

Ammonia, CCUS and hydrogen safety: scientific research at the Health and Safety Executive

Friday 12 April 2024

The aim of this presentation is to summarise the research undertaken by the Health and Safety Executive (HSE) Science Division on the Net Zero topics of ammonia, CCUS and hydrogen – focusing mainly on the first two topics. It will explain the context of the safety concerns, the scientific research that has been undertaken by HSE in recent years to assess the relevant hazards and risks, the future direction of HSE's research, and some remaining knowledge gaps. It will also touch on other safety-related studies ongoing in the UK and internationally on these topics.

The speaker, Dr Simon Gant, is a Technical Fellow in the Fluid Dynamics Team at HSE Science Division. He has worked at HSE since 2005, mainly on dispersion of toxic and flammable gases. In recent years, he has led work on various ammonia, CCUS and hydrogen research projects, including Jack Rabbit, COOLTRANS, H21 and HyDeploy. Simon has recently taken on the role of Strategic Science Advisor on Net Zero in HSE. This involves him identifying knowledge gaps and prioritising HSE's scientific research efforts to meet its regulatory and policy needs. Simon is also Chair of the Atmospheric Dispersion Modelling Liaison Committee (www.admlc.com), which coordinates knowledge-sharing activities amongst dispersion specialists in around a dozen UK Government agencies.