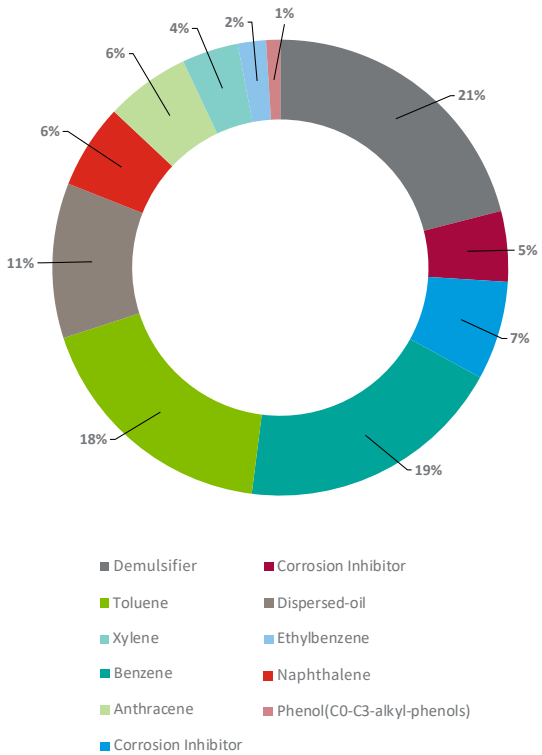
Environmental Testing
Services for operators

We offer support on discharges to sea by quantifying environmental risk using dispersion modelling

Discharges to sea represent one of the major environmental impacts of offshore petroleum production activities. Oilfield production chemicals are diverse, ranging from simple inorganic salts or organic solvents to complex organics, polymers, sequestrants, or compounds with surface-active properties.

Usage in a controlled and sustained manner is the key to utilization in advantageous, harmonious, and productive scenarios. Thus, the rationale for introducing regulations such as REACH (Registration, Evaluation, Authorisation & restriction of CHemicals), OCNS (Offshore Chemical Notification Scheme), and OSPAR (Oslo and Paris convention) are examples to regulate chemicals and discharges.

We have been providing services to chemical suppliers and manufacturers for implementation of Harmonised Offshore Chemical Notification Format (HOCNF) for more than two decades. Our Flotta testing facility provides an extensive portfolio of tests and associated consultancy to meet your requirements.



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Environmental Modelling

Risk Based Approach (RBA)

We have been instrumental in performing all intrinsic activities of toxicity testing including produced water environmental modelling using Dose-related Risks and Effects Assessment Model (DREAM) and reporting.

Since the submission of the first RBA assessment report to the Regulator, we have now performed the full evaluation for several major operators.

DREAM (Dose-related Risk and Effect Assessment Model)

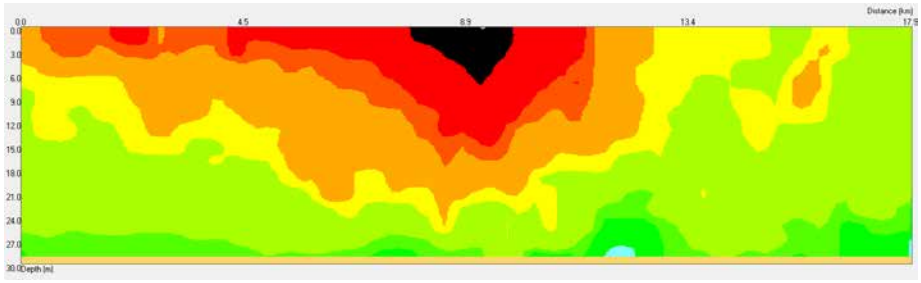
DREAM dispersion modelling simulates the impact from discharged produced water, or cuttings and mud, and chemicals on both the water column and the sediment. The risk is quantifiably measured for the specific location.

When coupled with Best Available Techniques (BAT) and Best Environmental Practices (BEP) assessments, operation cost and environmental risk can be evaluated and reduced.

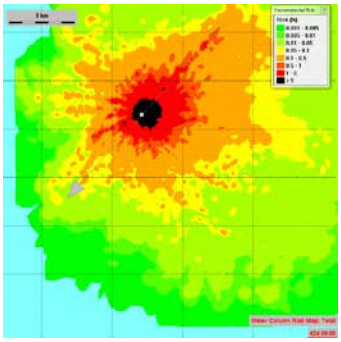
We contribute specialist knowledge and understanding gained over many years of experience to provide a comprehensive service.

Benefits of Environmental Modelling

- EIF (Environmental Impact Factor) calculation shows risk map of discharge
- 3D simulation of discharge to sea
- Identify substances of greatest harm
- Comparison of alternative measures, i.e. chemicals used or implementation of technology
- Justification of chemical usage
- Recommendations for enhanced performance at reduced cost and environmental risk



Output of Dose-related Risk and Effect Assessment Model (DREAM)



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