

Examples of good practice identified during KP3 inspections

This list of Good Practices has been derived from KP3 Inspection reports. Companies might regard some of the examples as normal practice. However, standards are not uniform across the industry. What might be considered weak examples of Good Practice have been included as they are not universally applied across the industry. Information and Good Practice sharing, both between companies and within them, has been found to be poor.

More detailed information is being sought for the stronger examples of Good Practice within this list. These detailed examples will be included at a later date.

1. Establishment of the Asset Integrity Group to review all asset integrity issues and report integrity management issues to the highest levels in the organisation.
2. Development of the role of Maintenance and Integrity Delivery Leader' who provides an essential link between the maintenance and production personnel thus enabling a conduit for enhanced performance.
3. Use of full team handover meetings, at the start of tours. Feasible because of the small POB.
4. Cumulative risk considered from multiple failure of low-risk safety-critical elements, such as emergency lighting.
5. SCE visibility of any impairment or maintenance issues through SCEIRA (Safety Critical Element Impairment Risk Assessment) Register.
6. A thermographic imaging survey of electrical switchboards is in place.
7. Completed work orders stamped to show performance standard met, and scanned into SAP database as a record of work done.
8. Extensive use of photographs on dead leg register & temporary repairs register to aid communication between offshore and onshore technical authorities.
9. Appraisal contract for offshore visits by mechanical & electrical superintendents.
10. Support of two trainee technicians with structured on-the-job training (Instrument and production technician). They should receive the appropriate NVQ level with ECITB.
11. A numbered ID tag and a cable tie in the colour of the current lifting gear colour code is attached to all harnesses.
12. Use of coloured 'post-it' tape notes to indicate location of hot and cold work permits and their numbers (quick, efficient overview of number of worksites open).
13. A metrics system monitors trends on availability, maintenance backlog and critical faults, with traffic lights to indicate if parameters are within limits. A monthly report is compiled on the top 3 metrics issues.
14. Use of Lux meter during the ICP testing of the emergency battery-backed light fittings and the changing of fluorescent tubes in emergency battery-backed Exe light fittings before reaching the tubes' end of life.
15. A temporary repair defect risk assessment sheet ensures full assessment of any pipework damage, by structuring data gathered for the Technical Authority, to ensure that the correct advice is given on repairs.
16. A Passing Valve register is held for the platform. The associated risks are described and any mitigation measures identified. Work orders are referenced for corrective action.
17. Safety-critical items which fail performance standards are regularly reviewed until remedied. A weekly Operational Risk Assessment is carried out to ensure operation can be continued and to identify mitigation.
18. Preventative Maintenance Optimisation on major equipment, where a review of maintenance schemes takes place against company generic strategies. This involves offshore technicians and vendors where appropriate.
19. Equipment Improvement Teams for specific heavy-breakdown equipment which have had a total renewal of key components. Ownership attached to offshore maintenance technicians.
20. 'Operations Desktop' web browser on and offshore for access to shift logs, overrides, passing valves, notifications etc. It will allow interrogation of maintenance and integrity databases in one location on-line.
21. Policy for tackling recruitment and retention by the main contractor arising from inequalities in terms and conditions of employment across inherited assets, and barriers to mobility of the workforce.
22. Empowerment of the main contractor to implement a competence assurance scheme.

