

EXPOSURE AND SPATIAL MODELLING

PROVIDING NOVEL SOLUTIONS FOR AN INCREASINGLY DEMANDING REGULATORY WORLD

SUPPORTING YOU WITH EXPOSURE AND SPATIAL MODELLING

- Standard regulatory modelling for all directives, uses, sources, exposure pathways, environmental compartments and receptors according to EU guidelines using, for example, the FOCUS surface water and groundwater models (PRZM, MACRO, TOXSWA, PEARL, PELMO, SWAN and VFSSMOD), MED-RICE, EUSES, SimpleTreat, ECPA-LET, ConsExpo, ART, DEPOMOD and MAMPEC
- Conducting regulatory modelling to zonal and national guidelines using, for example, UK POEM, HARDSPEC, UK higher-tier drainflow, GeoPEARL, GEMS, FROGS and EVA
- Design, characterisation and implementation of higher-tier exposure scenarios for risk refinement
- Generation and use of field- and laboratory-generated data, or literature, spatial or meta-analysis data to refine default model parameters or improve mitigation-measure effectiveness values
- Spatially distributed, probabilistic and catchment-scale exposure modelling and risk assessments
- Novel modelling approaches, for example, air dispersion modelling using ADMS coupling exposure models with effects and ecological models
- Inverse modelling of field fate or leaching and lysimeter studies
- Software development facilitating bespoke and higher-tier exposure scenarios and risk assessments



RECENT PROJECTS

- Full Annex I and Annex III modelling packages for a volatile compound, including redeposition modelling, long-range transport and deposition, and greenhouse modelling
- Inverse modelling of shallow groundwater monitoring data using PEARL for a potato desiccant study
- Led the development of an ECPA local environment tool and specific environmental release categories (SpERC) to assess the environmental exposure of co-formulants used in plant protection products registered under REACH
- Environmental and human risk assessments for non-standard substances, for example, hydrolysis products, fibres and inorganics
- Pan-EU-scale spatially distributed modelling of losses of a herbicide from diffuse urban and agricultural sources
- Catchment-scale risk assessments for 10 veterinary medicines of potential concern in the UK
- Freshwater and marine aquaculture environmental risk assessment using DEPOMOD and SEPA bath treatment models for fish medicine
- Refinement of default livestock input parameters for a veterinary medicine environmental risk assessment in conjunction with ADAS animal husbandry specialists

We have a well-earned reputation for providing higher-tier, non-standard support for challenging products in an increasingly demanding regulatory environment. We also provide specialist policy advice and research to government clients.

OUR UNIQUE COMBINATION OF EXPERTISE AND EXPERIENCE MEANS THAT OUR CLIENTS HAVE ACCESS TO A WIDE BREADTH OF INDUSTRY AND REGULATORY SPECIALISTS THROUGHOUT THEIR PROJECTS.

OUR TEAM OF MORE THAN 30 SCIENTISTS BRINGS TOGETHER EXPERTISE FROM INDUSTRY, RESEARCH AND REGULATORY AUTHORITIES, THEREBY ENABLING US TO FIND SOLUTIONS TO SEEMINGLY IMPOSSIBLE PROBLEMS.



WHAT CEA OFFERS

ENVIRONMENTAL FATE

FIELD FATE AND STEWARDSHIP

EXPOSURE AND SPATIAL MODELLING

AQUATIC TESTING AND ANALYSIS

ECOTOXICOLOGY AND RISK ASSESSMENT

TOXICOLOGY AND HUMAN SAFETY ASSESSMENT

CHEMICAL REGULATORY SUPPORT

ABOUT CAMBRIDGE ENVIRONMENTAL ASSESSMENTS

Since 2001, CEA, an RSK ADAS Ltd company, has delivered bespoke strategic and dossier support for chemical and product registrations across Europe. Our team of more than 30 scientists brings together expertise from industry, research and regulatory authorities, thereby enabling us to find solutions to seemingly impossible problems.

Our services range from data evaluation and substance identification through state-of-the-art modelling and specialist higher-tier studies for the refinement of risk assessments to the compilation of whole dossiers or dossier sections. Our clients span manufacturers, formulators, end users, trade associations and regulatory agencies.

Visit our website or speak to a specialist to find out how we can help you to bring your products to market safely and quickly.

CONTACT

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CEA offers a range of regulatory services for REACH (1907/2006), plant protection products (1107/2009), biocidal products (528/2012), food additives (1333/2008), novel foods (258/97), veterinary medicines (2001/82/EC) and human pharmaceuticals (2001/83/EC).

CEA is part of RSK ADAS Ltd, the UK's largest independent provider of agricultural and environmental consultancy, research and development, and policy advice.

