

BP Amoco's Reiley: Safer rigs will get more work

RIG SAFETY STILL NEEDS to be improved. But how does the industry get where it needs to be when the subject of rig safety is not too exciting?

That is the question posed by **Richard Reiley**, Drilling Assurance—Upstream Technology Group, BP, at the 2000 IADC International Well Control Conference 6-7 Dec in Houston.

"People are still getting injured and killed," said Mr Reiley, "and that has to stop."

From BP's perspective the key business challenges are improved business performance and a commitment to health, safety and the environment.

Better business performance means more low cost production faster, ensuring rig and equipment availability and attracting and retaining personnel to staff and supervise rig operations.

The HSE commitment must be to zero accidents, said Mr Reiley, "no harm to people and no damage to the environment."

BP puts much effort into evaluating the safety records of drilling contractors, he said. And the result is that safer rigs get more work. "We'll see a shift of work to those with good safety records."

WHERE SAFETY BREAKS DOWN

"Everything on the rig is bigger and tougher than people," said Mr Reiley.

He cited several reasons for the breakdown of safety improvement efforts, including:

- Substandard leadership behavior;
- Under-trained people that are unaware of the dangers of rig operations;

- Use of the wrong tools—or the wrong people—for the job;

- Lack of job planning, equipment maintenance and supervision;

- Promotions made without enough regard for the individual's safety record or safety attitude.

In selecting personnel, it is important to judge their experience and competency. But it is equally important to assess their safety attitudes towards themselves and others, said Mr Reiley.

General H. "Stormin' Norman" Swartzkopf's Eleven Commandments for Leaders (and oilfield workers)

- You must have clear (*safety*) goals. You must be able to articulate them clearly to others.
- Give yourself a clear (*safety*) agenda. Every morning, write the five most important things to accomplish that day and get those five done.
- Let people know where they stand (*on safety*).
- What's broken, fix now. Don't put it off. Problems that aren't dealt with only lead to more (*safety*) problems.
- No repainting the flagpole. Make sure all the work your people are doing is essential to the organization (*and done safely*).
- Set high (*safety*) standards. People won't generally perform above your (*safety*) expectations, so it's important to expect a lot.
- Lay the (*safety*) concept out, but let your people execute it. Tell them in the clearest terms what you want done, but let them suggest the best way to do it.
- People come to work to succeed, so don't operate on the principle that if they aren't watched and supervised, they'll bungle up (*safety on*) the job.
- Never lie (*about safety*). Ever.
- When in charge, take command. Some leaders who feel they don't have adequate information (*about safety*) put off deciding to do anything at all. The best policy is to decide, monitor the results, and change course if it's necessary.
- Do what's right (*safe*). The truth of the matter is that you always **know the right (*safe*)** thing to do. The hard part is doing it.

The best employees "take personal ownership of safety and look after the safety of others."

An individual's safety track record includes safety at work, on the road and at home. Assessing the record away from work will take extra effort, said Mr Reiley.

"But if an individual is not practicing safety away from work, he may not practice it at work either."

BP'S COMMITMENT

The key to BP's safety strategy is that everyone is responsible for safety, including employees and contractors. Senior management is held accountable for contractor safety and for "getting people home safely."

Another key part of the commitment is that any employee has the right to shut down an operation that he thinks is unsafe.

Finally, BP is committed to making time for crew training, pre-job safety meetings and "safety attitude adjustments."

Mr Reiley summarized the fundamentals of effective safety performance by offering eleven commandments for oilfield workers (see accompanying box) based on the Eleven Commandments for Leaders set forth by General H Norman Swartzkopf.

WELL CONTROL

Poor well control results in high costs and severe damage to the public's perception of the oil and gas industry.

At the 2000 IADC International Well Control Conference, **Rodney Eads**, Senior Vice

President, **Diamond Offshore Drilling Inc**, highlighted several examples of loss of well control during the past year.

Fortunately the wells involved were brought under control without injury or pollution.

In describing incidents during the past year, Mr Eads cited several areas of concern, including jackups over a platform, jackups and shallow gas, and semisubmersible operations.

In one incident involving a jackup over a

platform, the rig had to be abandoned due to a gas release from an adjacent well. A poor cement job was the cause of the leak and the gas was ignited during a welding operation.

In another incident involving a jackup over a platform, the rig was abandoned when a relief valve failed.

Mr Eads cited an event involving a jackup and shallow gas. The cement job was not adequate and when the well came in the rig had to be abandoned.

There were three incidents in the US Gulf of Mexico during 2000 in which the lower marine riser package (LMRP) was unintentionally released from a semi-submersible, said Mr Eads.

OPERATIONAL CHALLENGES

These incidents pointed out what works well and where problems still exist, said Mr Eads.

Well control training worked well in these cases, he said.

Emergency response training also worked well as evidenced by the fact that no one was injured. Also effective was “operational gap” analysis, in which the drilling team and others critique the operation.

But there are some problem areas, said Mr Eads. For example, wells are often started before the drilling program is completed.

Today’s high oil and gas prices put pressure on operators to complete the well as quickly as possible.

Mr Eads cites ineffective pre-spud meetings—or none—as another key challenge. “A pre-spud meeting is a fundamental requirement of the process.”

He also is concerned that rig crews are not fully involved in risk assessments and well procedures.

TECHNICAL CHALLENGES

Mr Eads summarized the technical challenges for better well control as follows:

- Underbalanced drilling offers great potential, but contractors and operators must take the time to assess and manage risk;
 - Risk assessment and management are also keys to the use of surface BOPs on floaters;
 - Dual gradient drilling is the “next major step change” and a “must have,” but it requires training and planning;
 - Finding and retaining quality personnel is critical;
 - Delivering consistent, quality well control training is necessary to avoid confusion;
 - Better communication among the well control team includes “bridging” different efforts;
 - Analyzing well control events will contribute greatly to better well control.
- “We need to accelerate the learning curve, rather than repeat it,” said Mr Eads. ■