



# ***ECOLOGICAL RISK ASSESSMENT***

*Determining Risk to Wildlife and the Environment*



*Risk Assessment Framework for Product Registration & Registration Review*

## **Problem Formulation**

Select assessment endpoints, define nature of the stressor, characterize use, prepare a conceptual model. Develop an analysis plan.

## **Ecological Effects Analysis**

Ecotoxicology evaluation, acute & chronic toxicity data acquisition and review, literature search for scientifically valid studies (registration data & open literature). Develop a stressor- response profile.

## **Exposure Analysis**

Estimate potential exposure from review of environmental fate and transport data, use information, monitoring data, and modeling information. Develop an exposure profile.

## **Risk Characterization**

Risk estimation and risk description, calculation of risk quotients by deterministic approach, probabilistic refined assessments. Address uncertainties, assumptions, strengths & limitations of the analysis. Prepare risk assessment report.

## **Endangered Species Assessment**

Endangered and threatened species screening-level and species-specific assessments. Determination of "no effect" or "may effect" following above risk assessment framework.

## **Environmental Modeling**

Employ various standard models to define pesticide fate and transport. Determine potential aquatic and terrestrial exposure routes. Design and develop customized models.

## **Spatial Analysis**

Utilize GIS technology to support the risk assessment process. Define potential use area, determine potential drift area including buffer analysis, identify runoff area by tracing flow directions. Design information management systems.

## **Offices in the USA and the UK**

### **USA Headquarters**

Tel: +1 253 473 9007

### **European Headquarters**

Tel: +44 131 445 6080

Email: [info@complianceservices.com](mailto:info@complianceservices.com)

[www.complianceservices.com](http://www.complianceservices.com)



**Best Supporting Role**