

# Q4 Corporate Health, Safety and Environment Message 2016

Colleagues,

This is an update of the Corporate HSE plan during Q4 of 2016. The plan focuses on six areas with a total of 19 high-level actions as listed below:

2016 Corporate HSE Business Plan				
Focus Areas	Champions	Leader	Action Item	Performance Measure
Road Safety	XD OND	MSE7	Implement recommendations of the Tyre study.	100% Completion of recommendations by set deadline.
			Continue with planned installation of the solar self-let reflectors in PDO roads.	Installation of the reflectors for 292 km in South and 143 km in North.
			Conduct road safety engagement sessions in all PDO operation areas	Run at least 50 sessions in across PDO
			Combine RAS with ROP Automated Vehicle Inspection at Fahud for the North Operation.	Completing the project and launching the activities.
		UWL	Integrate Safe Journey Management system with IVMS and Centralize monitoring of Journeys for all PDO and Contractors.	Full implementation of the functionality of the system for all PDO Journeys.
			Progress the new commuting strategy for PDO and Contractors staff to/from the interior locations.	Implement extra flights to the South to cater for the remaining contractors staff and achieve more than 80% of area coverage.
Worksite Hazards	UWD GD	MSE11	Design and Develop PDO specific BBS program and Implement across PDO including Contractors.	Implementation of the program in June 2016.
		MSE13	Develop and Roll-out of HSE Leadership program for FLS through HSE Advisers and Field Standard Officers.	As per Implementation Plan.
			Develop and Roll-out of Hands and Fingers Injury Prevention program and campaigns with Well Engineering.	Implementation of the program in May 2016.
Asset Integrity - Process Safety	UEOD OSD	UOM	Conduct site awareness sessions on AIPS and enroll identified PDO Engineering and Contractor critical staff on AIPS online training.	Conduction of 6 site awareness AIPS sessions and 90% of selected staff completing the online training.
			Closing Gaps identified in "Letter of Assurance" covering all PDO oil and Gas producing assets.	100% Completion of actions by set deadline.
		MSE4	Roll out AI-PS "Incident Data Book" across all PDO.	Conduct at least 8 sessions to cover all PDO operation areas and CPD projects
Contract HSE Management	FD PCD	MSE1	Directorates to conduct HSE competence assessment, manage the gaps for Contract Holders and Contract Site representatives responsible for Medium/High HSE Risk contracts.	Complete SAP Assessments of 50% of all Directorates relevant staff.
			To enhance the HSE in Contracts, conduct HSE contract Workshops for Contract Holders and Contract Site Representatives in (PR1171 Part I). Workshops will cover accommodation and welfare sessions.	Conduct two workshops in each of the asset areas (Coast, Lekhwair, Yibal, Fahud, Qarn Alum, Bahja, Nimr, Marmul, Harweel).
Environment	UID UPD	MSE2	Implement 2016 activities as listed in the Environmental Strategy road map.	100% completion of the activities by set deadline.
			Map out PDO SOx and NOx emission exposure across PDO projects and facilities.	Production of a report with SOx & NOx emission levels map, dispersion analysis and reduction options.
Health and Welfare	MD EAD	MCC	Conduct audits to verify compliance with FTW standards and clinics requirements and progress with PRISM.	Conduct one audit in each of the asset areas (Coast, Lekhwair, Yibal, Fahud, Qarn Alum, Bahja, Nimr, Marmul, Harweel).
			Conduct health awareness sessions on lifestyle issues pan PDO. Sessions to include related MDIRC recommendations.	Conduct at least 6 sessions.
			Develop a and roll out Alcohol & Drugs Policy and associated procedure. Implement the randomized alcohol & drugs test as specified in the policy and procedure.	Development and roll out of the policy and procedure by Q1. Conduction of at least 200 random tests on alcohol & drugs by Q4.

## Road Safety

Some clarifications were sent to major tyre agencies on a number of concerns and raised issues; still waiting for their responses. Cost estimate of the tyre specs changes still under investigation.

A major workshop is being organized and planned with both the stakeholders and local tyre agencies during Q1 of 2017. further review of the next phase of the study will take place during Q2 2017.

Installation of solar self-let reflectors will commence 1<sup>st</sup> March 2017 after obtaining MiTB approval.

out of 50 sessions, we have conducted 69 Driving Forums and 53 sessions for Well Engineering Rigs, where a total of 4135 people attended the Driving Forums and 741 of Rigs employees.

The mobile RAS units project is kept on hold due to the current ROP new basis projects that are ongoing. However, the budget is secured for 2018 & 2019.

System integration for SJM is still in progress and evaluation of three different systems is ongoing. Violations have reduced to 3 violations per vehicle per 1000 km. Further efforts required by CHs to encourage or issue consequence management to reduce violations even more. Over 95% of vehicles are now being monitored. Awaiting response to a few of contractors who have not provided their credentials.

While working on several improvements, the number of passengers commuting in this buses have increased to over 9000 a month. This has reduced cost per seat from around OMR 65 (at the beginning of the project in 2013) to OMR 13 per seat today based on the utilization. Private vehicles last counted in September for North area have reduced by 49% since the start of the project. Discussion on engaging Salam Air for extra flights to the South has commenced and Meetings with Muwasalat for busing strategy took place, awaiting proposals from Muwasalat. For efficiency, the busing contractor have been approached to present smaller buses of 20 seaters that can replace the large buses and deploy the large buses where there is demand for it. Discussion with the Ministry of Tourism is on going to work together in placing a rest area in Adam. Land is allocated and draft plan is being completed.

