



CASE STUDY

Tripatra-Samsung

Situation

In 2011, ExxonMobil and the Pertamina oil company partnered with Samsung Engineering and Indonesian engineering and construction leader, Tripatra, to begin work on the Banyu Urip oil field in East Java.

This significant project included a total investment of \$2.5 billion (USD) and an estimated production of 165,000 barrels of oil per day. The oilfield is equivalent to approximately 20% of Indonesia's overall oil production.

The project mobilised over 10,000 workers at peak, and 25,000 people were put through the original orientation and training sessions. Due to the Indonesian government's contractual requirements for selection and mobilisation of sub-contractor firms and workers, the majority of people were local East Javanese with no experience in a similar operating environment. Moreover, these local people were not familiar with the safety expectations set by Mobil Cepu Limited, as they were transferred from Tripatra-Samsung. During the early works and construction phase, Mobil Cepu Limited had also changed a number of its critical leadership roles due to poor performance across the three principal project metrics—safety, progress, and budget.

The size and scope of a project such as the Banyu Urip oil field always poses a challenge for safety. The project included construction of infrastructure facilities, oil processing facilities, and wellpads for the drilling of oil and natural gas. The project also required building facilities for processing the oil once it was delivered, including fuel gas treatment, water treatment,

and power generation plants. Employees in this type of work environment are faced with innumerable hazards. Without strong leadership to support safe work, numerous and significant risks can quickly multiply, creating long-lasting difficulties and problems for the entire organisation. Prior to DEKRA Insight's engagement, the project had not achieved 10 consecutive 'Hurt Free Days' in almost two years of mobilisation. Hurt Free Days were measured in accordance with the global Exxon Mobil reporting metric.

Solution

Faced with the very difficult task of maintaining high levels of safe behaviour in the dynamic and often unpredictable oil and gas construction sector, Mobil Cepu Limited and Tripatra-Samsung leaders contacted DEKRA Insight for support in developing a process specifically designed to meet their unique needs.

Beginning in May 2014, stakeholders initiated a safety improvement strategy and plan. This was created from the findings of a first sight review of critical safety processes conducted by DEKRA Insight. The plan focussed on addressing the mobilisation process and mobilisation tools, developing safety leadership skills of supervisors through training and in-field coaching, improving the effectiveness of critical safety processes and safety mentorship skills of supervisors, mid-level management, and the HSE team.

The programme design concentrated on developing the very important skills of Tripatra-Samsung and sub-contractor leaders to enable and empower teams to sustain and continuously build on the foundations of safety. The key areas of leadership focus were exposure reduction, safety communication and feedback, and hazard assessment and analysis, where exposure was present.

The specific safety processes addressed in programme design were:

- Induction
- Short-service worker (a training and supportive approach for large numbers of individual workers not yet considered competent in safety behaviours)
- Toolbox talks
- Permit-to-work
- Job safety analysis
- Observation and interaction
- Coaching skills

