Downstream oil industry safety statistics

CONCAWE has now been collecting data on the safety performance of the downstream oil industry in Europe for eight years. A complete report for the year 2000 will be published shortly. For that period returns were received from all CONCAWE Member Companies who operate refineries which together represent more than 90% of the oil refining capacity in Europe.

Figure 1 summarizes the survey results for all years in terms of four indicators: Fatal Accident Rate (FAR)¹; Lost Workday Injury Frequency (LWIF)²; All Incident Frequency (AIF)³; and Road Accident Rate (RAR)⁴. The statistics include own employees as well as contractors.

A notable feature of the surveys has been the decreasing number of fatalities in the industry. Although, with 12 fatalities, 2000 was not as good as 1999 (8 fatalities), the last two years are the best on record in this respect. What is more, of the 20 fatalities recorded over these two years, no fewer than 17 were caused by road accidents. The remaining 3 fatalities occurred during maintenance and construction activities, mainly from collapsing equipment. It is noteworthy that not one fatality resulted from fire or explosion, which is often regarded as the major hazard for the oil industry. Member Companies clearly have to pay even more attention to improving road safety. Efforts in the area have already paid off as the RAR has declined significantly over the years of these surveys. It must be noted, however, that only a minority of companies reports the latter indicator.

The LWIF has been fairly constant with only a slight reduction over the last five years. The AIF figures are more random but have been decreasing over the last four years. Comparison of these figures from year to year is complicated by the fact that not all companies record AIF and that the number of companies that do has increased over the period. Further complications arise from the fact that restricted working is not allowed in some countries and there are differences between what is classified as Medical Treatment and First Aid (which is not included). The ratio of AIF to LWIF has always been lower than expected. It is quite possible that as the reporting of incidents improves, the AIF will rise again. Paradoxically, this may be a positive sign in that one



of the basic steps to improving safety performance is to ensure that all incidents are reported so that they can be studied and any weaknesses identified and corrected.

These statistics confirm that safety is improving in the European downstream oil industry. In the past, comparisons with the general situation in European industry have shown that our industry has a good record. This year CONCAWE Member Companies have been compared with the European chemical industry and the upstream oil industry. The figures are of the same order of magnitude although the chemical industry has a higher LWIF and lower fatalities while the opposite is true for the upstream oil industry. All CONCAWE Member Companies are however committed to reducing the number of accidents involving both their own employees and their contractors to as low a frequency as possible.

- ¹ **FAR**: the number of fatalities per 100 million hours worked
- ² LWIF: the number of incidents involving injury severe enough for the worker to miss one or more days work per million hours worked
- ³ AIF: the number of incidents which cause a worker to seek medical treatment or to be put onto lighter duties per million hours worked (includes lost-time incidents)
- ⁴ **RAR**: the number of road accidents per million kilometres travelled.