ADCO

ADCO Pairs Compliance with Performance in HEARTS – HSE Electronic Analysis Reporting & Tracking System

Abu Dhabi Company for Onshore Oil Operations (ADCO) has been a world-class energy producer for decades - and now it is aggressively expanding its operations. In 2012, ADCO produced 1.4 million bpd and accounted for more than 50% of the United Arab Emirates total oil production. By 2017, the company plans to boost its onshore crude capacity to 1.8 million bpd, a substantial 28% increase, by opening up previously underdeveloped fields for exploration, development, production, and export.[1] To achieve this bold growth, ADCO is not compromising on health, safety and environmental (HSE) management but rather embracing it as a driver for progress.

ADCO's business strategy begins with a commitment to "continuously achieve the highest standards in HSE performance," according to the company's website. ADCO has adopted an HSE Management System structure to ensure compliance with government regulations, industry standards and corporate policies as well as actively promoting continuous improvement of HSE performance - as prescribed in Codes of Practice outlined by its parent company, Abu Dhabi National Oil Company (ADNOC). ADCO's leaders realize the success of this management system approach will ultimately achieve depends upon their organization's ability to manage HSE information.

"By 2006, we knew we needed to manage our HSE information more effectively across the company as our home- grown systems were archaic, and usage of the system was actually declining. Many groups were relying on spreadsheets and manual processes. Data validation was a time consuming and laborious task," said Zaffar Ijaz Ahmad, HSE Team Leader (Planning & Reporting) at ADCO. "We wanted a single up-to-date software platform - built by industry experts to deliver high-quality HSE data and best-practice workflows - so the right people get the right information at the right time to make good decisions."

To meet this urgent need, ADCO launched a project called HEARTS, the HSE Electronic Analysis Reporting and Tracking System. HEARTS is ADCO's HSE incident and environment management system, which is used by all personnel working at the company, from the operator level to senior management. HEARTS is also the centralized system to track overall HSE compliance and performance throughout ADCO.

Challenge

- Support HSE Management System strategy with enterprise-wide information system
- Enforce compliance with HSE regulations, standards, parent company Codes of Practice
- Provide HSE transparency and accountability to senior management and shareholders

Solution

Environmental Performance Solution

- Air emissions
- Waste management
- Water usage and discharge

Operational Risk Solution

- Incident Management

Results

- Converged multiple "archaic" systems into a single integrated enterprise-wide HSE platform open to all 6,300 employees, including 400+ active users
- Maintained international standards - including ISO 14001, 9001 and OHSAS 18001 certifications
- Provided HSE performance metrics for corporate leadership dashboards and sustainability reporting
- Supported overall incident mgmt. programs that:
  - Raised action closure to 93% (12-15% increase)

At ADCO, HSE is in Our HEARTS

Next, the ADCO CITD (Corporate Information Technology Division) and HSE teams performed a detailed evaluation of commercial software products that met their technical requirements and had been proven by industry peers. They looked for a comprehensive HSE information system that is web based and user-friendly so it can be used by all employees and contractors. It had to enable timely reporting of HSE incidents and near misses, track actions to minimize their impact and prevent recurrences, and support complete incident investigations. It had to demonstrate full compliance with ADNOC Codes of Practice, UAE laws, and international standards - including ADCO's ISO 14001, 9001 and OHSAS

18001 certifications.

In 2006, ADCO chose *Sphera Essential Suite®* as the unified enterprise software platform for HEARTS.

With *Sphera Essential Suite*, ADCO's team was able to replace its two separate legacy applications, for environmental and safety data respectively. In addition, they also established interoperability with other systems such as PIES (Production Injection Export System) and AQMS (Air Quality Management System), accelerating workflows and protecting data integrity by eliminating the need for most of the manual data handling.

ADCO's HSE team worked with Sphera and one of its implementation partners, Environmental Resources Management Ltd. (ERM), on the phased deployment of *Sphera Essential Suite* under the name HEARTS. Today, HEARTS is open to all of ADCO's over 6,000 employees and more than 400 of them actively use the system.

"HEARTS is helping us manage incidents more quickly and effectively than ever. If anyone of our staff sees an incident, they can enter initial data directly into the system, actions are immediately assigned to the appropriate person and tracked to completion," said William Langford, CITD Team Leader at ADCO. "We now have a 93 percent closure rate on actions - which is 12 to 15 percent higher than it was a few years ago. I think that's remarkable!"

Additional benefits achieved with HEARTS include:

- Incident Management - Built-in workflows based on industry best practices replaced manual processes and reduced delays. Enhanced data capture, root cause and trend analysis, corrective actions and other aspects of ADCO's

comprehensive incident management program are all facilitated through the system. The overall HSE program is achieving very positive results with ADCO, for example, achieving a 0.08 LTIF (Lost Time Injury Frequency) rate that is significantly lower than the industry bench mark of 0.43 injuries per million man-hours.[2]

- Environmental Monitoring - The HSE team uses HEARTS (*Sphera Essential Suite)* modules for tracking air emissions, water discharge and hazardous waste to deliver a current, complete picture of ADCO's environmental footprint to other stakeholders across the organization. For example, air emissions data from HEARTS supports ADNOC's Air Quality Management System in order to document ADCO emissions and verify full compliance with the parent company's environmental management policies.

- Performance Management - ADCO's leadership team has an Executive Dashboard to monitor KPIs from across the business, including HSE data from HEARTS, with the ability to drill down into details as needed to assure compliance, or see that assets are well managed.

- Self-Service Business Intelligence Reporting-HEARTS also leverages the SAP Business Objects tool so end users can access HSE data and create highly customized reports, charts, graphics and more that are relevant to their functional roles and do it quickly, without depending on the IT team for minor reports.

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> Team Leader, CITD Specialized Solutions
> ADCO

Information from HEARTS is in continuous use throughout the company because HSE is an integral part of the way ADCO does business.

"Updates on our safety and environmental performance are provided to senior management every 15 days, and then we roll data into monthly reports, quarterly shareholder briefings, a yearly sustainability letter and eventually it is aggregated with data from the other Group Companies into ADNOC's annual sustainability report," said Zaffar. "HSE is about all of us and all of the work we do. We must continuously improve our HSE Management System in order to drive sustainable growth and HEARTS is key to making that happen."

[1] http://www.arabianbusiness.com/adco-boost-crude-capacity-1-8m-bpd-by-2017-8773.html, [2] ADNOC Sustainability Report 2011, page 42, **Sample of Executive Dashboard views from HEARTS**

Operational Risk | Environmental Performance | Product Stewardship