practical provisions/stores are purchased for the rig that reduce the generation of garbage and waste.

On an annual basis, MODU management assesses the following areas regarding the effectiveness of waste minimization management:

- Identification
 1. Sources of wastes
 2. Which sources can be eliminated
 3. Impact of the waste/potential reduction in impact
- Collection and Storage
 1. Suitable containers to eliminate hazards from exposure
 2. Removal of waste from the rig
 3. Recycling of waste
 4. Storage to prevent waste prior to use
- Processing

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1. Generation of waste byproducts to prevent unnecessary risk to people or environment

- Disposal
 1. Responsible disposal in line with local regulatory requirements if applicable

All waste package or containerized to be sent ashore for disposal is appropriately labeled as hazardous, Non-hazardous, etc.

2.3.6 Occupational Health

Maintaining Occupational health requires that personnel identify exposures/potential exposures to occupational health hazards and control those exposures and hazards through the proper implementation of Company policies and procedures relevant to the specific hazards.

Hazards are represented in many different forms dependent on the nature of the work environment and include:

- Chemicals and hazardous substances
- Potential falling objects
- Energized equipment
- Fire
- Toxic gases
- Oxygen deficient atmospheres
- Pathogens

All levels of the THINK Planning Process require the identification of work place hazards prior to the commencement of any task. The same policy applies to the use of the Permit to Work system. When hazards have been identified they are required to be properly controlled. There are specific programs and policies in place that, on an ongoing basis, control exposures to occupational health hazards. Certain other controls, relevant to specific hazards are utilized on a daily basis.

The controls that are required and are in place at all times include:

- Pathogen awareness training
- Identification/awareness of hazardous areas through development and use of a Hazard Register
- Weekly health and hygiene inspections
- Maintenance of a hazardous material information system, ensuring hazardous materials are properly identified, labeled and effectively controlled
- The use of dedicated storage areas for hazardous materials
- Implementation of a program for dropped objects
- Proper housekeeping
- Hazardous material awareness training

Controls that are utilized on an "as needed" basis, relevant to specific hazard or potential hazards include:

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- Lock-out / tag-outs and energy isolations
- Confined space entry procedures
- The use of proper clothing and appropriate PPE

The Installation Medical Person has a responsibility to ensure personnel maintain awareness of health issues and to advise on various health matters.

Supervisors participate in control of exposures to occupational health hazards by continuously monitoring the execution of work and performance of their people as part of their normal day-to-day activities.

2.3.7 HSE Procedures

The arrangements for developing, maintaining, implementing and reviewing written procedures are detailed in the Company Management System Governing Document, HQS-CMS-GOV. HSE procedures which are documented throughout the Company Management System at the Corporate, Region and Installation levels describe the steps, activities, tasks and/or work processes required to safely and reliably execute work and responsibilities to meet Corporate, Region, client, operation and/or regulatory requirements.

Corporate documents and procedures apply to the entire company and Region level documents and procedures apply to all installations working within that particular Region. Installation specific HSE procedures will depend on rig type, design, flag and coastal state requirements and are found in the following documents:

- Marine Operations Manual
- Emergency Response Manual (including SOPEP)
- Rig-specific Maintenance Tasks
- Task Specific THINK Procedures
- Rig Specific Procedures


2.3.8 HSE Communications

2.3.8.1 HSE Information

Health Safety and Environmental (HSE) information is made available and appropriately communicated to all personnel onboard the Deepwater Horizon including direct contractors, Clients, Client subcontractors and outside agencies to ensure that they are adequately informed of HSE issues, in order to improve awareness and HSE Performance. All relevant personnel discuss HSE information at various departmental and/or general installation HSE meetings and as appropriate, HSE information is posted on QHSE bulletins boards so that it is accessible to all personnel. An explanation of where to obtain HSE information is part of the rig's HSE orientation.

HSE information is distributed to the rig and made available to all personnel in the following methods:

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Monthly Incident Rate Chart

Monthly Incident Rates Charts, which provide a statistical comparison within the Company, are provided to the Deepwater Horizon by Corporate HSE Services. The incident rates are Year-to-date and 12-month rolling rates.

Crew supervisors study and review the charts with their crews during Weekly Departmental HSE Meetings. The Charts are then posted on the QHSE bulletin board.

Serious Incident Bulletins

Personnel onboard the rig are informed about serious incidents through bulletins issued at the discretion of the regional QHSE department, which contain only factual information based on the related incident report. Serious Incident Bulletins may be followed by a HSE Alert.

HSE Alerts

HSE Alerts provide immediate notification of critical information and actions to address an incident or situation which represents a clear and present hazard to people environment or property.

Corporate HSE Alerts are developed and issued to all installations to advise all personnel of an immediate danger. These Alerts are required to be acted upon on an urgent basis.

The development of HSE Alerts is based on facts gathered during the fact-finding of the incident.

All HSE Alerts issued by the Unit management are submitted to Corporate HSE Services for consideration for global application. Only Corporate HSE Services has the authority to issue/distribute HSE Alerts globally.

During HSE meetings crewmembers of the Deepwater Horizon review the alert and discuss corrective and preventive actions that might be taken to prevent a similar situation from occurring onboard. The alert is posted on the QHSE bulletin board and a copy is filed in a permanent reading file/binder for future reference and review.

HSE Alerts are "Non-Discretionary sources of opportunities" that the Company has identified as being important and/or critical to performance and require the use of **FOCUS** Planning and Tracking software to ensure action points which result from a corrective or improvement opportunity are effectively planned and tracked.

HSE Bulletins


HSE Bulletins provide specific or general information related to a particular subject, situation or incident deemed of important value to inform and raise people's awareness.

HSE Advisories

HSE Advisories provide specific information to improve the understanding of an existing requirement or process through further explanation and clarification, or to communicate a new requirement deemed of critical value to be implemented and complied with.

HSE Bulletins and Advisories are "Discretionary sources of opportunity" that require managers and supervisors to decide if **FOCUS** software should be used to ensure action points which result from a corrective or improvement opportunity are effectively planned and tracked.

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HSE Signs

The Deepwater Horizon uses internationally recognized pictogram signs, according to the Company safety signs standard, to convey HSE critical information, such as PPE requirements, hazards, escape routes, emergency equipment, and so on.

Whenever temporary barriers for specific hazards are erected onboard the rig, they are clearly identified and removed after the area is safe.

Hazard Mapping

Areas where restrictions on access or equipment apply (for example, high noise areas, ignition source zones (explosion-proof equipment only), lighting, authorized personnel only, and so on) onboard the Deepwater Horizon are mapped and the location of this information is conveyed at the orientation.

QHSE Bulleting Board

The Deepwater Horizon has and maintains an up-to-date QHSE bulletin board that is accessible to all personnel.

Organization Chart

The Deepwater Horizon has and displays an organizational chart showing the OIM and the management/supervisory team.

2.3.3.2 Daily Communications

The Deepwater Horizon has an effective system in place that ensures critical information is communicated and understood throughout the working day. The elements of this system include:

- Standing Instructions for Drillers.
- Standing Instructions for Crane Operators.
- Formal shift hand-over report/logbook for all supervisors, issued at each shift change.

The Standing instructions for the Driller are issued by the Toolpusher and include drilling parameters and mud properties. Detailed instructions and safety requirements/considerations are included.

The Deck Foreman issues Standing Instructions for the Crane Operators that include detailed instructions for the job and also reference safety requirements/considerations.

A formal shift handover is made between supervisors at each shift change and specifically addresses present and upcoming operations, equipment status and permits and/or isolations in place. The form is signed by both the incoming and outgoing supervisor.

All three forms are filed and retained onboard for a minimum of ninety days.

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2.3.8.3 HSE Meetings

HSE meetings are conducted onboard the Deepwater Horizon in a manner intended to motivate and recognize proactive HSE performance, provide an opportunity for crews to discuss, understand/apply processes/procedures for conducting tasks and identifying hazards and potential risks and to increase awareness by reviewing and learning from incidents and HSE information. All Company personnel, client personnel and all subcontractor personnel attend and participate in relevant HSE meetings as determined by the OIM.

Effective HSE meeting must be conducted in a positive manner to motivate proactive HSE performance among crewmembers. Effective meetings follow a prepared agenda, are of sufficient duration, include clear and thorough discussion so attendees understand the issues and encourage active participation by attendees.

All HSE meetings are documented and attendance sheets are signed by all personnel attending. The OIM and Rig Manager review and sign each meeting report and ensure appropriate action identified in the meeting is addressed using the **FOCUS** Improvement Process. The documented meeting reports are made available for review by all personnel and copies are kept by the RSTC for a minimum of three years.

Weekly Departmental Meetings

Department heads on board the rig are responsible to ensure that all personnel within their department attend at least one departmental HSE meeting per week. Crew supervisors are responsible to ensure that effective meetings are conducted. These weekly meetings are sometimes conducted with other another department, and in that case, the heads of both departments ensure that the meeting is effective for all personnel. The attendance of Transocean subcontractors is required at relevant HSE meetings. Client and client subcontractor personnel are strongly encouraged to participate in relevant HSE meetings.

The primary purpose of these meetings is to discuss the various planning, monitoring and improving processes (**THINK**, **START** and **FOCUS**) used throughout the Company and how they apply or will be used. Additional topics include reviewing and discussing how other HSE information, internal or external, applies or could apply to the department.

Topics that are regularly discussed during these meetings include:

- Welcoming new crew members
- Announcing individual HSE performance and recognition
- Teaching the **THINK**, **START** and **FOCUS** processes and the complete HSE system in an organized manner
- Reviewing **THINK** plans, **START** observations, and status of **FOCUS** improvement opportunities
- Reviewing HSE Alerts and Advisories
- Demonstrating the correct use of tools and equipment
- Identifying hazards
- Discussing recent near hits and incidents
- Reviewing the Monthly Incident Rate Chart

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General HSE Meetings

The OIM periodically conducts general HSE meetings for issues that apply to all personnel, such as HSE performance recognition, incident status (Company, Region, installation or facility), and significant change to normal routines.

Pre-tour Meetings

Pre-tour meetings onboard the rig are part of the hand-over process to ensure that all personnel starting work are aware of the current operation and their particular responsibilities. These meetings are generally held amongst individual crews.

Pre-task Meetings

Specific meetings are held onboard the Deepwater Horizon prior to certain tasks being conducted. The formality and content of the meetings depends on the exact nature of the task to be conducted. The person who has direct operational responsibility for the proposed operation is responsible to ensure that an effective pre-task meeting is conducted. For more complex or non-routine operations onboard the rig a suitable meeting format is decided upon (for example, pre-spud, pre-rig move or well test).

Daily Operation Meetings

Onboard the Deepwater Horizon, all department heads or their designees attend a joint, daily operation meeting, together with the OIM to discuss each department's plans for the next 24 hours.

Specific attention is paid to the potential of interacting departments, with the intent of reducing any risk involved. Additional topics that are included when relevant or required are previous 24 hour **START** observations and action plans for corrective actions (**FOCUS**), any incidents in the previous 24 hours and an operational look ahead. The OIM is responsible for the conduct of these meeting and Client personnel are included as appropriate.


QHSE Steering Committee and Meetings

Installation, QHSE Steering Committee Meetings are conducted onboard the Deepwater Horizon at least two times per year. The meetings are conducted at specific times defined by the Region Manager and agreed upon by Corporate HSE Services, in a manner such that each crew has the opportunity to attend at least two meetings per year. Annual HSE goals must be reviewed during QHSE Steering Committee Meetings to determine HSE performance gaps and identify improvement /corrective opportunities (if any) to be addressed.

2.3.9 Drilling and Well Control Operations

Drilling and Well Control Operations and procedures onboard the Deepwater Horizon are performed in accordance with Company and statutory requirements pertinent to the area of operations. These procedures represent reliable knowledge and methods for a particular process or activity proven through experience and the adoption of best practices within the industry. Transocean maintains its standards by continuous monitoring of activities and updating of the procedures to reflect technical advances and changes in legislative requirements. Alterations in procedures can also be initiated by the requirements of the drill crews and/or operators. All alterations to operational procedures are reviewed by management to ensure compliance with statutory requirements.

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The Rig Manager, OIM and Toolpusher are responsible for ensuring and verifying that the implementation of Drilling and Well Control Operations policies and management of well control incidents conform to the requirements detailed in the Transocean Well Control Manual (HQS-OPS-HB-01) and the Field Operations Manual (HQS-OPS-HB-05) and that all personnel involved are appropriately trained as per requirements of the Company training matrix and are competent to fulfill their responsibilities.

