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Professional Profile

Mr. Hilton has over 12 years of experience in the environmental fate and behaviour and risk assessment of plant protection products, biocides, and other chemicals, including over 9 years of experience in the UK Chemicals Regulation Directorate (CRD). He provides scientific and strategic consultation on the environmental fate and regulation of such chemicals in the form of study monitoring, data evaluation, dossier drafting, the assessment of environmental exposure using both standard and higher tier assessment tools, including FOCUS models.

In his current role Mr Hilton advises clients regarding the environmental fate and behaviour, and regulation, of chemicals under both National and EU legislation; in particular relating to pesticides (Regulation 1107/2009), biocides (Regulation 98/8/EC) and other chemicals. He is experienced in the monitoring of environmental fate studies, the evaluation of data and the assessment of exposure of such products to the environment using both standard and higher tier assessments and the provision of strategic advice. He is particularly well versed in the use of FOCUS modelling as an exposure assessment tool, and provides services in exposure assessments using other tools for EU Member State approvals and non-standard uses, such as for plant protection product applications on rice. He also prepares dossier sections for active substance and product approvals drawing on his experience as a regulator where he wrote monographs under both National and EU legislation. Mr. Hilton was a CRD representative on the steering committee for the development of the hard surfaces exposure model HardSPEC; a position he retains as an independent consultant.

While at CRD, Mr. Hilton chaired and presented technical training to industry in the form of fate and behaviour pesticide assessment workshops, and developed and provided bespoke environmental fate and behaviour training on pesticide assessment including FOCUS groundwater and FOCUS surface water, including higher tier refinements, to other EU member state competent authority experts. Mr. Hilton was the CRD fate and behaviour representative for the development of a plant protection products minor use assessment tool, and the CRD representative at the EFSA organised workshop to develop scenarios for emissions of pesticides from protected crops and development of an agreed EU risk assessment framework. Mr. Hilton developed the UK CRD approach to the assessment of the fate and behaviour of plant protection products used on protected crops. He also developed the UK CRD approach to the assessment of substances of concern in biocidal products, and assisted in the development of an agreed approach within the EU. He was the UK's nominated scientific expert at several EU level biocide technical meetings and pesticide PRAPeR meetings for environmental fate and behaviour.

Mr. Hilton also previously worked as environmental research scientist in the contaminant fate and effects team at the Centre for Ecology, Fisheries and Aquaculture Science (CEFAS), a UK government research agency. There he planned and conducted environmental research into the occurrence of novel contaminants in fresh and marine waters and sediments and biota. He designed and conducted laboratory experiments, and developed methods of analysis, in order to assess the fate, effects and behaviour of contaminants (e.g., pharmaceuticals and biocides). His paper on the determination of

selected human pharmaceutical compounds in effluent and surface water in the Journal of Chromatography A, was in the top 50 most cited papers published between 2000 and 2005 in that journal.

Academic Credentials & Professional Honors

M.Sc., Environmental Geochemistry, University of Leeds, UK, 2000

B.Sc., Chemistry, University of Manchester Inst of Sci and Tech, 1996

Prior Experience

Higher Scientific Officer, Environmental Fate and Behaviour Branch, Chemicals Regulation Directorate (CRD), HSE (formerly Pesticides Safety Directorate (PSD), DEFRA), 2005-2012

Higher Scientific Officer, Pesticide Chemistry and Residues Branch, Pesticides Safety Directorate, DEFRA, 2003-2005

Scientific Officer, Contaminant Fate and Effects Team, Centre for Environment Fisheries and Aquaculture Science (CEFAS), DEFRA, 2001-2003

Publications

Hilton MJ, Jarvis TD, Ricketts DC. The degradation rate of thiamethoxam in European field studies. Pest Management Science 2016 Feb;72(2):388-397.

Hilton MJ, Jarvis TD, Ricketts DC. The degradation rate of thiamethoxam in European field studies. Pest Management Science 2016 Feb; 72(2):388-397.

Hilton MJ, Thomas KV. Determination of selected human pharmaceutical compounds in effluent and surface water samples by high performance liquid chromatography-electrospray tandem mass spectrometry. Journal of Chromatography A 2003; 1015(1-2):129-141.

Dyer RA, Tolhurst LE, Hilton M, Thomas KV. Bioaccumulation of the antifouling paint booster biocide Irgarol 1051 by the green algae Tetraselmis suecica. Bulletin of Environmental Contamination and Toxicology 2006; 77(4):524-532.

Ashton D, Hilton M, Thomas KV. Investigating the environmental transport of human pharmaceuticals to streams. Science of the Total Environment 2004; 333(1-3):167-184.

Thomas KV, Hilton M. The occurrence of selected pharmaceutical compounds in UK estuaries. Marine Pollution Bulletin 2004; 49(5-6):436-444.

Thomas KV, Aldridge J, Dyer R, Hilton M, McHugh M, Reed J, Reynolds W, Tolhurst L. The occurrence, fate and effects of selected antifouling paint booster biocides in UK docks, harbours and marinas. Proceedings of In-Safe, 2004.

Thomas KV, Hilton M, McHugh M, Waldock M. Increased persistence of antifouling paint booster biocides when associated with paint particles. Environmental Pollution 2003; 123(1):153-161.

Presentations

Hilton MJ. Determination of selected human pharmaceutical compounds in effluent and surface water samples by high performance liquid chromatography-electrospray tandem mass spectrometry. SETAC Europe, Hamburg DE, April 2003.

Reports

Hilton MJ, Thomas KV, Ashton DK. Pharmaceuticals in the Aquatic Environment. UK Environment Agency Report, 2003. http://www.environment-agency.gov.uk/