

# PDO's Haz-ID contrasts safe/unsafe procedures

**AN INTERACTIVE TRAINING** tool identifies incorrect and then correct ways to deal with potential hazards during various drilling and ancillary operations on rigs. *Haz-ID* is an interactive CD that shows typical hazards at typical drill sites.

The tool was supported and produced by **Petroleum Development Oman (PDO)**, which typically contracts about 30 drilling rigs and 15 workover units in the country.

The latest *Haz-ID* iteration is also published in hard copy in the form of two manuals with laminated pages that is ideal for use at the rig floor while the CD version can be used in offices and training rooms.

The first edition went beyond Oman's borders into other Middle East countries, and it is expected that the second edition will likely do the same.

## BEHIND THE TOOL

The interactive *Haz-ID* CD is the result of the combined efforts of more than 20 drilling and service contractors in Oman that contributed to the project by providing thousands of photographs of their rigs and work sites.

The CD can be used as an introduction for new employees as well as for on-going refresher training of experienced crews.

The use of photos is used extensively in the CD to overcome the numerous language barriers that exist in Oman's work force.

"This tool overcomes the challenges and problems of translating English training documents into Arabic," said **Dean Hills**, Area Manager for **Oil Drilling & Exploration LLC (OD&E)** in Oman, a division of Ensign Resource Service Group Inc.

"There are usually at least three different languages spoken on each rig, English, Arabic and Hindi.

"Also, we observed that rig crews like watching safety videos and learn more than looking at words or being lectured about safety."

## WHAT'S INSIDE?

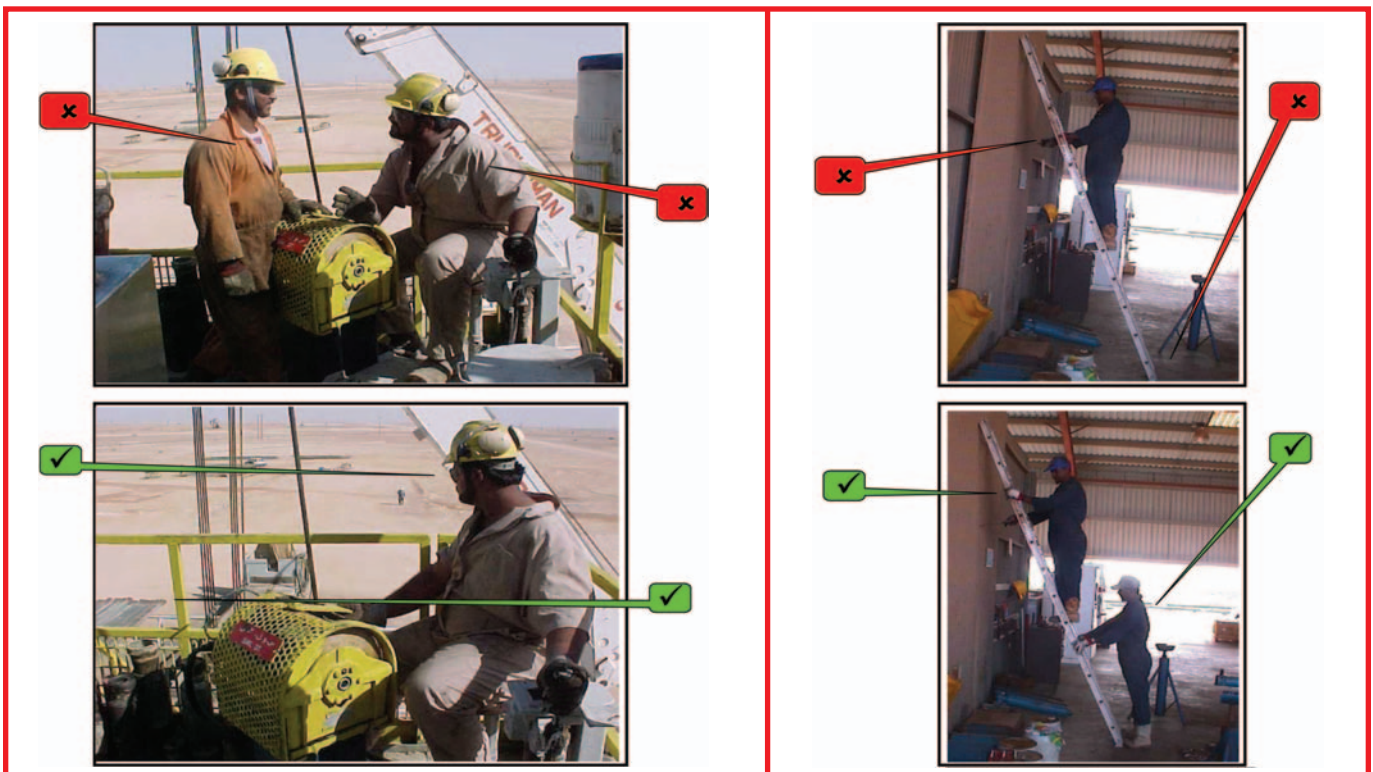
The first edition of *Haz-ID* was launched in 1999 and contained 243 *Haz-ID* wrong and right photo sheets in 16 categories.