2.3.9.1 Training and Competency Requirements

IADC WellCap Standard is the Transocean Company Standard for well control training and is offered at Introductory, Fundamental and Supervisory levels. Personnel with drilling and well control responsibilities and their required levels of training are as follows:

- Introductory Well Control is presented in an OJT Module for Floorhands. Roustabouts and Ordinary Seaman who relieve Floorhands on breaks are required to complete training within six months of commencement of relieving duties Assistant Drillers and All Subsea Supervisors
- IADC Wellcap Fundamental is required for Derrickhands, Pumphands, Assistant Drillers and all Subsea Supervisors
- IADC WellCap Supervisory is for Drillers, Toolpushers, Senior Toolpushers and OIMs
- IADC WellCap Plus is facilitated training offered on an invitation basis for OIMs, Senior Toolpushers, Toolpushers and Drillers

The North American Region Training Center is staffed by IADC certified instructors who are qualified to conduct all levels of training.

2.3.9.2 Well Planning, Review of Procedures and Client Interfaces

Transocean requires an appropriate level of well planning to communicate Transocean's methods of operations, understand the Client's expectations, identify risks / opportunities for operational improvement, required resources and well-site information and eliminate assumptions that may have a negative impact towards safety of personnel, environment, equipment or operational performance.

When possible prior to the well being spudded, the Rig Manager - Performance / OIM reviews the drilling program to confirm safe drilling and well control practices, compliance with Company policies and the ability of the installation to perform drilling operations within the environment and water depth of the proposed location.

A pre-spud meeting is held prior to drilling each well. The following people normally are in attendance, with others attending as necessary:

- OIM
- Toolpusher
- Driller
- Subsea Supervisor

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- Master
- Client's Drilling Superintendent
- Clients Drilling Supervisor
- Third Party Representatives (as required by Client)

Well planning checklists that identify client and contractor issues and responsibilities are used to identify pre-spud meeting agenda issues. The following topics are covered during the pre-spud meeting:

- Supervisory lines of communication
- Drilling contract review; responsibilities of each party
- Drilling program review, including mud, casing, cement, etc., programs; special emphasis to be placed on special operations and possible problem areas
- Rules and regulations
- Contractor and Client policies
- Drills, frequency and information involved
- Well control policy and procedures
- Reporting and records
- Crew change schedules
- Logging and well testing programs

During the meeting, notes must be taken. A meeting record will be typed after the meeting and distributed to all attendees, complete with distribution list (signed) with a copy put in the MODU files.

2.3.9.3 Simultaneous and Combined Operations Risk Assessments

Simultaneous drilling and production operations are required to have a risk assessment completed before they are carried out. Appropriate risk prevention and mitigation measures are implemented and all relevant personnel are informed of the risks and preventive and mitigating measures prior to beginning operations.

A TSTP (Task Specific **THINK** Procedure) inclusive of a (TRA) Task Risk Assessment is required for operations involving moving on or off a platform of subsea installation where wells are flowing and when conducting drilling operations adjacent to producing wells. The TSTP requires the approval of the Region Operations Manager in addition to the normal approval of the OIM and Rig Manager.

The TSTP represents installation specific procedures that are the basis for establishing effective and reliable preventive and mitigating controls.

The TRA is applied to further demonstrate in detail that the risks and hazards have been reduced to ALARP.

For moving on or off platforms or subsea installations where wells are kept flowing the TSTP must address (not and exhaustive list):

- Down-hole safety valves
- Manned emergency shut-down stations and communications
- Online gas monitoring
- Weather limitation criteria
- Development of detailed procedures including responsibilities

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- Emergency response plans developed
- Seabed surveys used must be current and up to date

For drilling operations adjacent to producing wells appropriate preventive and mitigating controls must be discussed with the client and the proposed plan must be acceptable by the Region Manager or his designee.

The TSTP procedures must address the following (not an exhaustive list):

- Online gas monitoring
- Manned emergency shut-down stations and communications
- Down-hole safety valves
- Live wellhead protection from load impact damage
- Dropped object avoidance procedures
- Clearance from existing wells
- Development of detailed simultaneous drilling and production procedures including responsibilities
- Emergency response plans developed.

Full assistance with the preventive and mitigating risk reducing controls for both scenarios should be sought from the Client involved.

2.3.10 Marine Operations and Site Assessment

2.3.10.1 Marine Operations

Marine operations onboard the Deepwater Horizon are conducted in compliance with the approved installation-specific Marine Operations Manual and all relevant Classification Society Rules, Flag State Requirements and Coastal State Legislation governing the installation and marine activities.


The Master, OIM and Maintenance Supervisor are familiar with the Installation's Marine Operations Manual and practical operating limits and ensure other supervisors are aware of requirements as applicable to their responsibilities.

Onboard the Deepwater Horizon the Central Control Room is manned by certified/licensed competent personnel (Dynamic Positioning Operators, Master, Chief Mate) at all times.

The Dynamic Positioning Operators (DPO) follow established guidelines for marine operations, such as the use of collision lights, fog horns in reduced visibility, radar for anti-collision and navigational watch procedures. Some marine operations are covered by rig-specific Task Specific THINK Procedures and others are detailed in the Field Operations Manual (HQS-OPS-HB-05)

Ultimate responsibility for the safety of the installation and the personnel remains with the OIM and the Installation's owners at all times

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2.3.10.2 Marine Crew Manning and Competency

Marine manning complies with the installation's minimum safe manning certificate (MSMC). The positions on the MSMC are filled by competent and appropriately licensed and/or certified personnel.

Newly hired marine personnel must meet prerequisites and qualifications (education, licensing, etc.) as detailed within the job description for each position. They are responsible to complete all training as per the Company training matrix and each year are subject to a performance appraisal. Training requirements for the Master include the completion of the Major Emergency Management (MEM) course and assessment / qualification as Person-in-Charge (PIC).

2.3.10.3 Site Assessments

Client Supplied Data

It is the responsibility of the client to provide information about the proposed drilling location as far in advance of a planned move as practically possible to allow sufficient review time by company Engineering and underwriters approving bodies. The information is used in the development of Well Specific Operating Guidelines (WSOG):

The following is the required client supplied data and general information:

- Type of operation: exploration well or over platform
- Location Designation
- Geographical Coordinates
- Water Depth
- Identification of platforms, pipelines, cables, well heads, floating or fixed vessels or any other relevant objects within a 3 mile radius of the proposed location
- Bottom anomaly information

Metoccean data, including references to data sources, shall be provided as indicated below:

Wind speed - at 10 meter above sea level 1-hour, 10-minute, 1-minute and 3 second gust

- Extreme environmental weather conditions 50 year return period data for the proposed installation location or the immediate vicinity to be provided. If such return periods are not available the more stringent 100 year return condition should be used for location approval purposes.
- Wave height - significant and maximum
- Wave period - significant and maximum wave energy associated
- Wave direction
- Tidal range, tidal streams and currents at 50% of water depth and bottom currents
- Maximum storm surge
- Directional information on each item above
- Predominant swell conditions
- Hurricane information

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2.3.10.4 Adverse Weather

Installation-specific practical operating limits and weather parameters are documented and communicated for functional operations during adverse weather including consideration of no wind conditions during well control or similar operations. Practical operating limits are typically less and do not exceed the design limits reflected in the MOM. The decision whether or not to perform any operation lays in the good judgement of the qualified personnel onboard the Installation.

Weather forecasts are fully utilized in order to give accurate warning of adverse weather. The forecasts are discussed with relevant personnel and work is planned to avoid exposing personnel and the Installation to the effects of adverse weather.

If severe weather is forecasted the OIM and Master ensure that the Installation is suitably prepared with particular reference to the watertight integrity and safety of personnel. Typically winds in excess of 60 Knots may threaten the safe movement of personnel on exposed decks.

The OIM and Master should monitor the approach of the weather system and use the onboard equipment to assist in this matter. In addition he should also contact the forecasting bureau direct to obtain the latest information on the approaching weather. In particular, decisions should be made regarding:

- Suspension of drilling Operations.
- Evacuation of non essential personnel.
- Verifying Installation stability.
- Securing deck loads.
- Ensuring all internal and external watertight closures are secure.
- Limiting personnel access to external decks.
- Rigging safety lines where necessary.

The Deepwater Horizon has contingency procedures within the Emergency Response Plan to address adverse weather conditions including hurricane evacuation.

2.3.10.5 Support Vessels

Arrangements for and provision of Offshore Supply Vessels (OSVs) are the responsibility of the Client although these vessels, while on location, are subject to Transocean operating policies and procedures as detailed in the Field Operations Manual.


OSV activities are coordinated with an onboard Client representative usually either the drilling foreman or a logistics coordinator. They in turn liaise with the Client's shore base to coordinate the transportation of supplies, equipment and personnel.

Offshore Supply Vessels are utilized on occasion in emergency response drills and exercises such as Man Overboard rescue and firefighting.

Following are recommended practices for operations with OSVs:

All vessels approaching a Company Installation should advise their ETA at least 1 hour before arrival and may require the following information from the installation.

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- Installation Heading
- Weather information
- Name of Standby Vessel (if any)
- Installation operations (ROV ops, over-the-side work, flaring etc.)
- Control room and crane VHF working channels
- Whether the supply vessel should be worked on arrival or not.

The following points should be taken into consideration when planning supply vessel operations:

- The type of load; heavy lifts; dangerous cargo
- Any requirement for a particular order of loading / offloading
- Operating limits and weather conditions

Time limitations and boat crew rest periods may apply. If supply vessels must operate along side the Installation for extended periods, OIM / Master should confirm that the supply vessel has sufficient watch keeping officers capable of maneuvering the vessel.

Before any supply vessel closes within the 500-meter zone the status of the following should be confirmed and defects reported to the OIM/Master:

- All propulsion and maneuvering control equipment
- Internal and external communication equipment
- Cargo handling equipment.

In marginal conditions a supply vessel should be asked to approach to a stand-off position at least 50 meters from the Company Installation to assess the conditions and the vessel's ability to carry out cargo operations.

The following points should be taken into consideration before commencing any supply vessel operations. In marginal weather conditions it is imperative for the safety of both the supply vessel and Company Installation that the items below are complied with:

- Visibility should be sufficient to allow the supply vessel Master a clear view of the Installation throughout the cargo operation.
- Wind and current direction. Operations should be carried out down wind and down current of the Installation whenever possible. This is to minimize the risk of contact in the event of a failure in the supply vessel propulsion or steering. An exception to this would be essential work on a potential shallow gas operation, when the vessel should be kept upwind.
- The station keeping ability of the vessel including the type and power of the propulsion and the experience of the personnel.
- The nature of the cargo and the expected duration of the operation.

The Master of a supply vessel always retains the right to refuse to come alongside or to cease operations and move clear of the installation on the grounds of the safety of the vessel and its crew.

Once inside the 500-meter safety zone any change in the operational status of the vessel equipment should be reported to the installation and a decision taken to continue or abort the cargo transfer operation.

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Supply vessels are prohibited from anchoring within the 500-meter zone of the Deepwater Horizon unless under exceptional circumstances and then only with the express permission of the OIM/Master

OSVs in DP Mode

Supply vessels operating Dynamically Positioned may only be permitted along side if deemed acceptable by OIM/Master. The vessel should comply with the IMCA publications, M103 "Guidelines for the Design and Operation of DP Vessels", confirmed acceptable for close approach DP operations by the OIM/Master with support from the Rig Manager as necessary.

For safety reasons a DP supply vessel using DP only should not work on the windward side of the rig without a Task Specific THINK Procedure (TSTP) in place that considers loss of supply vessel DP capabilities.

DP supply vessels should not approach the rig without approval if a well is flowing.

The use of DP during actual cargo transfer operations is only acceptable with the permission of the OIM/Master.

Information regarding the capabilities of the vessel and the state of readiness of her equipment should be confirmed to the OIM/Master before operations commence and similar information should be passed to the OSV.

In weather conditions nearing DP supply vessel station keeping capabilities, the OIM/Master of a Company Installation should request that two trained DP operators be on the bridge at all times while the supply vessel is operating on DP within the 500-meter zone.

2.3.11 Engineering Management

Engineering and Technical Services is part of the Operations Department which oversees policies and procedures that affect offshore operational matters.

It is the responsibility of engineering and Technical Services to ensure that modifications and upgrades to the rig are reviewed, approved and carried out in a safe, planned, controlled and cost-effective manner. They ensure that all applicable drawings and documentation is amended to reflect changes.