23. A matrix of major hazard scenarios and SCEs on a spreadsheet has links in relevant cells to safety case references. It is used as an input to the risk assessment when deficiencies are found in SCE performance.
24. Tracking register traffic light system following an ICP survey. Red = Failure of a Preventative Measure, Amber = Failure of a Mitigating Measure, Green High = Meets Performance Standard but in a state of deterioration.
25. As part of SCE reporting a PFEER review is carried out every 6 months. This gives the current availability of each SCE and compares it with historic data. Trends are analysed and any corrective action is taken.
26. Cross-company maintenance & reliability network develops & monitors best practice maintenance tools. Topics include screening, prioritisation, procedures, planning & KPI stewardship.
27. Performance Standard Assurance Reports initiative. PSARs provide a history of the equipment related to a performance standard to demonstrate standards are met. A non-compliance is raised if a problem is identified.
28. A notice board lists the performance standards out of conformance. It describes the standard, the date, the equipment affected, a description of the non-compliance, and the risk control measures used to compensate.
29. Maintenance work orders for safety critical work are printed on different colour paper to make it obvious to personnel. The safety critical work pending is clear to all offshore staff.
30. The current integrity maintenance bar chart is displayed onshore for all to see how the asset/engineering teams are performing. Senior managers are not only aware of the situation but they share the knowledge with staff.
31. Root Cause (failure) analysis. Linked to MTBF, safety/production criticality.
32. The installation has a construction/fabrication group to carry out a large proportion of pipework repairs by as-new replacement. This minimises temporary repairs and eliminates double dipping to complete permanent repairs.
33. Defects found whilst carrying out maintenance tasks are recorded and taken forward via a corrective order system. A deviation triggers a Root Cause Analysis to identify the actual cause of the problem.
34. A comprehensive internal directory (with photographs) gives information on all technical authorities and engineering expertise.
35. Contingency actions assigned to each performance standard, for use if standard is not complied with. This forms part of the Performance Standard Assurance Programme.
36. Establishment of the offshore based planning role and the support this role provides to onshore and offshore performance and performance monitoring.
37. Reporting of safety related issues to the highest level within the company.
38. Two back-to-back Inspection Engineers in permanent residence offshore.
39. Fire and gas inhibits control good. None tolerated, when maintenance is done, only one inhibit in placed at a time.
40. Proactive system for leak detection – portable acoustic detector.
41. For the current Reactivation programme a clear Scope of Work has been identified, a project team selected with experience in similar work, and the commissioning procedures are clearly identified.
42. The ICP is fully involved and there is clear liaison between all on and offshore parties including the project, commissioning, installation and operational teams.
43. Supervisors apportion sufficient time on the rig not in the office.
44. Onshore management listen when offshore personnel have a concern, take on board comments and give good support.

45. Maintenance system is user-friendly and well supported, can be used to look ahead for planning purposes and view trends, contains large amounts of data and can be taken to higher levels. The inbuilt e-mail is advantageous.
46. Personnel asked by management to give an opinion and involved in budgets and planning.
47. Personnel involved in Safety Leadership and Team Building events.
48. The work instructions for the PM routines are exemplary. They reflect knowledge and experience accumulated over many years. This resource should be recognised and retained during management and systems changes.
49. The company considers that if the rig is not adequately maintained then an oil company will not contract it. It is very much in the company's interest to maintain their asset.
50. Root Cause (failure) analysis. Linked to MTBF, safety/production criticality.
51. Motivation of the workforce by linking pay scales to the attainment of skills.
52. The way in which backlog of maintenance has been driven down. Revised planning, more staff, duplicates of jobs removed, no maintenance removed.
53. Data can only be entered into the management database by a dedicated person onshore. Aids consistency and quality of recorded information.
54. The procedures for competence assurance cover not only operator staff but also contractors.
55. The definition of backlog is clear and transparent (work not completed within 30 days of start date). A deferrals system is not used, to reduce management resource. All overdue maintenance is captured as backlog.
56. Preparation and maintenance of temporary repair register.
57. Supervisory staff very hands on and take their place in maintenance activities.
58. 21 day / tour job list encourages in-tour planning and ownership and leads to task liquidation.
59. Healthcare contracts with vendor OEM's to supply service level maintenance support – vendors involved with in root cause analyses.
60. The installation was due to close in 2003. Life has been extended, possibly to 2008. Company has decoupled planning for maintenance from planning of abandonment programme. Maintenance planned to end of 2007.
61. All senior managers have a specific target of offshore visits in personal performance agreements (once per quarter). Seen as very important to talk to offshore employees. Asset manager carried out 11 visits last year.
62. The defect reporting system is used to identify faults that occur. A record is kept, even if no fault is found on subsequent investigation and this may allow some monitoring of fault occurrences.
63. Prioritisation of action items and the delegation of accountability and responsibility to individuals within the organization.
64. Shift in ethos from "producing safely" to "safe production".