

# AQUATIC TESTING AND ANALYSIS

PROVIDING NOVEL SOLUTIONS FOR AN INCREASINGLY DEMANDING REGULATORY WORLD

- INNOVATIVE MESOCOSM FACILITY
- HIGHER-TIER LABORATORY STUDIES
- STATISTICAL ANALYSIS

## MESOCOSMS, LABORATORY STUDIES AND SUPPORTING ANALYSES

CEA conducts higher-tier studies tailored to meet the specific needs of its clients. We understand the importance of study design and high-quality data for addressing your regulatory requirements.

- Experienced in conducting good-laboratory-practice (GLP) and non-GLP trials
- 199 outdoor aquatic mesocosms (flat-bottomed or sloped) to simulate different edge-of-field environments with a focus on plants and invertebrates
- Bespoke mesocosm design to produce robust population and community endpoints (ETO and ERO) that meet the requirements of the EFSA (2013) aquatic guidance
- In-house identification of freshwater phytoplankton, periphyton, macrophytes, zooplankton and macroinvertebrates
- In-situ bioassays and laboratory testing to provide endpoints for species of interest
- Field sampling and culturing of non-standard invertebrates
- Indoor microcosms and higher-tier laboratory studies on many aquatic invertebrates, plants and algae to address data gaps
- Interpretation of ECx values for new and existing ecotoxicological datasets
- Analysis of new and existing mesocosm datasets using minimum detectable difference (MDD) to meet the requirements of EFSA (2013) aquatic guidance



## RECENT COMMISSIONS

- Mesocosm study investigating the effects on focal species of invertebrates using free-living and in-situ bioassays to determine ECx values and recovery estimates
- Sloped mesocosms study to evaluate the effect of a herbicide on macrophyte communities
- Indoor microcosm comparative sensitivity study with wild-caught invertebrates
- Investigations of zooplankton communities in indoor microcosms
- Laboratory culturing and higher-tier studies with age-specific non-standard invertebrates
- MDD re-analysis and contextualisation of data from multiple mesocosm studies according to current guidance
- Statistical reinterpretation of ecotoxicological study data to derive additional endpoints, ECx and NOEC

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.

