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# Exposure profiles

## *Publication of exposure profile for kerosines/jet fuels.*

The risk assessment of chemical substances is based on a comparison of the potential adverse effects of a substance at given concentrations with the known or foreseeable exposure for man and the environment. Identification of the intrinsic hazards of a substance together with data on the extent to which man and the environment are exposed are the two key sets of information in the risk assessment process.

Hazard assessment procedures are well developed and are based on the principles laid down in the Dangerous Substances Directive. For petroleum substances, comprehensive information on the human and environmental toxicological characteristics has been extensively reviewed. These are published in CONCAWE Report 98/54 and the CONCAWE product dossiers.

However, the collection of the corresponding exposure data for petroleum substances is less advanced, and in consequence, a CONCAWE Task Force has been established to assess available data from member companies and from the published literature to document the available exposure data in the form of exposure profiles for the main petroleum substance groups. These profiles will eventually form companion documents to the product dossiers and will be available for use by member companies and by the risk assessors.

The objective of the work of the Task Force has been to identify exposed populations for each of the main petroleum substance groups and to quantify the level of exposure for each population group and for the environment. Generally, there are three groups of people that, potentially, may be exposed to petroleum substances. These are: workers, through exposure in the work place (occupational exposure); consumers, during the normal use of the substance; and the general population, through exposure to contaminated air, soil and water, and via the food chain. Exposure to the environment is assessed in the form of the potential exposure of aquatic systems, sediments, soil and air.

CONCAWE has recently published the exposure profile for kerosines/jet fuels (report no. 99/52). This exposure profile is a review of exposure to kerosines and jet fuels based on available data from member companies and from the published literature. It considers human exposure data for workers in the petroleum industry and kerosine fuel distribution, and consumers; and indirect exposure to the general public via the food chain and through inhalation of air. Environmental exposure covers releases to air, water, soil and groundwater, where such information is available. In addition, the report gives a summary of the uses, compositions, hazards, occupational exposure limits, and supply and consumption figures for kerosines and jet fuels.