

OGP raises bar on lifting, hoisting performance

LIFTING AND HOISTING operations consistently rank among the top causes of fatalities in E&P activities, often representing its largest category after land transport. These operations can be as varied as the lifting of loads using forklift trucks, heavy lifts over live facilities and the lifting of topside modules onto off-shore facilities.

Safe and efficient management of these different types of operations can be a difficult challenge. Many organizations have developed their own in-house practices. However, high levels of incidents continue to occur. In 2005 the International Association of Oil & Gas Producers (OGP) recognized that the lifting accident trend had become unacceptable. To an industry that continues to make strides toward the goal of zero incidents, this trend must be reversed.

As a result, in May 2005 OGP established the Lifting and Hoisting Safety Task Force. The goal was to develop the appropriate tools to assist E&P companies and drilling contractors to reduce the number of lifting and hoisting associated incidents.

A cross section of the oil and gas industry is represented in the Task Force: operators, service companies and contractors. Members are **Peter Thompson**, BP; **Philip Wiggs**, IMCA; **Kenny Burns**, MI-SWACO, **Carsten Bowitz**, OLF; **Graeme Lawrie**, Schlumberger; **Stein Ove Dyngeland**, Statoil; **Jim MacFarlane**, UK HSE (for International Regulators Forum); **Don Smith**, OGP; **Alan Spackman**, IADC; **Antonin Morrien**, Shell; **Tom Mekelburg**, ExxonMobil; **Richie Adams**, BROA; **Chris Parkinson**, Shell; **Jaap Vogelarr**, Total; and the Task Force Chairman **Mike Brasic**, BP.

PURPOSE

The intent of the document is to bring about a significant reduction in lifting incidents among OGP member companies by highlighting the essential principles of safe lifting and encouraging their strict application to lifting and hoisting operations. This recommended practice should be followed to ensure that all lifting operations whether for an individual lift or a series of repetitive lifts are carried out safely and that all foreseeable risks have been assessed and mitigated.



Lifting and hoisting operations make up a sizable portion of fatality causes in E&P activities. To help reduce these incidents, the OGP has been developing a set of Recommended Practice.

OBJECTIVES & PHILOSOPHY

The task group members drew on their own extensive experience and outlined eight objectives to be achieved by a recommended practice:

- Provide essential principles of safe lifting and hoisting;
- Ensure that the document is international in scope and application;
- Significantly impact accident reduction in OGP Member Lifting Operations;
- Address the key lifting concerns identified by the International Regulators Forum;
- Produce a concise document broadly consistent with other OGP publications;

- Establish a detailed reference of “Best Practices” and tools;

- Promote a standard and consistent approach to lifting and hoisting activities among OGP member companies; and

- Target middle and upper management.

One of the first things the Task Force agreed on was that it would avoid producing simply a “lowest common denominator” of agreement on hoisting and lifting practice between the member companies. To truly achieve its objective of reducing incidents, the team had to “raise the bar” – advance the overall standard to a new level.

The group also decided that in order to draft a document that would be applicable all around the globe, it would not write a

“set of rules.” Rather than simply producing a long list of do’s and don’ts, it decided to offer a reference document that will provide guidance to oil and gas companies.

The Task Force decided that to spread its document most effectively, the guidelines must target senior management so they can develop procedures to safely manage hoisting and lifting operations based on well-proven best practice and innovation. After all, senior management is responsible for setting the direction and tone of a company.

By providing a guidance document with current best practices from a variety of companies, management can adapt their own companies’ procedures the way they see fit. This high-level focus ensures that awareness and commitment are driven throughout their organization.

Additionally, acknowledging that many companies already have some form of lifting and hoisting documentation to organize its lifting operations, the Task Force decided there was no value in rewriting these. The value of the OGP’s efforts would be in making companies more aware of existing procedures, encouraging their commitment to enforcement, guiding them on how to best monitor for compliance, and simply making sure that their rules are up-to-date for an ever-evolving industry.

Working under this philosophy, the Task Force formed three key areas of the document:

- A framework based on a series of Essential Principles;
- A management system;
- A detailed reference section with examples of best practice and proprietary products.

TOP 10 ISSUES

A further input to the work of the Task Force came from a study undertaken by the International Regulators Forum. The group, at its Annual General Meeting in 2004, had identified a “Top Ten” lifting and hoisting issues:

- Competence of crane operator;
- Competence of banksman/slinger;
- Manriding using winches;
- Planning of lifting accidents;
- Analysis of lifting accidents;
- Static and dynamic crane rating;

- Hook snagging on the supply boat;
- Competence of maintenance staff;
- Supervision of lifting operations; and
- Inadequate maintenance.

These issues were consistent with those identified by OGP Task Force members based on their own experience.

ELEMENTS OF SAFE LIFTING

Through a series of meetings, including discussions by various project-specific work groups, the OGP Task Force identified nine “Elements of Safe Lifting” for its document:

- Planning;
- Control;
- Competence;
- Inspection and certification;
- Load integrity and stability;
- Equipment;
- Lifting of personnel;
- Safety management system;
- Toolbox/references/best practice.

