

“Where will our knowledge take you?”

Offshore Discharge Consultancy



All modelling studies are designed for site specific applications and take full account of operational procedures



Our experienced staff have detailed knowledge allowing them to understand and model complex process systems.

BMT Cordah has provided consultancy services for offshore marine discharges for more than 25 years

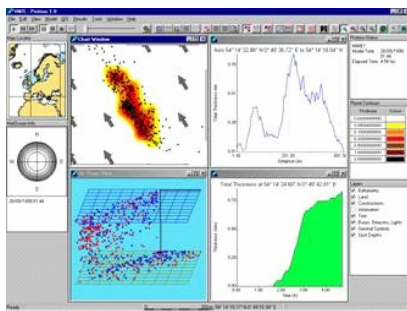
Our clients include many major oil and gas exploration and production companies, environmental consultancies and government bodies – including the Department for Business, Enterprise and Regulatory Reform (BERR). We can provide a range of services, including all modelling requirements, from PON applications and ecological risk assessment, to the complete management of Environmental Impact Assessments and production of Environmental Statements.

We work with clients from the original work planning stage through to permit submission offering guidance and support and compilation of all required supporting and submission documents.

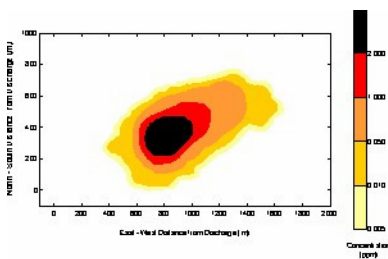
We strive for excellence and have regular detailed discussions with statutory consultees and BERR regarding the permitting system. Discussions have ranged from future changes to legislation and their implications for operators, to the risk assessments of novel offshore operations.

Our experience allows us to advise clients on their internal procedures to increase efficiency of project management and their liaison with both the regulators and our technical specialists.

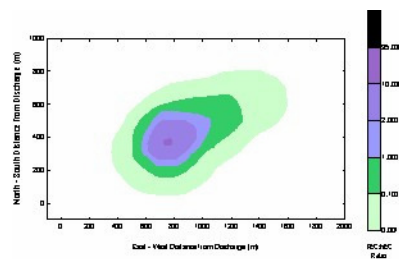
BMT Cordah recognises the tight deadlines to which the offshore industry works and offers a fast turnaround service.



BMT Cordah's PROTEUS application: showing chart plot, 3D view and concentration graphs



Contour plot of chemical concentration levels



Contour plot PEC:PNEC Risk Ratios

PROTEUS Discharge Modelling:

BMT Cordah's PROTEUS model was specifically developed as an information system to simulate the dispersion and dilution of aqueous discharges, such as produced waters and drilling discharges. A full range of chemical effluents of different buoyancies can be modelled and tracked through the water column.

PROTEUS capability includes:

- 3-D dispersion modelling of aqueous plumes; including early jetting phase, dynamic collapse, and subsequent passive dispersion;
- Spatially-varying bathymetry;
- Spatially and temporarily varying hydrodynamics;
- Bespoke characterisation of the discharge scenario (pipe configuration, effluent type, concentration and density);
- Mean, maximum or depth-specific concentration contours and suspended particle position export facility;
- Plume extents, and pathway trajectory;
- Ecotoxicological risk assessment; and
- Discussion of results to aid decision making.

Complementary Services:

Environmental Impact Assessment

BMT Cordah provides a range of EIA consulting services from scoping studies to full appraisal.

Discharge modelling reports can be submitted independently or as part of an Environmental Statement.

PON Applications and Offshore Chemical Regulations

BMT Cordah provides advice and assistance for all PON applications and provides expert guidance on the application of the UK Offshore Chemical Regulations. Our discharge modelling studies are also used to support BAT/BEP studies, environmental engineering investigations and studies to optimise the configuration of outfalls and caissons.

Ecological Risk Assessment

BMT Cordah offers ecological risk assessment with all discharge modelling using a range of methods including PEC:PNEC, CBR and WET schemes.

Drill Cuttings Management

BMT Cordah have an adaptive cuttings pile model for in-situ piles, and can conduct cuttings discharge dispersion modelling.

What we do for our clients:

- Legislative support and guidance
- Compilation and submission of permit renewal/annual documents
- All types of PONs catered for with hundreds of submission per year compiled by an experienced and knowledgeable team
- Support internationally on Best Practice advice, chemical risk assessment, and evaluation of early stage projects
- Modelling capabilities range from UK legislative required models, including CHARM, to comparative studies with dispersion based, longer study period modelling products such as PROTEUS, DREAM and CORMIX.