



FUGRO

OIL SPILL SERVICES

Fugro's marine environmental team delivers a comprehensive range of oil spill services to the offshore oil and gas industry across the full project lifecycle.

CONSULTANCY AND LABORATORY SERVICES

For more than 40 years Fugro's marine environmental services have provided unrivalled expertise to the oil and gas industry. Our oil spill services support a wide range of clients including regulatory bodies, oil companies, shipping associations and insurance companies. We provide efficient and cost-effective solutions tailored to each client's specific requirements. Fugro's environmental consultancy group provides oil spill planning and impact assessment services for operators undertaking exploration, development, production and decommissioning activities. Our chemistry laboratory has extensive experience in oil spill forensics, offering rapid analysis to aid source location. As well as analysing and reporting data, we helped to research and develop leading analytical techniques.

OIL POLLUTION EMERGENCY PLANS (OPEPS)

An OPEP is a legal requirement for all offshore oil and gas operations within the UK, ensuring that operators and authorities can respond effectively in the event of a spill. We have provided OPEPs for standalone drilling operations, multiple offshore installations, pipelines and fields. Each OPEP prepares our clients to deal with all categories of accidental hydrocarbon spills. It includes:

- Guidance on practical actions and reporting requirements
- Definitions of the roles and responsibilities of all interested parties
- Response strategies relevant to the operations and specific environmental conditions
- Risk assessments, including oil spill modelling, using a range of worst-case scenarios



All oil and gas operators hold primacy for oil spill prevention and response at their assets.



MAJOR ENVIRONMENTAL INCIDENT ASSESSEMENTS

Fugro provides Major Environmental Incident Assessments in line with the requirements of the EU Offshore Safety Directive.

This process combines oil spill modelling results with regional environmental sensitivity data in a geographical information system (GIS) environment, to identify whether European coastal and marine protected sites may be impacted by a worst-case scenario spill.

ENVIRONMENTAL SENSITIVITY MAPPING

Our GIS team can supply detailed coastal sensitivity maps that provide an analysis of potential oil spill risks and a methodology for prioritising coastal protection and response activities.

ENVIRONMENTAL IMPACT ASSESSMENT

Our consultants have extensive experience in undertaking environmental impact assessments (EIAs) for a wide range of exploration, development and decommissioning projects. All EIAs include an analysis of oil spill risks; modelling for all potential worst-case scenarios; a detailed oil spill impact assessment; and the identification of spill prevention and response procedures.

OIL SPILL SAMPLING KITS

A robust sampling procedure is essential for confidently identifying the source of an oil spill. Fugro provides oil spill sampling kits that make the collection of samples quick and easy while also ensuring the highest level of sample integrity and traceability. After receiving the samples for analysis and interpretation, we can replenish the client's kits.



Oil pollution sampling kit for collecting high-quality spill samples.

OIL SPILL FORENSICS

When analysing oil spill samples, our laboratory uses the CEN (European Committee for Standardisation) method: CEN/TR 15522-2. This is a modern, widely accepted spill versus source assessment that we helped develop.

The CEN method utilises a two-stage chromatographic analysis process to generate information about the chemical composition of the oil – in particular, the aliphatic, aromatic and biomarker compounds.

To determine the extent of similarity between the oil spill and the suspected source samples, the data is assessed visually by skilled analysts and statistically by means of diagnostic ratios and the evaluation of critical differences. The computerised oil spill identification (COSI) system contains the data from thousands of oil samples and is used for fast, reliable comparisons.

As well as undertaking forensic analysis, we review third-party oil identification reports and offer impartial, expert interpretation of the data generated.



Reviewing oil pollution sample data.



Mapping sensitive coastal habitats allows spill protection and response strategies to be prioritised.