

Environmental Consultancy, EIA and Strategic Environmental Assessment

Environmental Impact Assessments (EIA)

EIA are fundamental to minimising the risk to and maximising the success of E&P projects. Bridgeport provides all of the technical studies necessary to assess the potential impact of a project to the socioeconomic, atmosphere, aquatic, and terrestrial environments.

Bridgeport's environmental specialists investigate and evaluate the potential environmental constraints together with opportunities associated with our clients' projects with the outcome of proposing appropriate and pragmatic mitigation and management measures.

This assists the regulatory approval process and serves to achieve good environmental and social outcomes.

An Environmental Management Plan (EMP) should be a site-specific plan developed to ensure that all necessary measures are identified and implemented in order to protect the environment and comply with environmental legislation.

Below is a brief overview of the types of impacts that Bridgeporth can assess:



Marine

- Spills, leaks, cooling water, sewerage, sanitary, and domestic wastes
- Drilling fluids, process, wash, and drainage water, the impact on ecosystems



Terrestrial

- Potential impacts to soil arising from physical disturbance, contamination from spillage, leakage or solid waste disposal
- Indirect impact from opening access or unexploded ordnance



Socioeconomic

- Human and cultural changes in land use, population levels, socioeconomic levels
- Quality of life, aesthetics, transportation



Atmospheric

- Primary sources of atmospheric emissions, including flaring, venting, and purging gases, airborne particulates from soil disturbance
- Combustion processes and particulates from other burning sources

Bridgeporth provides a number of remote sensing techniques for monitoring and change detection:

- Gamma ray spectrometry
- Hyperspectral data
- Digital terrain models
- Digital surface models
- Thermal infrared imagery
- Colour digital aerial photography
- LiDAR surveys
- Image analysis

LiDAR Remote Sensing (LRS) technology measures distance by illuminating a target with a laser and analysing the reacted light. It has many applications, including:

- Flood mapping
- Glacier and snowfield mapping
- Agriculture and forestry mapping
- Monitoring of open-cast mining

Hyperspectral Remote Sensing (HRS) extracts physical information across the spectrum to describe inherent properties of the targets. Regions can be quantitatively analysed for a wealth of materials, natural and artificial, such as vegetation, water, gases, soils, and rocks. Potential applications include:

- Mineral mapping
- Water quality, oil spill detection
- Plant mapping and distribution
- Vegetation health
- Forest inventory

Bridgeporth also provides a number of ground verification programs:

- Calibration of remote sensing data
- Hard rock geochemistry (ICP-MS, Mass Spec)
- Wet geochemistry
- ISO 17025 and MCERTS standards
- Vegetation sampling and archiving

Bridgeporth can use any of the above techniques, or a combination of them, to minimise environmental risk and create an effective Environmental Management Plan that can meet your project needs. By using ground and remote sensing technologies to track, monitor, and assess the environmental impacts of a project from day one, your company can cost-effectively mitigate against any potentially negative effects on the environment or de-risk arbitrary litigation law suites.

To learn more about how Bridgeporth can help your exploration, please contact us at sales@bridgeporth.com or **+44 (0)1908 667 014**