The Management of Change Enhanced Approach is used for proposed modifications to the rig. FOCUS Planning and Tracking Software is used to develop plans, obtain approvals, monitor progress and track to completion.

Proposals for modifications initiated on the rig will first go to the Technical Field Support Manager.

All requests for action to be taken by HQS Engineering Departments are documented using the Request for Engineering Action (REA) request.

Company Equipment Standards, Engineering Standards and Recommended Practices are reviewed and followed where applicable with due consideration being given to the impact of proposed modifications on the operation of the rig with regard to safety, environmental, operational and maintenance standards.

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Major modifications are subject to both Company and Class Society approval.

When necessary, a project manager (and possibly a team) is appointed to develop and supervise the scope of work, gain approvals and monitor costs.

A "Modifications Repairs Log" is maintained onboard and copies of documentation for all significant modifications are maintained in HQS Engineering.

2.3.12 Lifting Operations and Materials Handling

Transocean Mechanical Lifting policies and procedures cover the use of Tuggers, Manriding, Deck Cranes, BOP Cranes and Handlers, Pipe Handling, Gantry, Overhead Trolley Beam Mounted Cranes and Forklifts. Only deck crane operations are addressed in this section. Policies and procedures relevant to all other equipment are detailed in the Health and Safety Policies and Procedures Manual HQS-HSE-PP-01. descriptions of all handling equipment are in Section 3 of the OIC.

The use of any and all mechanical lifting equipment requires that a suitable plan with a risk assessment and appropriate controls must be confirmed in place prior to all tasks. Mechanical lifting is covered by all levels of the **THINK** Planning Process, rig-specific Task Specific **THINK** Procedures, Task Risk Assessments and the use of Permits-to work.

2.3.12.1 Responsibilities, Training and Competence

Onboard the Deepwater Horizon the Deck Pusher supervises cranes and deck operations to ensure they are carried out in a safe and efficient manner in accordance with Transocean Mechanical Lifting Policy as detailed in the Health and Safety Policies and Procedures Manual. His duties and responsibilities include:

- Providing relevant instructions for current and forthcoming operations
- Ensuring pre-job meetings are held for all non-routine operations
- Ensuring that a suitable plan with the appropriate level of risk assessment is in place for each task
- Supervising all crane and deck operations
- Coordinating boat traffic
- Checking lifted loads for clearance, obstructions, balance and attachment
- Ensuring the main deck and pipe deck are kept clean and well organized

Deck Pushers are required to complete the Crane Operator OJT Module, API RP2D Crane Operator training and API RP 2D Rigger training.

The Crane Operator works at the direction of the Deck Pusher and primary duties include:

- Operating the crane to transfer personnel and materials to and from supply boats and to move equipment onboard as required.
- Partaking in pre-job meetings for all non-routine jobs
- Review and plan each task with the crew and ensure an appropriate risk assessment is in place
- Inspecting all lifting gear before use

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- Performing safety inspections on cranes
- Carrying out preventive maintenance on cranes and components
- Maintaining a clean and well organized main deck and pipe deck

Crane Operators (and Assistant Crane Operators) must complete the Crane Operator OJT module, API RP2D Crane Operator training and API RP 2D rigger training. After completion of the OJT module they must be able to demonstrate to the OIM or his designee:

- Hand signals
- Appropriate use of the radio during lifting operations
- Handling, attaching and moving and holding loads
- Operating practices
- Routine crane maintenance (daily, weekly, monthly)
- Personnel Transfer
- Use of load charts at different angles

Only competent Crane Operators are authorized to operate cranes with exceptions being made for training and maintenance work. Only Crane Operators authorized by the OIM can train or instruct trainees.

The Crane Operator is responsible to know and follow limitations on crane operations as detailed in the Deepwater Horizon Operating Manual

Roustabouts report to the Crane Operator or Deck Pusher and their duties include:

- Preparing cargo for lifting by attaching appropriate lifting gear
- Giving/relaying hand signals and/or radio signals to the Crane Operator
- Manually lifting, carrying and moving equipment, tools and materials as required
- Participate in pre-job planning and risk assessments as required.

Roustabouts are required to complete the Roustabout OJT Module and API RP2D Rigger training. Roustabouts complete Manual Handling Training as part of their Safety OJT Module.

2.3.12.2 Communications

Only personnel that have completed the certified rigger training may act as Banksman. While assigned, Banksmen have no duties other than communicating with the Crane Operator using hand signals and/or radios to direct the movement of equipment and materials.

Hand signals must be available and must be understood by every person involved in directing cranes.

Hand signals are the primary means of communication for all crane signaling; radios may be used in conjunction with hand signals but are considered secondary.

If, due to conditions, radios are used in lieu of hand signals as primary communications and appropriate risk assessment must be conducted prior to the task.

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2.3.12.3 Mechanical Lifting

The purpose of the Company's Mechanical Lifting Policy is to prevent injury of incidents during mechanical lifting operations and states that:

- Mechanical lifting devices must only be operated by competent personnel or trainees while under direct supervision of competent personnel.
- All lifting equipment in service is required to have current certification or to have been successfully load tested within the last year.
- All lifting equipment must be suitable for the lift and visually inspected for condition prior to each use
- Padeyes or lifting lugs must be properly designed, manufactured, installed and tested prior to use

Lifting equipment includes lifting gear and lifting appliances as described below:

- Lifting gear includes any device(s) used or designed to be used directly or indirectly to connect a load to a lifting appliance and which does not form part of the load
- Lifting appliances are any mechanical device(s) capable of raising or lowering load including but not limited to cranes, chain blocks, pull lifts, winches and drawworks
- Cargo carrying units include any equipment used to contain or transfer loads such as containers, baskets, bottle racks, personnel baskets, and waste skips
- Padeyes are engineered load bearing attachments designed to be used with a shackle, integrated or welded into a structure, piece of equipment or lifting appliance and are used to transfer a dynamic load or secure a static load.

Maintenance and Use of Lifting Equipment

Any person using lifting equipment must be trained in the rigging practices and load handling methods for that equipment. They must also have working knowledge of its capabilities and any defects likely to arise in service.

Equipment found to have a defect affecting the safe operation must be removed from service and repaired, load tested and authorized for use or destroyed.

A register of all lifting equipment must be maintained at each installation and facility. This register must be able to trace any piece of equipment back to a current load test certificate. Every effort must be made to retain the original manufacturer certificate aboard the installation. All lifting appliances must be included in planned maintenance system.

A system that uniquely identifies the Safe Working Load (SWL), inspection frequency and individual identification of each piece of lifting equipment and each padeye must be maintained at each installation and facility.

A competent person must inspect all lifting equipment and padeyes at least every 12 months. A record of that inspection must be kept on the rig. All recommendations made within the report must be acted upon and, if necessary inserted in the FOCUS software.

Color coding must be used to clearly identify the last inspection date of all lifting equipment and all new lifting equipment placed in service shall be marked with the current color code.

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Lifting equipment must be used only for the specific purpose for which it was designed and before a lifting operation commences the following checks must be made:

- A SWL must be clearly marked on the lifting appliance
- The weight of the load must be within the SWL rating of the lifting appliance
- The lifting gear and appliance has been inspected and marked with the current color code
- The lifting gear and appliance do not display any visual signs of damage

Any item of lifting equipment subjected to repair or alteration in the design must be re-certified and authorized for use before being reinstated.

2.3.13 Logistics Management

2.3.13.1 Personnel Tracking

Onboard the Deepwater Horizon, the Radio Operator is responsible for maintaining a current record of Personnel On Board (POB) at all times. The POB is updated daily or as changes occur depending on arrival and departure of personnel. The POB includes at a minimum, arrivals and departures, a total account of all personnel on board and primary and secondary lifeboat assignments for all personnel. The POB is reported to the Regional office via the GRS (Global Reporting System) report.

The movements of personnel to and from the rig are tracked by the use of manifests generated on the rig by the Radio Operator and forwarded to the Client and either the helicopter or OSV provider. Personnel arriving on or departing the rig are required to sign the Arrival / Departure Log.

All personnel onboard are required to complete information sheets that are filed by the Radio Operator. The personal information records details primary and secondary emergency contact information. All personnel also complete and update as appropriate confidential Individual Personal Medical Records.

2.3.13.2 Helicopter Operations

The OIM is responsible for control of helicopter movements and the designation of competent Helicopter Landing Officers(s) (HLO). Onboard the Deepwater Horizon the

The marine deck foreman, Bosun or RSTC will be designated HLO. In general, all activities on the Helideck are under direction of the HLO, and all helicopter operations are in accordance with the rig-specific Task Specific THINK Procedure for Helicopter Landing and Refueling. Following are excerpts from the TSTP:

- The heliport notifies the Radio Room of the ETA. The Radio room notifies the Medic, Bosun and DP. The Bosun in turn notifies the Primary Landing Team and the medic notifies the Crane Operator so that crane ops will be suspended in a timely manner.
- The HLO inspects the helideck, Monkey Island, E-deck and D-deck for loose objects and unsecured W/ T doors, ensures retractable handrails are folded down and that helideck monitors are positioned correctly. He also performs radio checks with DP/CCR and the Radio Room

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- The Medic passes all necessary information to the helicopter pilots; heading, winds, number of passengers and weight, etc. he also verifies that the forward cranes are secured and relays this information to the HLO along with the type of helicopter approaching, fuel requirements, number of arriving personnel, etc.
- If fuel is needed, the HLO readies samples and checks available fuel supply.
- The HLO checks that the foam system is lined up and assists the fire team with donning their outfits. He also ensures that all crash equipment is clear and in ready status.
- A 3 minute pre-landing announcement is made by one of the landing team and the HLO ensures helideck passage is restricted by use of red chains
- DP/CCR observes all operations by CCTV when a helicopter is on deck.
- The HLO directs the Fireman to man the monitor that will give the most effective coverage while the helicopter is on deck
- The HLO identifies the exit route for debarking/embarking passengers and ensure handrails are raised
- The HLO monitors the placement of wheel chocks if needed.
- Team members offload the aircraft all the while observing disembarking passengers
- Refueling operations begin once all passengers are inside the Helipoint Room.
- After refueling operations are completed, baggage is loaded and passengers embark while being kept under observation. Once they are on the aircraft, the HLO makes pre-take off checks.
- If chocks are in use they are removed at this point on direction of the pilot and the HLO and fire team exit the helideck and assume a standby position on the stairs.
- The HLO makes a final assessment of the deck for hazards and gives the pilot a "Green Deck" for take off. After the aircraft has departed the HLO and Landing Team verify that all systems are secure and that all equipment is properly stowed.
- The Medic makes a PA that the helicopter has left the ship.

The following environmental limitations apply to helicopter operations:

- Winds greater than 22 m/sec (50 mph or 43 knots).
- Visibility below 4.8 km (3 miles).
- Extremes of heave, roll, and/or pitch, i.e., heave greater than 2 m (6.5 ft) double amplitude and roll and/or pitch greater than 2° single amplitude.


The above guidelines are the minimum conditions under which helicopter operations can be conducted. In the case where more stringent Operator or helicopter company-issued guidelines have been posted on the rig, they shall supercede the above guidelines. See

The HLO attends an approved HLO training course and all other personnel receive on the job training relevant to helicopter operations. Helicopter Emergency Drills are held at least every 90 days.

More detailed helicopter procedures are outlined in the Deepwater Horizon Operating Manual and emergency procedures are detailed in the Emergency Response Manual.

2.3.14 Hazardous and Radioactive Substances

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Transocean requires that on an installation, all hazardous materials must be identified, labeled and effectively controlled in order to heighten the awareness of personnel and to reduce exposure to harmful effects associated with these material. A Hazardous Material Identification System (HMIS) is required to be available at all times.

Great care must be exercised to protect personnel when being exposed to hazardous materials, which includes substances that may have an adverse effect on health or the environment. Personnel who are required to handle hazardous materials must be made aware of the hazards, the nature of the material, risks created by exposure, safe handling instructions, precautions to be taken, use of PPE, emergency procedures and proper storage instructions for the materials.

2.3.14.1 Training

All personnel must complete documented Company approved hazardous materials awareness training and at least one materials person that has attended a Region approved course in the handling / shipping of hazardous materials must be onboard at all times.

2.3.14.2 Material Safety Data Sheets (MSDS)

An MSDS must be available for use in the **THINK** plan prior to offloading any hazardous material onto the rig.

