Managing Safe Drilling Operations
- an Operator’s perspective

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Agenda

- Managing Major Accident Risks

- Operations Integrity Management System (OIMS)
  - OIMS Overview
  - Management Leadership, Commitment and Accountability
  - Risk Assessment and Management
  - Personnel and Training
  - Third Party Services

- Closing Remarks
Managing Major Accident Risk

People
- Competency & Training
- Roles & Responsibilities
- Communication
- Behaviour

Plant
- Design Standards
- Operations and Maintenance
- Performance Standards

Processes
- Risk Management
- Personnel Safety & Health
- Work Management
- Operations by Others
- Change Management
Operations Integrity Management System (OIMS)

1. Management Leadership, Commitment and Accountability
2. Risk Assessment and Management
3. Facilities Design and Construction
4. Information/Documentation
5. Personnel and Training
6. Operations and Maintenance
7. Management of Change
8. Third-Party Services
9. Incident Investigation and Analysis
10. Community Awareness and Emergency Preparedness
11. Operations Integrity Assessment and Improvement
Operations Integrity Management System (OIMS)

“Operations”

2. Risk Assessment and Management
3. Facilities Design and Construction
4. Information/Documentation
5. Personnel and Training
6. Operations and Maintenance
7. Management of Change
8. Third-Party Services
9. Incident Investigation and Analysis
10. Community Awareness and Emergency Preparedness

11. Operations Integrity Assessment and Improvement

1. Management Leadership, Commitment and Accountability

Driver

Evaluation
1 - Management Leadership, Commitment and Accountability

- **Principle**: Management establishes policy, provides perspective, sets expectations and provides the resources for successful operations. Assurance of Operations Integrity requires management leadership and commitment visible to the organization, and accountability at all levels.

  - Management commitment and personal accountability
  - Workforce engagement
  - Performance evaluation and stewardship of results
  - OIMS principles applied scalable towards JV Operators
Drilling Management

- The management relationship between ExxonMobil Drilling and the Drilling Contractor is governed through the following key elements and activities:
  - Norwegian regulation for drilling activities ("See to" duty)
  - ExxonMobil Drilling Specific Operations Integrity Management System (OIMS)
  - Technical and Commercial Contract between ExxonMobil and Drilling Contractor
  - Inspections, Audits, Verification and Acceptance Tests
  - Validation of rig AoC
  - Jointly developed Bridging Documents (Operations Safety Plan, Well Control, Emergency Response)
  - Early and regular engagement and discussion at multiple levels, including KPI reviews
2 - Risk Assessment and Management

- **Principle:** Comprehensive risk assessments can reduce safety, health, environmental and security risks and mitigate the consequences of incidents by providing essential information for decision-making.

- Standard global Risk Management and Stewardship
- All levels of organization trained and capable of risk identification and assessment
- Higher risk and extended risk escalated to Senior Management
Drilling Risk Assessment and Management

- Drilling Operations Overall Risk Assessment
- Perform and review gap analysis between rig AoC/QRA and EM acceptance criteria
- Specific Risk Assessments - Examples
  - Rig Move and Mooring
  - Drilling Operations
  - Completion Operations
  - Aviation
- Safe Job Analyses / Last Minute Risk Assessments
Principle: Control of operations depends upon people. Achieving Operations Integrity requires the appropriate screening, careful selection and placement, ongoing assessment and proper training of employees, and the implementation of appropriate Operations Integrity programs.

- Screening, selection, placement and ongoing assessment of qualifications and abilities
- Training and Competency
- Individual responsibility and accountability
Drilling Personnel and Training

• Contractor Personnel Competency Assurance System
• Joint selection and replacement of key personnel
• Involvement of employees in implementing new safe work practices
• Safety Leadership Workshops to ensure common working expectations
• Safety Coaches to assist in rig-site implementation
• Additional specific training as required (i.e. dropped objects training, hazard identification, etc)
Principle: Third parties doing work in ExxonMobil’s behalf impact on its operation and its reputation. It is essential that they perform in a manner that is consistent and compatible with ExxonMobil’s policies and business objectives.

- Evaluation and selection includes assessment of capabilities to perform work in a safe and environmentally sound manner
- Performance requirements are defined and communicated
- Interfaces are effectively managed
- Monitoring system in place assessing performance, providing feedback, and ensuring deficiencies are corrected.
Drilling Contractor and Rig Assessment

- Rig acceptance inspections and surveys performed before initiating well operations
  - Utilize industry and internal standards
  - Review prior audits and certifications such as AoC
  - Action plan developed, and items tracked to closure
- Structured system for follow-up and performance monitoring during operations
  - Mutually agreed goals
  - Daily operations meetings
  - Weekly maintenance and action item reviews
  - Quarterly KPI meetings
  - Senior management engagement and interactions throughout

Inspection and Surveys:
- Drilling Contractor Management Systems Audit
- Certifications and Class Documents Verification
- Working Environment Survey
- Hull Integrity, Ballast and Marine Systems Survey
- Maintenance Systems Survey
- Drilling Equipment and DROPS Survey
- Well Control Equipment / BOPE Survey
- Medical Treatment Facilities and Hygiene Survey
- Cranes and Lifting Gear Survey
- Environmental and Spill Prevention Survey
- Safety Systems Survey
OIMS principles towards JV Operators

• The principles are the same for both own Operations and Operations managed by others

• Ensure operator has adequate systems in place meeting OIMS objectives
  • Influence change where required

• Active license participation, including:
  • Follow-up of incidents and Key Performance Indicators
  • Participation in site inspections
  • Sharing of programs/initiatives

• Applied in a scalable way

• EM recently taken active role with Operators and partners to strengthen risk management focus in license activities
Concluding Remarks

• Long journey; invest in time and efforts
• Plant – People - Processes
• Responsibility and accountability throughout the organization
• Robust governance processes

Each of us has a **personal responsibility for our own safety and the safety of others**
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