The second edition contains nearly twice as many split photo sheets in 24 categories that include:

- Rig floor;
- Mast;
- BOP;
- Mud tank and pumps;
- Rig moves;
- Tubulars;
- Casing;
- Cementing;
- Wellheads;
- Electrical;
- Workshop;
- Stores;
- Crane and forklift.

While the CD mainly shows very basic hazards on and around drilling rigs and is aimed primarily at new hires, it quickly became a primary aid for Tool Box Talks and safety meetings on PDO's rigs. The first edition of the CD was a simple copy of the manual, with no interactive capability.

The second edition is interactive and provides a significantly more powerful training tool.



The photograph on the top left from the CD illustrates the incorrect and hazardous way of operating a winch while the bottom photo shows the correct way to minimize risks. The photos on the right show the incorrect and unsafe way to use a ladder, and the proper way to use ladders.

It not only shows the “wrong” photo (the wrong and hazardous way to do things) so crews can identify the hazards without prompting, but the “right” photo is then shown to confirm that all hazards have been correctly identified.

“The original idea for *Haz-ID*,” Mr Hills, explained, “was to take photos showing only the right way of doing things.

“However,” he continued, “we then thought that a new man doesn’t even know the wrong way to do things, let alone the correct way, so we show him both so he can see the difference.”

The *Haz-ID* sheets show real rig workers on real rigs with real hazards, resulting in realistic situations. The photos were taken by rig crews around the country.

### EVOLVING EDITIONS

The next phase for *Haz-ID* is to develop the CD into a series of modules. For example, Module I could include an induction section that shows a dozen or so very basic hazards for the new hire. These could be incorporated into existing induction processes.

A second module could be viewed after a new hire has been on a rig for a week with another dozen split sheets showing the next level of hazards.

Subsequent modules would be similar to the categories included in the second edition CD such as slinging and rigging hazards, derrickman hazards, electrical hazards and workshop hazards.

With the use of digital cameras, the next edition of *Haz-ID* could include video clips showing the wrong and right way of doing things, Mr Hills noted, such as stabbing tubulars, making a connection, etc.

### CD ESTABLISHED ON PDO RIGS

The first edition of *Haz-ID*, produced in 1999, was enthusiastically accepted on all PDO rigs.

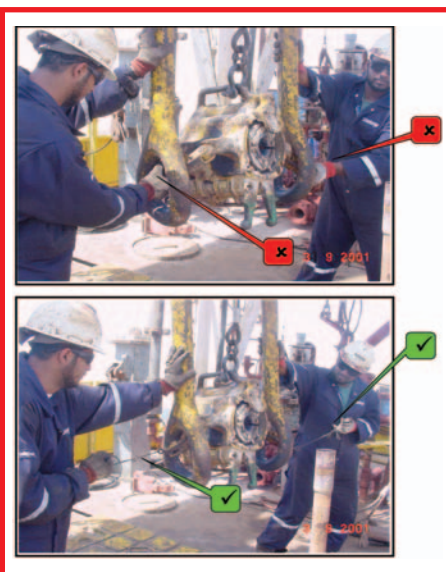
PDO’s Drilling Operations Incident Review Committee (DOIRC), which was established in the early 1990s, meets with all of its drilling contractors, service companies and PDO drilling managers to share learnings from recent high potential incidents and to discuss safety issues.

A contractual requirement of working for PDO is to employ and train locals to replace expats, or “Omanization”.

Most rigs employ 70-80% Omani crews,

which involves training a large number of new hires who have never even seen a drilling rig. *Haz-ID* has proven to be one of the best training tools for Omanization process.

A drilling contractor could have as many



The top photograph shows the incorrect use of hands while rigging up the elevator. The bottom photo illustrates the correct and safe way to perform the operation.

as 60 people dedicated to one rig, with around 20 people actually on a particular shift and working at the rig at any given time. This is in addition to PDO and service company crews.

### PROJECT TEAM MEMBERS

The *Haz-ID* project’s team members include Dean Hills, OD&E, Team Leader; Salim Al-Hassani, PDO; Suwali Al-Shamaisi, PDO; Maher Al-Balushi, Precision Drilling; Khalid Al-Hashmi, OD&E; and Kader Adiraja, Baker Oil Tools.

“I also want to thank all of the PDO crews who submitted photographs for the project and the Well Engineering HSE Advisors Group who spent over 400 man-hours preparing the second edition of *Haz-ID*,” Mr Hills said, “and PDO for funding the publication of *Haz-ID*.”

It is expected that a third edition of *Haz-ID* will be produced in future years. For this to happen, Mr Hills said, contractors are urged to submit new right and wrong photos of hazardous situations.

Digital photos should be sent via email to dean.hills@odeoman.com.om. ■