Installations are required to maintain at all times a system that ensure up-to-date MSDS sheets are available for all hazardous materials being used or stored on the installation. The Installation Medical Person is responsible to maintain this system.

In addition to MSDS sheets acquired from the materials person for Transocean's materials, the Installation Medical Person also obtains MSDS sheets from the Mud Engineer for chemical and drilling fluids and from other third parties for materials they have onboard.

2.3.14.3 Marking and Storage

Hazardous materials are labeled to indicate the name of the material or the trade name and the Hazardous Materials Identification System Information including:

- Type of hazard
- Hazard rating
- Required protective equipment

Hazardous materials are stored in dedicated areas within adequate containment facilities and products that may react with one another are stored separately. During storage, all HMIS marking must be visible.

2.3.14.4 Shipping

When products and materials covered by this procedure are packaged for shipment, a trained materials person supervises the work and ensures procedures detailed in the HSE Policies and Procedures Manual are followed.

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2.3.14.5 Inventory Control

A system is required to be developed and maintained whereby the OIM or designee is made aware of the location and quantities of all types of hazardous materials onboard the installation at any time. The hazardous materials inventory must be regularly checked and must be made readily available to the Emergency Response Teams.

2.3.14.6 Hazardous Materials Waste

Principles covering the handling of hazardous materials and waste include:

- Identification and labeling
- Separation of wastes that can react when mixed when stored or handled
- Storage in clearly marked specific containers which are sent ashore for disposal

2.3.14.7 Working with Hazardous Materials

Procedures for working with hazardous materials (in addition to those detailed in the HSE Policy and Procedures Manual) include:

- Referring to the HMIS for storage and handling information
- Reading the labels on containers
- Maintaining awareness of relevant MSDS information
- Checking for warning signs or special instructions posted in the area

2.3.14.8 Radioactive Materials, Explosives, Dangerous Liquids and Gases

Handling of these materials is controlled by the Permit to Work system is only done by approved personnel. The OIM must be informed when any of these materials/ substances are brought onboard and is responsible for the placement and security of such materials.

All such materials must be stored in clearly marked designated storage areas away from normally manned area and storage containers must closed and locked at all times and identified with appropriate labels.

2.3.14.9 Dangerous Liquids, Flammable Liquids, Containers and Paint.

Procedures for working with dangerous and / or flammable liquids, containers and paint are all detailed in the HSE Policy and Procedures Manual.

2.3.14.10 Radio Silence

The basic policies relevant to Radio Silence are as follows:

- Radio silence is required when there is a risk of accidental activation of explosives from radio/electrical transmissions. Some particular technologies that employ Electric Bridge Wire or

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Exploding Foil Initiator systems in lieu of the primary explosive used in traditional detonators do not require radio silence

- Radio silence will normally be in conjunction that requires a Permit to Work
- The OIM or designee is responsible for coordinating the preparations for and the monitoring of the period of radio silence.

2.3.15 Procurement Management

All Transocean locations where purchasing is done maintain a List of Approved Suppliers, selected on the basis of their ability to meet minimum quality, delivery and price criteria as based on demonstrated capability, previous performance or product significance. The list is maintained electronically in EMPAC, the Company's purchasing system.

Suppliers are evaluated and qualified by the local Materials Manager and/or Regional and HQS Procurement Management prior to inclusion on the List. Supplier status changes are processed through the local material Manager.

Suppliers are qualified by on-site or off-site assessment, history or service or third party certification. Suppliers subject to offsite assessment are evaluated using a Critical Supplier Evaluation Form. The form is completed and signed by the supplier and reviewed by the Materials Manager to determine is the status and significance of the Supplier's QA system relative to the products or services proposed for purchase is satisfactory.

The on-site assessment which allows for a more adequate assessment is assisted by use of Supplier Criticality Assessment Guidelines form. Assessment is conducted prior to placing orders so that the degree of quality exposure is identified and controls are put in place to minimize impact to the Company. This applies in particular to suppliers providing Safety Critical and High Critical equipment. The supplier is assessed for a category of product or service based on the end use of the product or service and the worst probable exposure or risk.

The quality of products and services are monitored and Critical Suppliers deficiencies and non-conformances are reported to the Corporate Suppliers Management Group. They have the responsibility to review the level of non-conformance and set up a plan of action which could include a full Supplier Evaluation or removal from the Approved Suppliers List. A significant individual non-conformance may warrant immediate action, in which case the location Procurement Manager notifies Corporate Suppliers Management advising preferred action.

The need for removal from the Approved Suppliers List is reviewed and approved by the District or Regional Procurement Manager based on unacceptable standards of performance. These can include poor service history, consistent improper documentation, unethical conduct, lack of quality control, etc...

Onboard the rig when items are found not to be in agreement with the shipping documents, requisition/purchase order, damaged or lacking required certification, they are marked and isolated as discrepant. Supervisors of ordering departments may inspect the items to see if they are acceptable. Items purchased with discrepancies must be processed using a Procurement Incident Report. The assigned Procurement Center or Materials Department handles each Procurement incident to Resolution

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2.3.16 Maintenance Management

2.3.16.1 Maintenance Policies

Transocean's fundamental maintenance strategy is translated into eight (8) policies supported by the Maintenance Manual (HQS-OPS-01), the Coatings Handbook and the GRS (Global Reporting System) User's Manual:

- Maintain the rigs in a safe condition and good working order by following the Company "Guidelines for Good Working Order" and ensuring that rig housekeeping is kept to a high standard.
- Maintain strategic long term plans for each individual drilling asset identifying major events; i.e., drydocking/SPS, extraordinary preventive maintenance, upgrades, and equipment replacements and utilizing standardized maintenance budgeting practices
- Preserve the value and maximize the useful working life of drilling assets in a cost effective manner by standardizing materials used on the rigs and optimizing procurement of those materials
- Perform standardized maintenance that meets the requirements of the Company Maintenance Management System (MMS). Maintain machinery equipment and structures based on criticality as related to operations and safety. Identify critical equipment and ensure that it is maintained using the Company's Standard Preventive Maintenance Tasks. Assign equipment "owners" to be responsible for equipment operation, condition and maintenance.
- Document the condition of rigs by performing unbiased assessments, preparing action plans and following up to correct deficiencies and any maintenance issues raised
- Focus on the training and development of competent maintenance personnel and equipment owners by providing OJT training courses and appropriate technical training. Provide training tools on the operation of the MMS and provide resources to support operations.
- Protect equipment, machinery and structures from corrosion and coating systems from damage to ensure that the long term protection of Company assets is conducted in the most efficient and cost-effective manner and that a safe and sound working environment is maintained.
- Record and investigate and report operational downtime, equipment failures and other significant events and take appropriate action to avoid reoccurrence ensuring that the lessons learned are shared across the Company.

2.3.16.2 Maintenance Organization

Four main groups are involved in the Transocean Maintenance organization:

The **Rig Operation and Maintenance Team** operates the equipment, plans, performs and reports on the maintenance activities, evaluates the effectiveness of and provides feedback on the maintenance performed. The Maintenance Supervisor is responsible for the overall condition of the rig. Equipment owners are responsible for safe operation and day to day maintenance of equipment. Maintenance personnel carry out maintenance as directed by their supervisors.

The **Rig Management Team** takes a central role in the planning, execution and review of activities. With the assistance of the Maintenance Supervisor and Department Heads the Rig Management and the OIM ensure that the MMS is implemented correctly and works effectively. They ensure that personnel are familiar with the requirements of the Maintenance manual and that adequate resources are provided to match the requirements of scheduled maintenance.

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The Business Unit Management Team which includes the Technical Field Support Group provides technical and training support, ensures that independent or hardware assessments required for the MMS are carried out and works with the corporate organization to ensure effective communications. It is also the communication link between the rigs and HQS.

The Corporate Maintenance Group (part of the HQS Operations group) coordinates with the Business Units the standardization and continuous improvement of MMS processes, assessments, maintenance task and systems. They are responsible for sharing feedback any lessons learned from the rig, and managing and maintaining company alerts and advisories, technical information bulletins and equipment standards.

2.3.16.3 Equipment Criticality

Machinery equipment and structures are maintained based on criticality. Equipment criticality is related to the consequences of failure either on the execution of operations or on safety or the environment. Transocean has defined five (5) levels of criticality:

1. Safety Critical Equipment (SCE) – Equipment that is require to respond to emergencies or to protect personnel from accidents including the following

- Fire, explosion or the release of dangerous substances
- Major structural damage or the loss of stability
- Collisions with ships or helicopter
- Failure of systems supporting human life

Typical equipment would include Emergency Systems and Safety Systems

2. High Critical Equipment (HCE) – Equipment that would cause safety or environmental consequences if it failed or that could cause major loss to people, property or the environment.

Typical equipment would include equipment that has the potential to suddenly release energy upon failure such as lifting gear and pressurized vessels

3. Operations Critical Equipment (OCE) – Equipment that would cause downtime if it failed

Typical equipment would include drill floor equipment, mud pumps, motion compensators, etc.

4. Low Critical Equipment (LCE) – Equipment that would cause no safety, environmental or operations impact if it failed but financial consequences could equal \$25,000 or greater

Typical equipment would include redundant services equipment such as hotel services equipment, water pumps and compressors

5. Non Critical Equipment (NCE) – Meets none of the previous criteria, has no maintenance tasks assigned, may be fixed when it breaks and consequences of failure are less than \$25,000.

If equipment is SCE, HCE or OCE then it is on a preventive maintenance schedules and is maintained using the Company's Standard Preventive Maintenance Tasks.

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2.3.16.4 Standard PM Tasks

Transocean's Standard PM tasks which are required to be used on all rigs have been developed by a group of the Company's most experienced field maintenance personnel assisted, as required, by original equipment manufacturers. Standard Tasks are updated as necessary to account for acquired operating experience, input from the field, manufacturer advice and equipment or maintenance requirement changes.

The tasks may only be changed at the HQS level. Where field personnel desire to add a task or change a task because it is not adequate or is too aggressive, there is a process in place for getting changes made. Changes or additional tasks are subject to review and approval by the Business Unit.

In the exceptional case where a standard task cannot be followed for valid technical, operational, experience or regulatory reasons, a non-standard task may be used or added after formal review of the change at Division Unit Level.

2.3.16.5 Management of Change for Critical Equipment

Onboard the Deepwater Horizon, the Management of Change Process for HSE critical equipment is typically initiated by the Maintenance Supervisor or a Department Head, i.e., Toolpusher or Master in cooperation with the Maintenance Supervisor. The Change Proposal is reviewed and approved by the OIM, the Rig Manager and the Rig Operations Manager before being forwarded to the Manager of Technical Field Support for final review and approval.

2.3.16.6 Contractor Management

Transocean in the course of its operations utilizes on occasion the services, equipment and/or materials of contractors. Contractors are chosen either from Transocean's list of approved contractors or are assessed for inclusion on the list via completion of a Master Service Agreement.

The Master Service Agreement requires that the Contractor meet certain criteria relevant to safety programs, reporting of unsafe conditions, reporting of accidents and compliance with Transocean's policies and procedures.

Contractor personnel are assessed, monitored and recognized for working to a system equivalent to the HSE system of Transocean. The purpose of this policy is to ensure that the HSE interface of all Company operations involving contractor personnel and equipment are effectively managed to identify hazards and control risks.

Any contractor or outside agency personnel that work onboard the Deepwater Horizon are encouraged to take an active part in the Company **THINK, START** and **FOCUS** Processes.

All permanently assigned subcontractors (catering, cementer, mud engineer, and so on) are introduced to the Colors process and encouraged to take an active part in the process.

Subcontractor personnel must perform a risk assessment appropriate to planned tasks.

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Contractors must maintain their equipment to an acceptable standard prior to and while on board the installation. Company onshore management must be informed of client or subcontractor equipment/personnel that are found to be unsatisfactory.

2.4 PERFORMANCE MONITORING

Compliance is a measurement of how well people understand and achieve the Company's expectations (policies, principles, objectives, etc.). Performance monitoring is monitoring compliance and managers and supervisors do this by actively participating with personnel and their activities and frequently reviewing key performance indicators.

