KOC HSE Performance
2012-13

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Kuwait Oil Company
HSE Performance of Lagging Indicators
Volume of Spills (In Barrels)

Volume of Spill

- 2006-07: 1,084
- 2007-08: 1,543
- 2008-09: 2,479
- 2009-10: 1,767
- 2010-11: 288
- 2011-12: 525
- 2012-13: 6,492
Environmental Incidents

Environmental Incidents

2006-07: 240
2007-08: 183
2008-09: 193
2009-10: 185
2010-11: 165
2011-12: 125
2012-13: 146
Crude Oil Spills (Nos.)

Crude Oil Spills

- 2006-07: 113
- 2007-08: 114
- 2008-09: 121
- 2009-10: 113
- 2010-11: 92
- 2011-12: 72
- 2012-13: 66
HSE Performance of Leading Indicators
Site Verification Visits
(Carried out by Circular Appointed Employees)
Site Verification Visits
(Carried out by Non Circular Appointed Employees)

Site Verification Visits by NCAEs (SVVs-NCAEs)

NCAEs: Non Circular Appointed Employees
Safety Observations & Conversations

Safety Observations & Conversations (SOC)

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
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<tbody>
<tr>
<td>2004-05</td>
<td>1,022</td>
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<tr>
<td>2005-06</td>
<td>1,232</td>
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<td>2006-07</td>
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<td>2010-11</td>
<td>21,078</td>
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<td>2011-12</td>
<td>28,329</td>
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<td>2012-13</td>
<td>25,666</td>
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</table>
**Lost Time Injury Frequency Rate (OGP vs. KOC)**

- **LTIFR (KOC) is better than OGP average value for 2012.**
- During 2012; OGP Average value of LTIFR is 0.48; Where as for KOC; LTIFR value is 0.13
- LTIFR (KOC) is better than OGP Average values during the last 3 years.

**Lost Time Injury Frequency (LTIF):** The number of Lost time injuries (Fatalities + Lost workday cases) per 1,000,000 hours worked.
Trend of Total Recordable Injury Rate of KOC
(With respect to OGP E&P Companies in the World)

- TRIR (KOC) for 2012 is better than OGP average value.
- TRIR (KOC) is better than OGP average values continuously during the Last 6 years.

**Total Recordable Incident Rate (TRIR):** The number of recordable incidents per 1000,000 hours worked.
**Recordable Incidents:** (Fatalities + Lost work day cases + Restricted work cases + Medical treatment Cases)
Trend of Gas Flaring in KOC

Trend of Gas Flaring in KOC

Percentage of Flaring

- 2005-06: 17.18%
- 2006-07: 9.94%
- 2007-08: 7.72%
- 2008-09: 3.87%
- 2009-10: 2.66%
- 2010-11: 1.74%
- 2011-12: 1.29%
- 2012-13: 1.44%
Effluent Water Management in KOC

- **Total Effluent Production (Million Barrels)**
- **Disposed into the Well (Million Barrels)**
- **Disposed into the Pit (Million Barrels)**

Year | Total Effluent | Disposed into Well | Disposed into Pit
--- | --- | --- | ---
2002-03 | 111.9 | 27.3 | 84.6
2003-04 | 113.2 | 42.6 | 70.6
2004-05 | 112 | 56 | 56
2005-06 | 105 | 81 | 81
2006-07 | 189 | 105 | 45
2007-08 | 228 | 211 | 37
2008-09 | 246 | 210 | 41
2009-10 | 283 | 180 | 34
2010-11 | 295 | 268 | 32
2011-12 | 335 | 297 | 31
2012-13 | 411 | 393 | 13
Effluent Water Management in KOC

Effluent Water Disposal into Pits

- 2005-06: 43.04%
- 2006-07: 19.84%
- 2007-08: 15.14%
- 2008-09: 14.63%
- 2009-10: 14.28%
- 2010-11: 10.87%
- 2011-12: 9.51%
- 2012-13: 3.18%
Thank You

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Kuwait Oil Company