### Worksite Hazards

On BBS:

- BBS Felt Leadership training video complete and received
- Online training for BBS Leadership has been designed and on the production server
- Aegis Database uploaded to production server
- Aegis Database Pilot Contractor Familiarization conducted and comments provided to vendor
- Final observation cards design completed and approved for printing (English/Arabic)
- Finalized IHTIMAM/PDO sub branding
- TOR for pilot reviewed and approved by FLG
- Schedule of training and coaching completed and shared with pilot contractors.

Conducted 21 FLS workshops. A total of 453 UWD personnel trained including contractors, against the target of 295. Conducted 2 dedicated sessions with Dalma Energy and 1 dedicated session with Round II supervisor candidates. Have kicked off the design of FLS Phase II and discussed with the project team. Had a kickoff meeting with the key contractors (Dalma, Abraj, Saxxon) for FLS Phase I. Preparing for FLS TTT workshop for the new set of Frontline Leaders/Facilitators in end January 2017.

The Line Of Defence LOD plan and progress update submitted at LSF level. Verification being done by Field Standard Officers FSO, currently 90% completed.

### Asset Integrity - Process Safety

7 site awareness sessions were completed with 277 participants. 90% of the selected staff have completed the AI-PS on-line training. This training has now been endorsed by FELT for all PDO Engineering staff.

76% (108 out of 153) of the due gap closure activities were closed by year end 2016. The common gaps the assets faced a challenge closing were:

- % Number of operators staff licensed.
- Number of facilities Asset Register verification completed.
- Number of approved waivers & safeguarding overrides per asset.

### Feedback HSE Plan Databook - Q4

Release Rev2 presented and data migration commenced towards end 2016. Date set for release rev 2 on 31 Jan 2017.

A total of 130 AIPS events have been uploaded in the Databook. Out of these 66 Tier 1, 2 and HiPos have been finalised and are completed in Databook. The remaining are in final draft ready to be approved.

In summary about 30 Roll Out sessions have been conducted during 2016. The databook has seen over 3000 unique users, and is recognized as key improvement for AIPS management and learning from incidents.

### Contract HSE Management

The HSE in Contract Workshops continued in 2016 with >101 contract staff successfully completing the mandatory 2 day session.

MSE12 completed the 2<sup>nd</sup> shift visits; Harweel second shift included and feedback to the Directorates completed 5<sup>th</sup> December 2016.

### Environment

#### Develop End-to-End Waste Management Plan

- Waste management plan is completed with action plan for 4 years for all waste streams which will be discussed with concern parties for implementation, the plan also has general parts highlighting rules and responsibility of each parties
- WMP was presented to MDC

#### Assess feasible options for reuse and management of RO Brine

- All RO reject water reuse options are evaluated
- Proposal to reuse RO reject water in dust control, drilling and site preparation was presented to MECA
- Soil analysis was carried out for TDS as per MECA's requirements. The samples were collected and send to third party Lab for analysis.
- An official request will be send to MECA for their approval.

### Review of Oil Spill Related Costs and Assessment of Remediation Practices – LEAN Project

- Project team proposed two counter measures to remove the waste from the process and these are to have dedicated resources to respond to major spills and to develop an SOP for cleanup. We got a proposal from TradeBe [our hazardous waste contractor] on responding to a spill and a draft SOP for the process was developed. Another counter measure is being reviewed to have 2 or 3 options to clean-up the spill to get the most attractive option to clean-up the site.

### Establish Measurable KPIs For Oil Spills

- The KPIs are established taking into consideration the International Association of Oil and Gas Producers (IOGP) performance on oil spills.
- Two KPIs were introduced and were approved by OND and OSD. These were:
  - # of Oil Spills > 1 Barrel per Million ton of Production (#/Mt)
  - #Mass of Oil spilled > 1 Barrel per Million ton of Production (t/Mt)
- The monthly performance for each cluster, directorate and total PDO were cascaded to concerned departments for comments, review and follow-up.

### Environment Legal Register and Evaluation of Compliance

- PDO environmental legal register developed and updated
- Desktop gap assessment of the compliance requirements conducted and report ready.
- Environmental compliance drafted master action plan (goal deployment approach) developed. Currently going through peer review and action parties and targets dates will be identified through engagement

### Soil and Ground Water Risk Assessment – Phase 2

All the field work including sampling, tests and survey are completed.. The Consultant has decided to conduct a very thorough modeling of the sites to reach firm conclusion for each site. The re-evaluation of groundwater risk is currently being undertaken, however an improved approach of applying USEPA assessment methodologies has been decided upon to present more definitive outcomes. While permeability measurements are an important aspect of the risk assessment, USEPA has developed a cascading 4 level procedure that if implemented will provide a greater degree of assurance of outcomes, and use more of the data collected during this and other studies both commissioned by PDO and by others. This methodology will limit the bias that could be introduced to risk assessment procedures by assignment of numerical values to perceived impacts.

This resulted in delaying the finalisation of the groundwater risk assessment, the length of which could only have been determined after experience of time to assemble and enter groundwater risk assessment inputs. The project report is expected to be submitted during 3rd week of January 2017.

### Health and Welfare

Regular review of Fitness to work together with Framingham evaluation is on going.

Monthly random sample of HPIs are reviewed. Findings and learnings are communicated back to the concerned teams. This remains an ever green project till when we centralised the contractor clinic in full. Simultaneous well over 30 doctors and nurses have been trained this year to ensure competence in fitness to work evaluation by contracting medical personnel.

Several health sessions have been conducted mainly in interior locations. 4 sessions/health activities were arranged in MAF for general population. Five trainings/workshops jointly with ministry of health for PDO healthcare staff including contractors.

The updated draft of Drugs and alcohol policy is still with other stakeholders for final comments and endorsement.

### The Quarter Lowlights:

There were 8 LTIs, 4 Non Accidental Deaths and 4 Tier 1 incidents happened during Q4.