2.4.1 Key Performance Indicators

Transocean uses a number of key performance indicators to define and measure progress towards the achievement of goals and objectives. These key performance indicators include:

- **START** Observations
- Safety Statistics
 - Incident Rates
 - Severity Rates
 - Serious Incident Cases
- Audit Reports
 - Internal
 - External
- Environmental Monitoring and Measurement
- Verification of HSE Critical Activities and Systems/Equipment
- Certification
 - Classification Society
 - Flag State
 - Statutory/Coastal State

2.4.2 Behavior Based Observation Systems – START

The primary monitoring tool used throughout the Company on a daily basis is Transocean's Behavior Based Observation System, **START**. **START** is used to observe and monitor work practices, plans and workplace conditions.

The purpose of the START Process is to:

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- Empower employees to observe tasks and work areas and look for safe and at-risk/unsafe behaviors and safe and unsafe conditions
- Empower employees to monitor themselves and others to ensure the safe execution of a plan by interrupting and correcting at risk/unsafe behaviors, unsafe behaviors, unsafe conditions and unplanned changes
- Increase personnel's ability to recognize and respond to hazards
- Reinforce observed or monitored safe behavior through effective feedback
- Interrupt operations when unplanned change is recognized
- Promote accountability for maintaining a safe workplace
- Obtain commitment among co-workers to repeat safe behavior
- Provide supervisors with feedback on trends in safety behavior

The **START** process must be actively led by all supervisors and supported by all Company personnel and any clients, subcontractors or client subcontractors must be encouraged to take an active part in the process.

All Company personnel are responsible for their own safety and behavior. All company personnel are obligated to interrupt any unsafe operation and correct any at-risk/unsafe behavior or unsafe condition.


Proper implementation of the **START** process by all personnel provides an effective method of preventing injuries, safeguarding equipment and avoiding operational exposures by all personnel.

START Process

START is an acronym standing for the elements of the system, i.e., See, THINK, Act, Reinforce and Track.

- **SEE** with total focus and observe for safe and at-risk behavior and conditions. Recognize safe behavior and reinforce it with effective feedback. Correct at-risk behavior and condition immediately in a constructive manner
- **THINK** about what you see. THINK "what if" to anticipate and recognize change. THINK what to say.
- **ACT** to monitor and observe safe and at-risk behavior as well as unsafe condition. Anticipate and recognize change and immediately interrupt the task to evaluate the change to either correct the condition/behavior or revise the plan
- **REINFORCE** safe behavior with specific effective feedback to encourage continued safe behavior and raise awareness of at-risk behavior and unsafe conditions. Communicate corrective and improvement opportunities with effective feedback to encourage change
- **TRACK** results of observations through active participation by all personnel. Communicate and share observations with all people on a daily basis to reinforce a safe workplace and raise people's awareness of where to focus their efforts and proactive measures.

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2.4.2.1 START Process Used to Perform Observations and Feedback

Observations can be performed on an individual (or individuals engaged in performing the same task) or conditions. Performing an observation on an individual does not necessarily require specific knowledge and responsibility of the task being performed. The individual performing the observation makes the commitment to identify safe conditions and safe behavior and/or interrupts the operation to act on an unsafe condition or at-risk behavior.

Effective feedback requires that people recognize and reinforce safe behavior at every opportunity and interrupt /correct at-risk/unsafe behavior immediately.

2.4.2.2 START Used to Monitor THINK Plans

Monitoring a **THINK** plan is when an individual or group has knowledge and understanding of a plan and makes the commitment to continually assess the plan progress. The purpose of monitoring plans is to recognize any change or deviation from the plan that could affect the planned result. The resulting consequences of not recognizing a change or deviation from the plan can be one or more of the following:

- An unsafe condition.
- An at risk behavior.
- A missed opportunity to interrupt.
- An incident occurs (Near Hit, Serious Near Hit, Personnel Injury, Environmental Damage, Property Damage).

All personnel must continually monitor their **THINK** plans and work conditions using the **START** Process.

2.4.2.3 START Observation Training

All Company personnel must be trained in the performance of **START** Observations. Training is available on the "Transocean Safety Leadership Training" DVD. Supervisors must actively participate in their employees **START** training utilizing the information from the DVD. Effective understanding of the process cannot be accomplished from employee-computer interface alone. Supervisors must utilize the information from the DVD to coach, mentor and monitor the effectiveness of their employees' observation and monitoring techniques.

The quality of **START** observations is enhanced by performing them daily using the **START** Card. Supervisors should perform joint observations with non-supervisory personnel or subcontractor personnel to assist their development and understanding of the proper observation and feedback techniques.

2.4.2.4 START Cards

Supervisors must ensure that they and their personnel perform **START** observation and record them on **START** Cards

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2.4.2.5 START Observation Tracking

The OIM must ensure an effective system is in place to:

- provide personal oversight of START participation by personnel
- track, communicate, trend START observations and,
- act upon the results of observations as needed

Effective **START** Observation tracking consists of the following:

- Review and communication of observations by personnel, supervisors and onboard management. (Review in pre-tour, pre-task, departmental and morning meetings)
- Establish trends of observations for safe behavior, at-risk behavior, safe and unsafe conditions in the workplace (what, where, when).

The Management of Change process must be used for improvement or corrective opportunities created from trending results. The use of **FOCUS** software may be necessary.

2.4.2.6 START Monitoring

START monitoring is an essential part of the execution of any **THINK** Plan. It must be continuously performed. **START** monitoring is performed by an individual on their Individual **THINK** Plan, or performed by a group of individuals on the group's **THINK** plan. **START** monitoring the execution of a plan is another method of tracking.

Anticipation and recognition of change is accomplished by continuous **START** monitoring of the plan using personal experience and knowledge of the plan to evaluate what could potentially change or cause deviation from the plan.

START Monitoring can only be performed by individuals that have a thorough understanding of the plan. To monitor effectively, continuous evaluation of plan must be performed to compare what is actually seen, heard and experienced versus what is planned to be seen heard or experienced.

START monitoring provides the opportunity to recognize change or deviation from the plan that has occurred or could occur. Anticipation or recognition of a change provides the opportunity to interrupt the task and assess the change to control any new risk.

Effective **START** monitoring must be performed during the execution of a **THINK** plan and includes continuously asking yourself:

- Is the plan still good for the task at hand?
- Are the tools and PPE still suitable for the task at hand?
- Are the risks still the same as identified in the plan?
- Are more or fewer people involved in the task?
- Are all people involved or affected by the plan informed?
- Do I know what will happen next?

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2.4.2.7 START Tours

Supervisors must perform periodic dedicated START observation tours. This is accomplished by making rounds for the specific purpose of conducting observations. START tours may also be conducted with non-supervisory personnel or subcontractor personnel for training purposes.

2.4.3 Incident Reporting and Analysis

Onboard the Deepwater Horizon all work related incidents are reported, and forwarded to the office for review by the Rig Manager. All non-work related incidents resulting in trauma and requiring care at the Medical Treatment level are reported, forwarded for review by the Rig Manager. Reporting requirements for incidents are communicated to all personnel at the HSE orientation.

The Rig Manager has the responsibility to evaluate incident, develop and implement appropriate improvement opportunities and track performance to confirm effectiveness.

A three-phase process is initiated following the occurrence of an incident on the rig.

1. Action is taken to ensure the area is safe and medical attention is provided if required.
2. The incident is reported internally and externally as required.
3. The incident is investigated.

2.4.3.1 Reporting Procedure

All medical attention rendered on the rig (including "work related" or "non-work related" First Aid cases) must be accurately recorded as defined in the Medical Documentation procedure.

Incidents are classified and reported as follows:

- Non-work related
 - Medical care provided offshore – for injuries resulting in medical treatment facts are reported on an Incident Report within GRS and validated by the Rig Manager. Medical treatment is documented per medical protocols
 - Medical provided onshore – includes treatment of non-work related incidents that occur at work and incidents that occur at home affect the employee's ability to perform routine job functions. Upon return to work, the employee must provide the Installation Medical Person with a document provided by the treating physician if a scheduled crew change was missed or they departed the rig prior to crew change to receive medical care onshore
- Work related
 - First aid, medical treatment, restricted work and serious injury cases – initial factual points are reported and documented on an Incident Report within GRS and validated by the Rig Manager. Work related incidents resulting in injury or illness to personnel are classified as "Personnel" and are reported on the daily operations report
 - Fatalities – The CEO and COO are notified by the fastest means available, the initial factual points are reported and documented on an Incident report form within GRS and are validated by the Rig Manager.

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- Non-personal injury
 - Unsafe observations that cannot be immediately corrected to the supervisor of/by the person conducting the observation and are documented on a **START** card
 - Near hits and serious near hits -- Factual points are reported on an Incident Report within GRS and are reviewed by the Rig Manager. Near hit are reported verbally to the supervisor of/by the person(s) witnessing the event and the OIM is notified. Serious near hits are reported to the OIM and to the supervisor of/by the person witnessing the event. Serious near hits are reported on the daily operations report. If an incident resulting in injury or damage could also be a Serious Near Hit, it may be reported as such. However, a second Incident Report must be completed for the Serious Near Hit. The potential severity should only be captured once, either on the original Incident Report or the Incident Report used to record the Serious Near Hit.
- Loss of containment -- Loss of containment incidents are reported per requirement of the Environmental management Manual
- Property damage -- Property damage is reported on an Operational Event Report

2.4.3.2 Severity

The Rig Manager, upon review of an Incident Report, must determine the actual and potential severity of all work-related incidents including near hits and serious near hits utilizing a severity calculator held in the GRS (Global Reporting System)

The severity of incident is calculated in order to allow the Rig Manager to determine if action needs to be taken. The severity calculator is held within the Global Reporting System (GRS).

Near Hits and Serious Near Hits result in only potential severity and no actual severity.

The Potential Severity value does not determine the classification of Near Hit or Serious Near Hit. The Severity rating determines classification of a Near Hit or Serious Near Hit.

There is no relationship between Potential Severity value and the classification of Near Hits or Serious Near Hits.

2.4.3.3 Incident Analysis

Incidents are indicators on where performance can be improved. Incident analysis uses critical information to establish what happened, but more significantly it determines how important it is to the Company to act on it. Incident analysis identifies corrective and improvement opportunities that represent lessons learned which should be reviewed against the Company Management System for change and/or improvement.

The North American Region has a specific procedure in place for incident analysis which takes in to account the following factors:

- Location of Region and District Management's Fact-finding Team
- Availability of specialized expertise

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- Regulatory requirements
- Geographical locations
- Transportation infrastructure
- Local customs and cultures

The incident analysis procedure is reviewed at appropriate levels to ensure it adequately addresses:

- Communication plan
- Organizing fact finding
- Fact finding document and evidence control
- Management review of facts

The following represent the four key steps required to complete an incident analysis:

1. Fact-finding. This must take place at the site of the incident.
2. Management review of facts.
3. Communication of Corrective and Improvement Opportunities.
4. Development of Corrective and improvement Action plans using **FOCUS** software

Fact finding

Designation of the appropriate responsible person for managing the fact-finding step is determined by the severity value initially assigned by the Rig Manager as it is applied to the Fact-Finding Table of Responsibilities.

The resources and personnel assigned to the fact-finding process must be based on the areas of expertise required, the level of experience available, the local environment and the level of direct management involvement necessary to complete the fact-finding step. In all cases either the OIM or the Rig Manager or District Manager / Region Operations Manager will ensure adequate resources and trained personnel are assigned to the fact-finding step dependant on severity of the incident.

Management Review of Facts

The Management Review of Facts should focus on how to prevent the incident from happening again and what can be learned from the incident. The Management Review determines whether corrective and improvement opportunities are needed to improve safety. Responsibility for ensuring adequate resources for carrying out the Management review of Facts is determined by the Division Manager.

Corporate Operations Group will conduct the Management Review of Facts for all fatalities. Region Management may be requested to assist in the Fact-Finding step, but the overall responsibility for Management Review of Facts resides with Corporate Operations Group.

Communication of Corrective and improvement Opportunities

Upon completion of the Management Review of Facts, corrective and improvement opportunities are communicated through line management and, when deemed appropriate by QHSE Management (at all levels), also by HSE Alert, HSE Bulletin or HSE Advisory. All Incident analysis results are non-discretionary sources of opportunities and must be entered into the **FOCUS** software.

