OIL AND GAS CASE STUDY - BROCKLESBY OILS, BROUGH, UK

Full IPPC service
Bio-diesel plant

ABB provided Brocklesby Oils with a structured approach through the full Integrated Pollution Prevention & Control (IPPC) life-cycle that was tailored to their individual needs by building upon existing systems.

‘Biodiesel’ is emerging as a sustainable fuel within the European Union with a predicted ten-fold increase in production by 2010. Brocklesby Oils decided to build a ‘bio-diesel’ plant to enhance its existing vegetable oil reprocessing facility. The Pollution Prevention and Control (PPC) Regulations (2000) requires UK operators to apply for a licence to operate. A phased application programme applies to existing installations but new installations must apply before commencing operation. As a new facility the proposed ‘bio-diesel’ plant fell immediately under IPPC legislation regulated by the Environment Agency (EA). This made the Brocklesby application one of the first in the country.

As a new plant there was very little design information available on which to base the application. However, it was not possible to secure funding for design without having an operating permit in place. Brocklesby Oils were in a classic ‘Catch 22’ situation.

Other ‘Bio-diesel’ plants were planned by competitors and so the time to beneficial operation was critical. This meant that the IPPC authorisation had to be obtained in the shortest possible period.

Brocklesby Oils engaged ABB in favour of other consultants due to:
- Proven track record in developing legislative applications, (e.g. IPC, COMAH)
- Regulatory experience of ABB consultants
- In-depth knowledge of the IPPC application process
- Process design and development capability
- Expertise over the full range of IPPC requirements

“We obtained our authorisation in the minimum time and ABB generated extremely valuable design documents as part of the process.”

Brocklesby Oils, Operations Director
Solution
The work utilised ABB’s unique breadth of skills to provide expertise across the full range of IPPC requirements.

An initial ‘gap analysis’ defined the scope of the application, identified existing information and prioritised and coordinated further activities. ABB’s process capability developed base information into the design data required for the application. Best Available Technique (BAT) analysis identified the appropriate level of environmental monitoring and control for the Brocklesby Oils installation. At strategic points in the application development liaison meetings were held with the EA.

The result was a successful submission with the correct level of detail.

Benefits
The ABB approach brought client benefits throughout the application process.

- Compliance IPPC data requirements by developing design information from basic flowsheet information
- Maximised use of existing data through a structured methodology
- Shorter consultation period and therefore total time due to a detailed knowledge of the authorisation process
- Knowledge of Environment Agency priorities allowed a phased improvement programme that managed plant development in a financially and environmentally acceptable manner.
- Experience in regulatory applications created a document that was suitable for release into the public domain