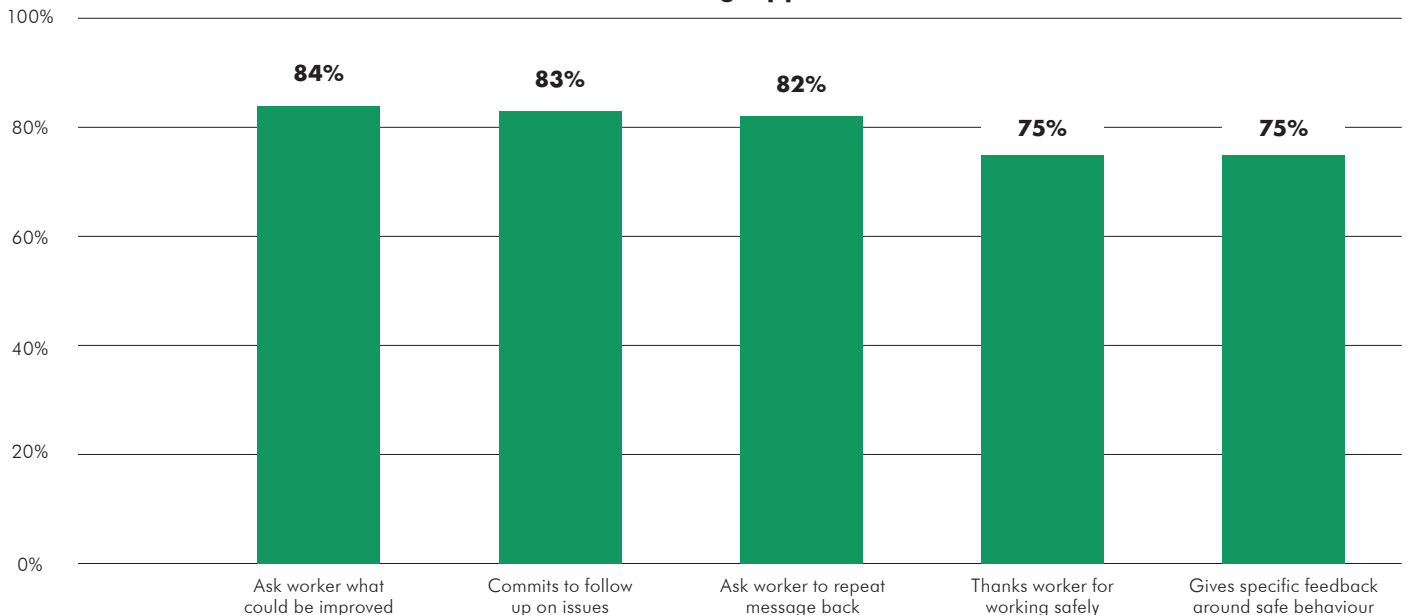
Each process received individual attention based on the audience and responsibilities of those individuals. Throughout the process, data was gathered on the quality and effectiveness of the programme delivery.

To support process effectiveness and to continue leadership’s focus on ‘what we still need to do’ rather than ‘what we have done’, Tripatra-Samsung focussed on supporting mechanisms that positively influenced each of the processes, including job safety analyses and training for short service employees and associated safety and health employees.

Achievements over first 3 months:

- Over 30 days Hurt-Free – first in history of project
- Over 30% improvement in Project progress measure
- 70% reduction in Non-Supervision violations
- Statistically significant increase in all coached behavioural scales linked to safety leadership skills

SSE Mentor Coaching Opportunities



“Opportunities for Mentors” - Top five opportunities for leadership skills observed during SSE Mentor coaching.

Results

Across all levels, Tripatra-Samsung has shown a commitment to safety improvement and a desire to improve in all areas of injury prevention. Leaders are looking at all possible routes as they search for opportunities to eliminate exposures in the project operations. Greater awareness and commitment flowed from the leadership team as they connected the performance improvement in safety directly with project progress, showing improved efficiencies, better planning, and improved engagement with workers.

Their dedication has produced remarkable results. Short classroom training sessions and workplace coaching have helped supervisors to make the right decisions in the midst of ‘getting the job done’. They have learned to communicate with employees in a way that encourages engagement and creates an environment of shared responsibility for the wellbeing of everyone at the site.

Employees for their part are exhibiting very high levels of competency and skill around identifying hazards and adapting to exposures as they surface. They have become more involved in the decisions that impact their safety and are quick to approach peers working at risk. There is strong support for what Tripatra-Samsung leaders are trying to accomplish and recognition that achieving good worker safety has a positive impact and is predictive of other key performance indicators.

A universal exposure-reduction mind-set is the goal moving forward. It will require cementing specific behaviours and language in the organisational culture, but with their commitment to driving proactive and preventative measures, Tripatra-Samsung leaders are putting safety and safety thinking into every corner of this very large construction site.

Project Implementation Impact