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Statistical Reporting

The Company Monthly Statistic Report consists of two sections; Company personnel (including leased labor) and Company hired subcontractors. Information in each list includes the number of:

- Working hours
- Work-related first aid cases
- Work-related medical treatment cases
- Restricted work cases
- Serious injury cases
- Fatalities
- Serious near hits

These statistics are used to evaluate and installation's safety performance

Responsibility

The direct responsibility for the implementation of the Incident Reporting and Investigation Process onboard the Deepwater Horizon lies with the OIM. His duties include:

- Ensuring the initial factual points are reported and documented on an Incident Report form within the Global Reporting System (GRS) for all required events.
- Ensuring any work related FAC, MTC, RWC, SIC and any EVDM, EVDS, PRDM or PRDS is reported on the daily operations report.
- Ensuring adequate resources for fact-finding are allocated, if determined to be the responsible person by severity assignment.
- Ensuring the Monthly Incident Rate Chart is posted for personnel to review.
- Keeping the client representative informed of the status of all ongoing medical events that may require emergency or non-emergency medical evacuation.

2.4.4 FOCUS Improvement Process

The **FOCUS** Improvement Process consists of steps to address improvement and corrective opportunities and provides a consistent means to improve Company performance by formulating and action plan, organizing resources to carry out the plan, communicating the action plan, undertaking the action, summarizing the results and capturing lessons learned. **FOCUS** enhances the execution of **THINK** and **START** within the Management of Change Process.

FOCUS incorporates a planning and tracking tool located within the Global Reporting System (GRS). The feedback form FOCUS is lessons learned and the use of GRS enable the Company to capture these lessons and make them available.

The first step in the FOCUS process is to determine if an opportunity is "improvement" or "corrective". Sources of opportunity include both mandatory and discretionary (optional) sources.

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2.4.4.1 Mandatory Sources of Opportunity

Mandatory sources of opportunity are sources that the Company has identified as being important and/or critical to performance. They require the use of the **FOCUS** tool to ensure corrective or improvement actions are effectively planned and tracked to completion. The following list includes all mandatory sources that require using the **FOCUS** tool:

- Company management system, **SMART** - Implementation Plans
- Performance Monitoring Audit and Assessment - Corrective and Improvement Action Plans
- ISM Code, ISPS Code, Client, Flag State and Regulatory Audits – Corrective and Improvement Actions Plans.
- HSE Alerts, Corporate and Unit – Corrective and Preventive Actions
- HSE Incident Analysis Result – Corrective and Improvement Actions Plans
- Service Quality Appraisals - Corrective and Improvement Actions Plans
- HSE Meetings - Corrective and Improvement Actions Plans

2.4.4.2 Discretionary Sources of Opportunities

Discretionary sources of opportunity are sources that require managers and supervisors to decide if the **FOCUS** tool should be used to ensure corrective or improvement actions are effectively planned and tracked. It is recommended managers and supervisors use the **FOCUS** tool in the case of discretionary sources when:

- A complex and/or critical situation or action has been identified.
- Managers and supervisors require a formal review and approval process.
- Significant lessons learned must be captured so they are available to users.
- Actions that require an extended period of time to complete (not related to maintenance or procurement activities).

NOTE: Regardless of the source of opportunity, when the “enhanced” approach to management of change is used, the FOCUS tool must be used.

The following list includes examples of discretionary sources where using the **FOCUS** tool is optional (these sources are available for selection in the tool):

- Advisory – Operations, Safety
- Alerts – Client, Equipment, Regulatory
- Annual Installation HSE Plan
- Client/Industry Meeting
- Exemption Request
- Feedback Forms, Lessons Learned
- Management Review, Management Visits
- Operational Event Report (OER)
- Security Incident
- **START** – Monitoring, Observation
- Start-up Plan – Installation, Office/Facility
- Steering Committee Meeting - QHSE
- **THINK** Plan – HAZOP/HAZID, Individual, MAHRA, Operation Integrity Case, Safety Case, Task Risk Assessment, Task Specific **THINK** Procedure, Verbal, Written

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2.4.4.3 Steps in the Process

After determining whether the opportunity is "improvement" or "corrective" the **FOCUS** tool within GRS is used to develop the improvement and corrective actions by using the following five steps.

Formulate the Plan (**THINK**)

- Analyze the improvement or corrective opportunity actions required.
- If a corrective opportunity action is required, address the causal factors, (change, condition, action and inaction). Determine if any interim actions are required as part of the corrective action.
- For corrective opportunity actions, develop plans, identifying effective solutions and steps to implement the plan. Identify and assess any risks and determine the necessary controls to safely and effectively support the steps of the plan.
- For improvement plans, define the steps required to improve performance. For executing plans, define the steps required to ensure that an expected level of performance is maintained. Identify and assess any risks and determine the necessary controls to safely and effectively support the steps of the plan.
- Assign the priority (high, medium, low) to prioritize the planned actions.

Organize Resources (**THINK**)

- Identify the resources required for the successful implementation of the planned actions. This may involve requesting expertise (knowledge, practice, skill and approval) and other resources from departments within the Company such as engineering (REA), technical field support, QHSE, training, operations, and so on, or outside parties such as clients, vendors, regulatory agencies or others.
- Determine a target date for completion of the planned actions.

Communicate the Plan (**THINK**)

- Determine if other parties are affected by the planned actions.
- Identify the responsible person for communicating the planned actions to parties that may be affected.
- Define the method the responsible person uses to communicate the planned actions.
- Responsible person communicates the planned actions to all parties involved or affected by the proposed changes.
- Submit the plan for approval per established authority limits.

Undertake the Actions (**START**)

- Implement the actions. Monitor, track and recognize changes that may affect the planned actions.
- Review any delays or alterations to or deviations from the planned actions and formulate alternative actions as agreed by the affected parties.
- Inform all affected parties of any changes to the planned actions.
- Ensure the successful implementation of the planned actions and inform all appropriate parties of their completion.
- Submit approval for any extension(s) of the target completion date of the planned actions.

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Summarize the Results

- Evaluate the effectiveness of the completed work. Address the original improvement and/or corrective opportunity to determine if the planned actions achieved what they were intended to achieve.
- Confirm the completed planned actions do not result in any unforeseen adverse effects.
- Ensure lessons learned are clearly described based on the review of the improvement or corrective opportunity actions completed.
- Responsible Person confirms planned actions were completed and implemented prior to submitting for close out.
- Maintain availability of lessons learned from improvement and corrective opportunity actions.
- Communicate lessons learned to the Company as required.
- Determine if Company's performance was improved by the improvement or corrective actions completed.

All personnel have the responsibility to use FOCUS to plan, risk assess, monitor, track and complete planned actions.

The OIM has the responsibility to:

- Ensure corrective and/or improvement opportunities are planned and tracked in the **FOCUS** tool when the source of opportunity is classified as "mandatory."
- Ensure corrective and/or improvement opportunities identified add value and improve Company performance.
- For discretionary sources, determine if the **FOCUS** tool is necessary to ensure actions are adequately planned and tracked to completion.
- Approve corrective and improvement action plans per **FOCUS** Approval Authority Limits.
- Monitor approved actions to ensure appropriate implementation is achieved and lessons learned are captured.
- Ensure approved actions are completed and closed out within the approved Target Completion Date.
- Review and approve requests for Target Date Extensions per **FOCUS** Approval Authority Limits.

2.4.5 Environmental Monitoring and Measurement

Transocean requires that all installations have an environmental performance monitoring and improvement process in place to ensure full compliance with Company policies, government laws and regulation.

Management conducts audits and assessments to verify compliance and some of the methods for continual monitoring include:

- Executive and Unit /Division Management Review
- Corporate and Unit /Division PMAA
- QHSE Steering Committee
- Monitoring by rig Manager (Asset/Performance)
- Daily Monitoring by OIM
- Green Team Monitoring
- Environmental Site Survey

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Leading and lagging environmental performance indicators are away of measuring and monitoring performance. They generate a quantifiable and consistent set of data which can be compared over time.

Leading indicators measure inputs and include:

- Purchase of Green products
- Recycling and waste segregation programs
- Green Team meetings
- Environmental drills
- Completed tracking forms for waste and emissions

Lagging indicators include the results and impacts of work such as waste and emission and include:

- Spills (loss of containment)
- Waste generated
- Emissions discharged
- Service Quality Appraisals (client perception)

Each location establishes baseline measurements for their environmental performance indicators to ensure environmental performance improvement. Data for each criteria is recorded and analyzed by the location Green team on a quarterly basis. This enables the identification of trends or anomalies for each of the data sets. The same process is conducted at Division, Business Unit and corporate levels. This allows for comparisons in performance at all levels within the company and the identification of areas of excellence as well as areas for improvement. The analysis of this information and the assessment of performance enable the establishment of strategies for improvement.

2.4.6 Audit and Audit Compliance

Transocean's primary audit program is the Performance Monitoring Audit and Assessment (PMAA). The PMAA involves measuring performance to the Company Management System by evaluating people, processes and systems. The PMAA is based on meeting leadership expectations (Executive Management) identified in the Company Management System as policies procedures and principles (leadership, management and personal) to determine system effectiveness and individual behavior and performance.

Audit measures compliance through the evaluation of objective evidence to elements which are deemed by management to be essential in achieving the intent of a policy. Elements which are deemed to be essential in achieving the intent of a policy are termed key elements and the compliance audit measures these key elements to determine if the intent of the policy (expected outcome and/or behavior) is being achieved.

Corporate Department Heads are required to identify key elements for all policies that will be audited.

Assessment measures compliance through the evaluation of essential criteria and objective evidence which is deemed by Executive Management (Corporate Officers) to be essential in achieving the expectations expressed in the Company's management principles and personal principles. Executive Management participates in the development of essential criteria that will be assessed for these principles.

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The PMAA process applies to the three hierarchical levels of the Company Management System: Corporate, Region/District and Installation. This section describes the audit process as conducted on the Deepwater Horizon.

Corporate and region management actively participate in the PMAA as auditor and assessors to meet their responsibilities to monitor and improve Company performance and demonstrate their management leadership.

2.4.6.1 Frequency of Audits and Team Participants

Audits are required to be conducted every 30 months. Audits and assessments may be carried out more frequently at the discretion of the Region Manager to address specific Region, client operation and/or regulatory concerns or requirements. The 30-month audit and assessment frequency must be met no matter the number of interim audits and assessments, and the minimum PMAA Team Participants required are 3 Management personnel from Region and 1 Lead Assessor.

2.4.6.2 Team Participants

The PMAA team members as well as the Lead Assessor are selected by Corporate and Region management and communicated through the annual Corporate and Region PMAA schedule plans. The Corporate Director of QHSE and the Region QHSE Managers liaise to ensure that PMAA schedules compliment each other and provide the best use of resources. Actual Corporate team member selection is determined by Corporate management and Region team member selection are determined by Region management. This is to ensure the proper knowledge, experience and communication skills will be available for an effective PMAA.

Although only three Region Management personnel are required to properly perform an audit, team composition will ordinarily include Corporate Management personnel from one of the following positions:

- Corporate Department Directors or Managers reporting to Department Vice Presidents
- Managers reporting to Corporate Department Directors
- Subject Matter Experts determined by Corporate Vice Presidents

Region Participants will be chosen from the following positions:

- Region Department Managers
- Operations Managers
- Managers and/or Supervisors reporting to Region Department Managers
- District Managers
- District Department Heads
- Rig Managers
- Operations Engineers
- Offshore Installation Managers (OIM) and Masters.

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2.4.6.3 Responsibilities of Installations for the PMAA

PMAAs on the rig are carried out by Team Members independent of the rig.

The rig is not required to carryout PMAA on a self-audit/assessment basis. Personnel are required to understand Company expectations related to their responsibilities as represented in tasks that they perform and/or supervise. Developing the knowledge, application and skills to meet their responsibilities requires that people are trained to understand the expectations described in the Company Management System.

- Managers and Supervisors are required to increase their people's understanding of what is expected of them and their performance as described in the Company Management System by:
- Determining what their people know and don't know in regards to the activities and processes outlined in the Company Management System manuals relevant to their job tasks and responsibilities.
- Assisting their people in understanding how the Company Management System is organized and how they can use it to gain knowledge and understanding on what is expected of them.
- Sharing their experience and knowledge by demonstrating to their people in the workplace the application of the activities and processes outlined in the Company Management System.
- Assessing and evaluating their people's ability to perform the activities and processes that are expected of them.

This training and evaluating process is the activity that involves increasing people's knowledge, allowing them to practice what they have learned, and through practice, develop skills and abilities to meet their responsibilities and the requirements specified in the Company Management System.

No other preparation for a PMAA on an installation is required other than:

- Managers and supervisors training personnel to understand and correctly apply required skills while performing tasks and activities and meeting responsibilities related to the Company Management System.
- Managers and supervisors assessing individuals' performance level against their job requirements.
- Individuals being accountable by taking ownership for the results of their work and behavior.

