Shell Miri
Minimising Unscheduled Deferment with continuous improvement

The Asset is a mixed gas & oil producing asset consisting of manned facilities with numerous attended satellite platforms tied back to the main facilities. If a satellite platform experience a trip or plant failure it requires a visit by a Technician, by boat or helicopter, to determine the rectification required and restore production. Due to the geology of the area and the varying ages of the installations, a diverse range of production techniques are employed, making causal factor identification difficult.

The Asset aspired to be a more sustainable and efficiently run operation and had set rigorous targets for reducing unscheduled deferment by 20%, to improve production reliability. Management understood that achieving and sustaining these higher standards of performance could not be accomplished via quick wins or a short-term focus. What was required was a well structured, change management improvement process.

ANALYSIS
In appreciation of the difficulties involved with change management programmes, and especially given the remote and diverse nature of their operation, Renoir Consulting was approached, based on their previous experience with another company in the group.

Renoir Oil & Gas undertook an initial review of current practise to determine the scope and effectiveness of the existing Unscheduled Deferment Management process, in terms of the review meeting structure and the general improvement cycle.

It was concluded that the existing Unscheduled Deferment Management process was in need of reinforcing and that there was a requirement for an appropriate review meeting format and some form of ranking of events. Additionally improving the accuracy & consistency of cause analysis via various Root Cause Analysis (RCA) techniques would not only improve remedial actions, and hence reduce repeat occurrences, but would allow positive action to be taken to prevent future problems.

APPROACH
Having agreed the actions required, a client Task Force was set up, led by the Head of Operations Support, with members drawn from offshore and onshore support, under the guidance of Renoir. Terms of Reference were developed which included the scope, deliverables & resources required for implementation.

An initial design phase took place so that a meeting structure, appropriate to the Asset was agreed, and draft Terms of Reference for each of the meetings were developed. These were then rolled out to all involved staff via presentations / workshop sessions to gain input & commitment to the evolving design. When designing the review process,
care was taken to ensure that existing meetings were refocused to incorporate the process, rather than creating additional meetings, and consideration was given to the context and fit of the meetings in the overall asset meeting structure.

**PROJECT**

The process was designed to reinforce the extensive use of RCA techniques for a more holistic and continuous unscheduled deferment improvement process.

Once agreement had been reached on the overall process, a support programme was designed and implemented focused on “on the job” coaching in meeting management, problem solving, priority setting, etc. This was combined with additional training in RCA techniques (5Ys, Fishbone, “Is–Is Not”, etc.) to ensure that proactive problem solving was embedded into the offshore team. A supporting booklet summarising these techniques was also produced to act as a memory jogger for Technicians conducting RCAs.

During this process, it was noted that the details of RCAs conducted and actions arising, were not being collated and utilised in an optimum manner. A revised Action Tracking Spreadsheet was developed by the Offshore team to address this. As an evolving improvement, a Microsoft Access based tracking system was developed to suit the needs of the Asset. It is also being extended to incorporate actions from other improvement programmes to ensure all events are tracked and that prioritisation is clear.

**RESULTS**

There is now a process in place for reviewing trips & incidents on a routine basis. Issues affecting Unscheduled Deferment and other risk areas are subjected to root cause analysis, risks assessed using a Risk
RENOIR CONSULTING CASE STUDY: SHELL MIRI

Assessment Matrix and then all are reviewed on a daily, weekly & monthly basis, with higher risk / opportunity areas being elevated for higher level attention.

The level of commitment shown to the improvement process by the Asset Offshore & Onshore teams was excellent. The teams now “own” the resultant levels of Unscheduled Deferment.

The intended aim of the process is that all trips / incidents should be subjected to an initial “quick” Root Cause Analysis to determine likely cause and impact, and where required this will result in a more in-depth analysis being conducted, and via the Action Tracking & Unscheduled Deferment Reporting, this will enable positive identification of poor performing plants so that efforts can be focussed on their minimisation / elimination.

**Joint effort**

The project was carried out as a joint effort between Asset personnel both onshore & offshore, Support Services and Renoir Consulting, with strong support and leadership by the Asset Manager & Head of Operations.

The Project incorporates aspects of Lean Manufacturing, Demming’s Continuous Improvement Cycle, Meeting Effectiveness, Root Cause Analysis, priority setting and other good managerial practise to ensure sustainability.

---

**THE RENOIR GROUP**

Renoir Consulting is a world leader in sustainable, implemented change. Founded in 1994, Renoir has offices located in North and South America, UK, Europe, Turkey, Middle East, Southern Africa, India, Pakistan, China, South East Asia and Australasia. With over 350 fully employed and highly trained consultants, their work across a wide range of industry sectors gives them a broader perspective of the issues facing your business, allowing them to be sensitive to your unique challenges, culture and specific business issues. This cross-pollination ensures truly effective, rapid and sustainable solutions.

Visit Renoir at www.renoirgroup.com for more information and a complete list of regional contacts or send us an e-mail at: renoir.office@renoirgroup.com

---

*World Leaders in Sustainable Change*

© Renoir Consulting Limited. This document remains the property of Renoir Consulting Limited and must not be copied or distributed in hardcopy or electronic form without the prior written approval of Renoir Consulting Limited.