The group wanted to emphasize that by identifying a safety management system as an element, it’s not saying that companies need to have a separate safety management system for hoisting and lifting operations. Rather, it’s to point out that companies can apply its existing safety management system to hoisting and lifting operations.

Based on the above elements and after reviews of current best practice around the world, the team identified essential principles to help companies improve existing procedures:

Planning:

- An assessment of the lift has been completed, and the lift method, equipment, and number of people required has been determined by a competent person;
- A lift plan is in place for every lift. If the lift deviates from the plan, stop the job.
- Hazard identification and risk assessment are an integral part of planning a lift.

Control:

- A person is designated in charge of the lift, using the Person In Charge (PIC) concept;



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- The PIC (person in charge) must review the lift plan and ensure that the required controls are in place and the lift is carried out according to the plan;

- The PIC ensures that the lift team has tested and understands the visual or radio communications prior to the lift;

- All personnel involved in the lifting operation shall have their individual responsibilities clearly allocated;

- All personnel are kept clear of overhead loads and areas of potential impact;

- Manual lift load handling is only performed below shoulder height. Never attempt to manually stop a swinging load.

Competence:

- All persons involved in planning and performing lifting must be trained and competent for their role;

- Operators of powered lifting appliances such as cranes and winches must be formally qualified for that equipment;

- Rigging of the load is carried out by a competent person(s);

- Refresher training and periodic assessment is necessary to assure competence.

Inspection and certification:

- Lifting devices and equipment must be thoroughly inspected by a competent person at least once a year, and equipment used in personnel lifting must be inspected at least once every six months;

- All lifting devices and equipment must be visually examined before use by a competent person;

- Equipment integrity must be maintained.

Load integrity and stability:

- Load must not exceed dynamic and/or static capacities of the lifting equipment;

- The integrity and stability of loads must be verified by a competent person before lifting.

Equipment:

- Any safety devices installed on lifting equipment will be operational.

- Equipment should be fitted with safety devices.

Lifting of personnel:

- Lifting of personnel should be avoided unless it is the least-risk option;

- Lifting of personnel will be done according to a specific personnel lift plan for that lift.

Safety management system:

- Lifting and hoisting work will be controlled by a management system.

The Toolbox:

- A series of examples of member company documentation and best practice solutions. In addition to these Essential Principles, the OGP document will contain a detailed appendix that references relevant best practice, including examples of process, procedures and additional tools that demonstrate examples of the Essential Principles. The Task Force highly encourages everyone in the industry to submit to this growing collection of best practices. Contributions should be e-mailed to Mr Brasic at brasiemf@bp.com or Mr Don Smith at don.smith@ogp.org.uk.

APPLICATION

This guidance applies to mechanical lifting and hoisting activities in exploration, drilling, production, logistics, operations, maintenance, construction, decommissioning and abandonment in onshore and offshore environments.

Certain specialist operations will require more rigorous controls due to the inherent hazards associated with the task. Examples are subsea lifts, lifting over live plant, lifts close to equipment capacity and environmentally sensitive lifts.

INDUSTRY FEEDBACK

With the majority of the document drafted, the Task Force recently solicited industry feedback on its document's philosophy and content at the OGP's "Transporting People and Equipment Safely – The Journey to Zero Accidents" conference. The two-day event was held 29-30 November, 2005, in Cairo.

The Task Force outlined five objectives to be achieved at the conference, via presentations and workshops:

- Inform the conference participants of the Lifting and Hoisting Task Force effort and plan;

- Achieve consensus on the approach, balance and content of the proposed guidance document;

- Provide a variety of perspectives on lifting and hoisting operations from individual companies across a broad spectrum of industry applications;

- Assimilate membership feedback from the conference into the proposed guidance document;

- Identify and include additional best practice and tools from participants into the document appendix.

The Cairo conference delegates confirmed the document's philosophy, direction and its intended impact. The audience endorsed the draft document, helped the team gauge the level of detail required in the document, contributed additional reference documents on best practice, and provided clarity on existing essential principles.

Subsequently, at a two-day workshop held in January, the Task Force reviewed all the guidance received during the Cairo conference and rationalized the feedback into the document structure.

WHAT'S AHEAD

A final draft of the Hoisting and Lifting Guidelines is expected to be finished by late March/early April. It will be submitted to the OGP Safety Committee for review, leading to final amendments. A final version of the document should be available by autumn 2006.

Task Force Chairman Mike Brasic predicts that some of the biggest challenges for companies will be allocating the resources to perform gap analyses against the OGP recommended practice and then perhaps modifying the management system to close that gap.

But these challenges and others must be overcome if the industry is to move forward. And they will be overcome, Mr Brasic said, "as long as management recognizes that lifting activities deserve the same level of attention and expertise as downhole applications, production processes and the many other things we do daily in the oil and gas business. Lifting is an integral part of our operations, and it follows that an absolute commitment to safety must be present." ■