2.4.6.4 Responsibilities of Region Management for the PMAA

Region Management is responsible for:

- Auditing and assessing Corporate Management System documents as described in the Performance Monitoring Audit and Assessment manual, HQS-CMS-PR-02.
- Developing key elements for use in the PMAA and auditing to address Region policies and procedures (if any).
- Providing personnel for the Audit Team and developing a PMMA schedule
- Determining through management review, any additional areas to be audited and assessed inclusive of the core PMAA scope.
- Reporting and evaluating results of the audit and assessment.
- Management review of the PMAA results.
- Ensuring Corrective and Improvement Actions are monitored, followed up and closed-out.

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- Communicating Lessons Learned to the appropriate parties.

2.4.6.5 Responsibilities of the PMAA Team

The PMAA team has a responsibility to ensure the audit and assessment adds value to the location and its management. These responsibilities include:

- Commitment and Accountability - The success of the PMAA depends on the commitment of team members. They are responsible for the quality and integrity of the audit and assessment
- Communication -- Feedback must be provided in a constructive and supportive manner that is consistent, honest and sincere while keeping people informed of execution plans and overall progress
- Behavior -- Maintain a professional attitude that is positive, friendly and understanding. Not being perceived as on looking for fault or criticizing.

2.4.6.6 Scope of the PMAA

The purpose of establishing the core PMAA scope is to establish a consistent approach to evaluate and measure global Company performance.

The core PMAA scope consists of the 8 Management Principles and 3 Personal Principles as defined in the Company Management System Manual (HQS-CMS-GOV) as well as an audit of selected policies and procedures contained in Corporate Level Policy and Procedures Manuals.

The core PMAA scope is determined by Corporate Management with input from Region Management. At the discretion of Region Management, additional Corporate policies and procedures outside the core PMAA scope may be included based on management's evaluation of the rig's performance.

2.4.6.7 Conduct of the PMAA

The PMAA is carried out in four steps:

1. Plan
2. Audit and Assess
3. Results and Action
4. Follow-up and Closeout

Plan – The PMAA team performs an initial performance review to:

- Establish specific knowledge of the rig's performance and operating history
- Establish clear objectives for the team to ensure appropriate time and resources are utilized to conduct and effective PMAA
- Identify whether Company reporting systems are used correctly
- Familiarize team members with the management system PMMA, the assessment report matrix, audit and assessment criteria and PMAA reporting documentation

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Audit and Assess – The second step of the PMAA is carrying out the audit and assessment by:

- Meeting with rig management offsite and onsite
- Assessment of principles and audit of policies

Results and Action – The third step requires the team to complete the following:

- Record results on the PMAA documentation
- Provide feedback to one another on the results
- Develop a common understanding of the results
- Determine who will communicate the results
- Prepare the PMAA reports
- Schedule meetings to communicate results with management on-site and off-site

Follow-up and Close-out – Follow-up ensures the rig's performance is optimized by carrying out any Improvement and Corrective Actions to completion. Close-out is a management responsibility carried out after verifying that follow-up has been satisfactorily completed. Follow-up and close-out includes:

- Rig Management completion of the Corrective and Improvement Opportunity actions within the planned **FOCUS** closeout
- Lead Assessor communication to all relevant personnel on the PMAA distribution list
- Corporate and/or Region Management review of the Performance Monitoring Report and forwarding of the Management System Feedback form to the appropriate QHSE Steering Committee
- Review and follow-up of Lessons Learned

Follow-up of Corrective and Improvement Opportunities is managed through the **FOCUS** Tracking Software. The Offshore Installation Manager has the direct responsibility to ensure that Corrective and Improvement Opportunities are clearly identified, included in **FOCUS** and closed out within the approved target date.

2.4.7 Verification of HSE Critical Activities/Tasks and Equipment/Systems

2.4.7.1 Verification of HSE Critical Activities/Tasks


HSE-Critical Activities/Tasks are those identified as essential to provide or maintain the preventive and mitigating barriers for the causes and consequences of the major accident hazards identified in Section 4 of the OIC

The HSE Critical Activities/Tasks have been derived from the bowties developed as part of the hazard assessment described in Section 4. Critical activities are included in an appendix to the OIC.

Critical activities/tasks may be design, inspection and maintenance, operational or administrative, i.e.:

- **design activities/tasks** - which specify the necessary hardware and equipment;
- **inspection and maintenance activities/tasks** - to ensure that this hardware and equipment maintains its integrity and reliability;

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- **operational activities/tasks** - to ensure that the equipment is used within the defined limits of the controls provided;
- **administrative activities/tasks** - which provide the necessary training, awareness and behavior conditioning to ensure that people perform predictably in all normal and abnormal situations.

The activities and tasks were developed based on operational procedures, policy and procedures, job descriptions, responsibilities, etc.

They have been reviewed / verified at the Corporate, Regional and Installation Level. They are subject to further review and verification based on changes in personnel, equipment, operating procedures, etc.

2.4.7.2 Verification of HSE Critical Equipment/Systems

HSE Critical Equipment onboard the Deepwater Horizon is subject to both external and internal inspection and verification.

External inspections and verifications include those undertaken by or on behalf of the flag state, coastal state, regulatory bodies and classification society. On occasion, the classification society and/or the coastal state may accept or require services performed by other parties as part of the surveys and inspection required by their rules such as lifeboat inspections.

Class Society Surveys and Inspections

The Deepwater Horizon is classed by DNV (Det Norske Veritas) and is subject to the scope and extent of surveys stipulated by the Rules of DNV and any resulting conditions, requirements or recommendations. Surveys are conducted at prescribed intervals and include Annual, Intermediate, Renewal and other Periodical Surveys. Surveys include extensive examinations to verify that the structure, main and essential auxiliary machinery, systems and equipment are maintained and remain in a condition that satisfies the Rules. Equipment and systems examined during these surveys includes:

- Machinery items and auxiliary systems
- Hull, structure and propulsion
- Drilling plant and cranes
- Helicopter deck
- Oil, air and sewage pollution

DNV on behalf of the flag state, Panama conducts examinations and issues an IMO Certificate (Safety Construction and Equipment Certificate) that covers:

- Construction
- Ventilation arrangements
- Watertight integrity
- Lifeboats and liferafts and their equipment
- Firefighting equipment (passive, fixed and portable)
- Fire and gas detection
- Radio equipment

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Coastal State Inspections and Verification

In the Gulf of Mexico, coastal state inspections and verifications are under the authority of two agencies, the United States Coast Guard (USCG) and the Minerals Management Service (MMS).

The USCG conducts an annual inspection for a Certificate of Compliance based on requirements set forth in Titles 33 and 46 of the Code of Federal Regulations. The equipment/systems covered by the USCG inspection include:


- Structural integrity, modifications for construction and repair
- Mooring systems
- Utility systems (air, fuel, bilge and ballast, etc.)
- Fire protection
- Safety systems (general alarms, ESD, gas detection, etc.)
- Electrical design and equipment
- Communications
- Pollution prevention
- Cranes and material handling
- Life saving equipment
- Workplace safety and health
- General arrangements (safety plans, escape routes, etc.)
- Emergency drills
- Safety analysis of industrial systems

The MMS conducts random inspection based on the requirements in Title 30 CFR. Equipment and systems inspected by the MMS include:

- Drilling, Completion, Well Servicing and Workovers
 - BOP equipment and control systems
 - Drilling system and relate relief valve, vent system, pressure vessels and piping, pumps, water systems, safety system, cementing and circulating systems
 - Lifting and hoisting associated with the derrick
 - Degassers
 - Bulk material handling and storage
 - Atmospheric vessels and piping
- Emergency shutdowns
- Gas detection
- Drilling, production, well-control safety and shutdown systems
- Pollution
- Ventilation (other than the accommodation)
- H2S contingency plans
- Testing of all drilling equipment
- Safe welding procedures
- Safety analysis of industrial systems

Internal inspections and verifications include those done onboard the Deepwater Horizon within the Company's Computerized Maintenance System and the formal hardware assessment undertaken by the Corporate Maintenance group. The assessment does not normally address safety equipment normally audited by HSE.

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Standards and guidelines utilized by the Corporate assessment group include:

- HQS Rig Condition Assessment Recommended Practices
- Transocean Maintenance Manual
- Original Equipment Manufacturer Maintenance and Operating Specifications
- Accepted oilfield operating and safety practices
- Transocean Standard Maintenance Tasks

Equipment/systems are evaluated using a Rig Condition Scorecard. A Rig Assessment Summary Report is prepared that contains an Executive Summary and a listing of any Major Asset Deficiencies with Recommendations. Additionally, Corrective Opportunities, Maintenance Issues and Improvement Opportunities are noted

Actions (Corrective Opportunities, Maintenance Issues and Improvement Opportunities) arising from inspection and verification are entered into the rig's Computer Based Maintenance Management System for follow up.

HSE Equipment criticality on the Deepwater Horizon is related to the consequences of failure either on the execution of operations or on safety or the environment. There are two categories of HSE critical equipment:

1. Safety Critical Equipment (SCE) – Equipment that is require to respond to emergencies or to protect personnel from accidents including the following
 - Fire, explosion or the release of dangerous substances
 - Major structural damage or the loss of stability
 - Collisions with ships or helicopter
 - Failure of systems supporting human life

Typical equipment would include Emergency Systems and Safety Systems

2. High Critical Equipment (HCE) – Equipment that would cause safety or environmental consequences if it failed or that could cause major loss to people, property or the environment.

Typical equipment would include equipment that has the potential to suddenly release energy upon failure such as lifting gear and pressurized vessels

A list of critical equipment and systems is included as an appendix in Section 3.


2.4.8 Certification

The Deepwater Horizon is registered in the Marshall Islands and classed by DNV. The rig maintains Class, Flag State, Statutory and Coastal State documentation and certification as follows:

DNV

- Classification Certificate

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Statutory Certificates (issued by DNV on behalf of Marshall Islands)

- International Load Line Certificate (full term and annual)
- Safety Management Certificate
- Mobile Offshore Drilling Unit Safety Certificate (1989) (full term and annual)
- MODU Code (periodical)
- Radio (annual)
- International Air Pollution Prevention Certificate (full term and annual)
- International Ship Security Certificate (including intermediate)
- International Air Pollution Prevention Certificate, Type A
- International Anti-fouling System Certificate
- Anti-fouling System Statement of Compliance

Marshall Islands

- Annual Safety Inspection
- Registration
- International Tonnage
- Minimum Safe Manning
- Ship's Station License (radio)
- ILO#92 Certificate of Crew Accommodations
- Bridge Visibility Dispensation
- RDF Omission Dispensation
- Radiotelephone/Watch Receiver Dispensation
- Engine Order Telegraph Dispensation
- Continuous Synopsis Record

U.S. Coast Guard

- MODU /TVE Certificate of Compliance
- COFR Certificate
- Fwd and Aft Marine Sanitary Devices
- Vessel Response Plan

Miscellaneous

- GMDSS Shore Based Maintenance
- Builder' Certificate
- Incline Test
- Certificate of Liability Insurance

DNV provides an updated list of the status of classification of the rig. The list includes due dates for applicable class surveys and certificates and the requirements and due dates of conditions of class, limitations or memoranda recorded against the installation. The list also provides expiration and survey dates of Statutory Certificates issued by Class on behalf of the Flag State or Coastal State. The information is available in electronic format.

It is the responsibility of the Rig Manager, OIM or applicable department supervisor to periodically review the status of the rig and ensure that certification is current and remains current by properly scheduling and ensuring the completion of surveys.

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2.5 MANAGEMENT REVIEW AND IMPROVEMENT

The Company Management System represents the way in which people and processes enable the company to accomplish annual goal and objectives, implement strategy and achieve performance excellence. Policies and procedures translate Company expectations into actions and one role of management is to, on an ongoing basis, monitor and evaluate people and the implementation of these processes (policies and procedures) to ensure that expectations set by Executive Management are met.

