Awareness of the problems associated with arsenic in drinking water and the environment has grown significantly over the last two decades or so and today an enormous literature exists documenting its occurrence, behaviour and impacts in many places across the globe. The mobilisation of arsenic in the environment occurs through a complex combination of natural biogeochemical reactions and human interactions. Most recognised problems are generated by mobilisation and transport under natural conditions, but mobilisation has also been caused, or exacerbated, by mining, fossil-fuel combustion and use of synthetic arsenical compounds (pesticides, herbicides, crop desiccants and arsenic-based additives in livestock feed). Arsenical pesticides and herbicides have been used much less over the last few decades, and more recent restrictions have been imposed on the use of arsenic in wood preservation (e.g. European Communities' Directive 2003/2/EC), but the legacy of such sources may still pose a localised threat to the environment.