Downstream oil industry safety statistics

2006 Report

The collection and analysis of accident data is an essential element of a modern safety management system, and its importance is recognised throughout the oil industry. CONCAWE has been compiling statistical data for the European downstream oil industry for 14 years and the purpose of this activity is twofold:

- to provide member companies with a benchmark against which to compare their performance, so that they can determine the efficacy of their management systems, identify shortcomings and take corrective action; and
- to demonstrate that the responsible management of safety in the downstream oil industry results in a low level of accidents, despite the hazards intrinsic to its operations.

The report for the year 2006 was published earlier this year (CONCAWE report 2/08) and is available on CONCAWE's website. Besides the 2006 data, the report also includes a full historical perspective from 1993, as well as comparative figures from other industry sectors. Data was submitted by 20 companies, accounting for more than 80% of the refining capacity of EU-27.

In line with previous reports, the results are reported in the form of key performance indicators that have been adopted by the majority of oil companies operating in Western Europe as well as by other branches of industry. These are: Lost Workday Injury Frequency (LWIF); All Injury Frequency (AIF); Road Accident Rate (RAR); and Fatal Accident Rate (FAR). The statistics include companies' own employees as well as contractors, and are split between 'manufacturing' (i.e. mostly refineries) and 'marketing' (i.e. distribution and retail).

The analytical results are of most interest in the form of historical trends, assisting the safety management efforts for continuous improvement. Figure 1 shows the evolution of the three-year rolling average for the four indicators over the past 14 years.

Figure 1 Personal incident statistics relating to the European downstream oil industry





Overall these indicators show a consistent performance over the years with a slow but steady reduction of LWIF, which is under 3.0 for the second year running. The figures suggest that AIF peaked around 1996–97, but this is also related to incomplete reporting of this indicator in the early years, as it was not formally in use in all companies. The trend is definitely on a downward slope and AIF figures have improved for all categories.

A total of seven fatalities were reported for 2006. Following a steady downward trend during the 1990s, fatality numbers began to increase in the first years of this decade, peaking in 2003. The reverse in this unfavourable trend since 2004 is confirmed by the 2006 figure. The FAR is now below that of 1999, which was the lowest FAR reported since CONCAWE started to compile this information.

Of these fatalities, five were due to road accidents and the two others resulted from hazards directly associated with our industry's maintenance and construction activities. Over the last five-year period road accidents (40%) and incidents during construction/ maintenance activities (40%) remain the principal causes of fatalities.