Management at all levels is required to monitor performance through the active participation in management reviews. Management review is monitoring which involves evaluating the results of:

- Management visits to regions, districts and installations and management review of business and operational performance
- Performance Monitoring Audit and Assessment (corporate, region and installation) and review
- Service Quality Appraisal (SQA)
- Global business reviews
- Regulatory or flag state required audits and/or assessments
- Maintenance hardware audits (installation only)
- Assurance & Advisory Services audits (corporate, region and installation)
- Internal Controls Self Assessment questionnaires and external audits (financial, etc.)
- Performance appraisal
- Key Performance Indicators (KPI)

In addition, management carries out review of events to determine the lessons learned from successes, failures and improvement and corrective opportunities. Lessons learned are available from sources such as:

- Project close-out meetings
- Incident analysis
- End of well reviews
- Service Quality Appraisals (SQA)
- PMAA close-outs
- Operational event reports
- **FOCUS** Planning and Tracking Software
- Industry and client correspondence

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Management reviews the findings of these evaluations, and the lessons learned and assesses them against the achievement of the company's goals and objectives. As appropriate, they are incorporated into future goals and objectives to enable the Company to execute its mission and achieve its vision.

2.6 ATTACHMENTS

2.6.1 Transocean Document Hierarchy

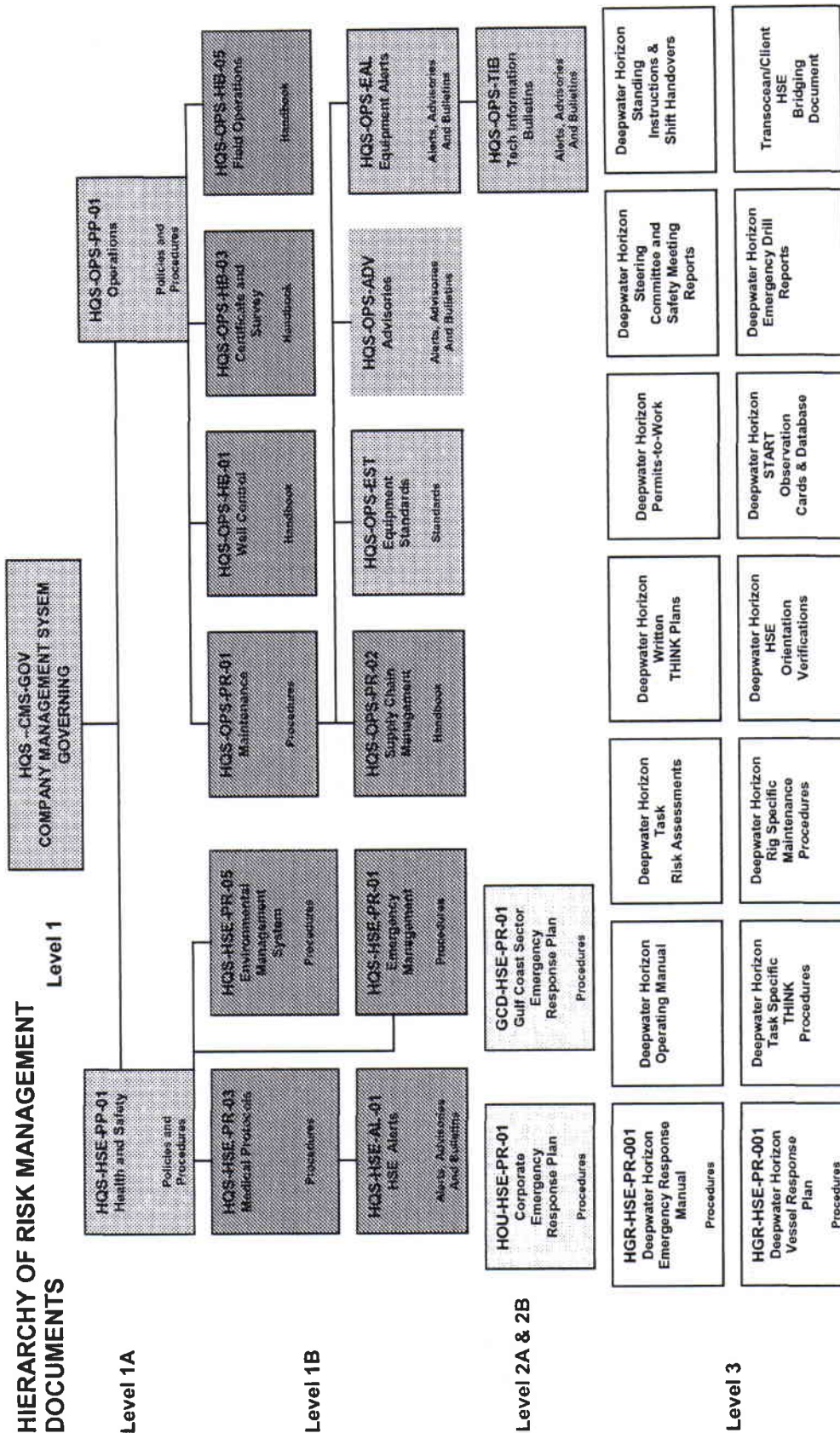
2.6.2 Organization Charts

2.6.2.1 Management and QHSE Organization

2.6.2.2 Deepwater Horizon Organization

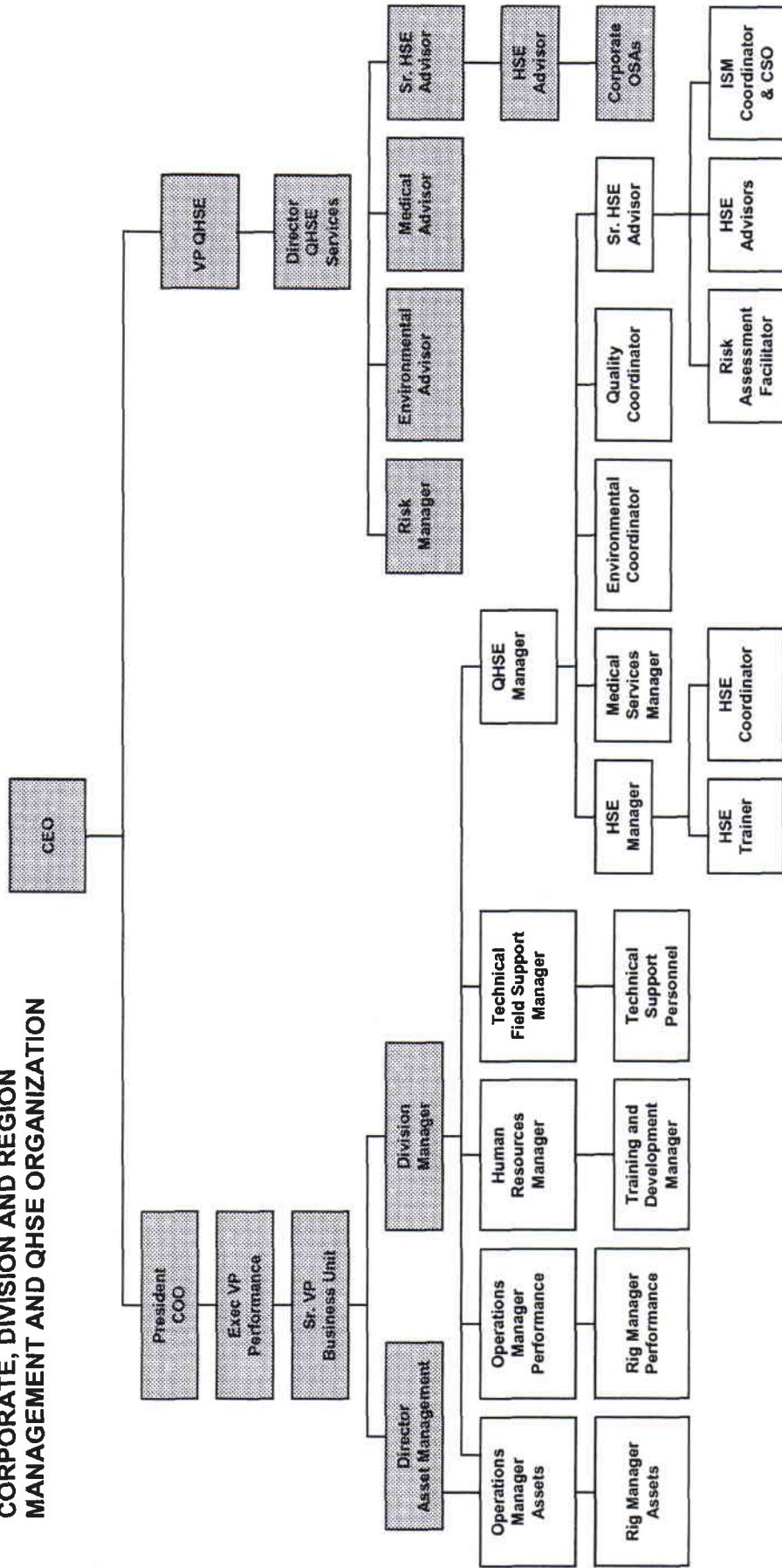
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HIERARCHY OF RISK MANAGEMENT DOCUMENTS



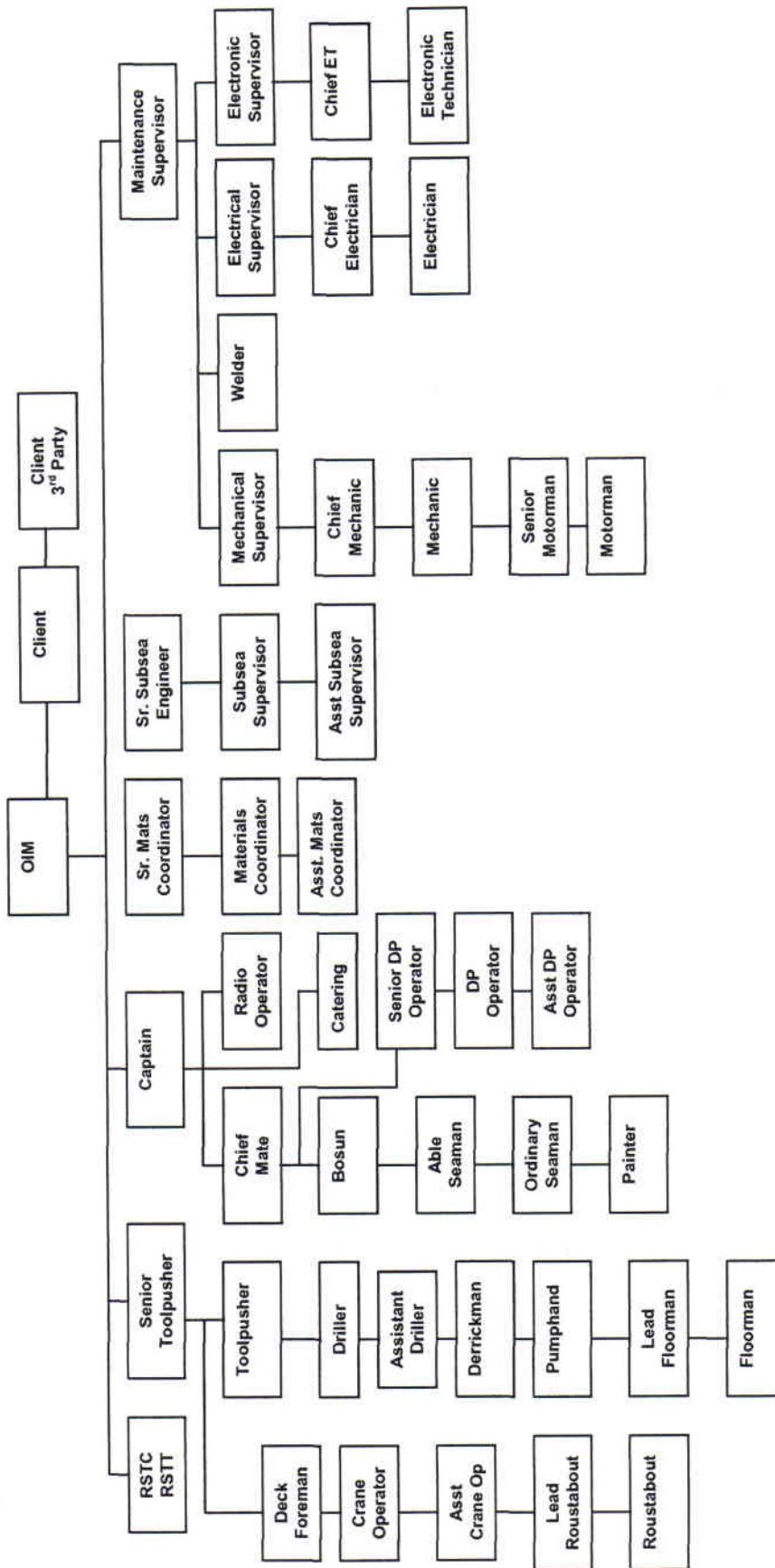
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