



Environmental Statement – Non-Technical Summary

**Proposed Renewable Fuels Plant,
Seal Sands, Teesside**

for

Tees Valley Biofuels Ltd

June 2006

06/1918/



1.1 Non technical Summary

1.1.1 Introduction

Tees Valley Biofuels Ltd is proposing to construct a Renewable Fuels plant on Teesside at Seal Sands. The development site is currently occupied by a small derelict hut measuring approximately 2 by 4 metres but no other buildings or structures and is a brown-field site.

Tees Valley Biofuels commissioned White Young Green Environmental (WYGE) to undertake an Environmental Impact Assessment (EIA) for the proposed development. This non-technical summary offers a non-technical overview of the development, significant environmental effects and mitigation measures to be implemented for the following planning application:

Project Title: Tees Valley Biofuels Ltd, Renewable Fuels Plant
Applicant: Tees Valley Biofuels Ltd

1.1.2 Site Location

The Renewable fuels plant is proposed to be installed on the plot to the North of the Vopak site at Seal Sands, Teesside (NGR 536 245).

1.1.3 Environmental Assessment Process

Stockton Borough Council (SBC) is the local planning authority for the proposed VOPAC study area. SBC determined that a statutory Environmental Impact Assessment (EIA) resulting in the production of an Environmental Statement (ES) was required *given the nature, scale and location of the project. It is considered that the proposals are likely to have a significant effect on the environment.*

The EIA process undertaken involved the following steps:

- Identifying features of the existing environment likely to be affected;
- Undertaking a consultation process;
- Identifying the environmental impacts of the development; and
- Identifying mitigation and enhancement measures.

1.1.4 Planning and Legislative Frameworks

The development site lies within the jurisdiction of SBC. The planning policies set out in Section 6 District Local Plan will therefore need to be complied with.

Supporting information contained within the application, indicated there are no environmental, amenity or technical difficulties to prevent the development from proceeding. Taking into account all relevant material considerations and the policy support for the development as set within Section 6, it is therefore reasonable to conclude that *planning permission should be granted subject to due process.*

1.1.5 Geotechnical, Contamination and Water Quality

The site remained as undeveloped wetlands until circa 1976 when the site was reclaimed from the sea as part of the Seal Sands industrial development. Following reclamation the site remained undeveloped until 1993 when a laboratory is shown in the northern area of the site. In the south of the site, storage tanks, buildings and infrastructure is shown. By 2004 this area of the site has seen a significant increase in the number of tanks.

Published geological information indicates the site to be underlain by made ground. Underlying this, the superficial deposits are shown to be Marine and Estuarine Alluvium. The solid geology beneath the site is the Mercia Mudstone Group. The site is not in an area affected by mining. The geology below the site has been classed as a Minor Aquifer. The nearest surface water course is the River Tees, which bounds the east of the site.

With regard to potential contamination issues it is suggested that the overall potential environmental risk with respect to the site is of a *high* order, on the basis of on-site potential contaminant sources and potential pathways. Overall it is considered that the potential risk from a number of geotechnical issues is of a *moderate* order.

An intrusive ground investigation is recommended, prior to development, to identify any potential development constraints and allow mitigation measures to be implemented. Implementation of any required remedial measures should significantly reduce the risk grading as indicated.

1.1.6 Flood Risk and Site Drainage

Whilst there is no record of historic flooding and the site lies within Zone 2 (see Figure 8.1) which indicates there is a less than 0.1% Annual Exceedence Probability (AEP) event, the site is therefore considered to have a potential risk of flooding, the likelihood being low.

With regard to site drainage, the peak discharge will be limited to the spare capacity in the existing surface water sewer. On site storage should be considered at the detail design stage.

1.1.7 Ecology and Nature Conservation

The following statutory designations are within 800m of the proposed development.

- Ramsar Site: Teesmouth & Cleveland Coast – Ref. UK11066
- Special Protection Area (SPA): Teesmouth & Cleveland Coast – UK9006061
- National Nature Reserve (NNR): Teesmouth – 1006937
- Site of Special Scientific Interest (SSSI) – Seal Sands – Ref 1060071

There is no anticipated direct or indirect impact which will adversely affect any of the above sites of international or national importance. However habitat loss will occur within the site curtilage and a negligible residual impact is only possible with the incorporation of ecological mitigation in the form of surrounding habitat improvements (such as native species planting and diverse grassland habitat establishment). There is however, adequate scope for this to be incorporated on adjacent land areas.

Adverse construction impacts on red and amber list bird species may be offset/minimised by timing of works so as to avoid the bird breeding season. Red list species such as skylark and linnet are both ground nesting and mitigation suitable to offset the direct impact of habitat loss will also potentially provide suitable nesting habitat for these species. Monitoring and design modification of appropriate mitigation will however be important for successful habitat compensation provision.

Amber list and general bird populations will also benefit from increase in botanical diversity not only from the provision of ground nesting habitat but also from potential increases in invertebrate biomass and diversity.

1.1.8 Landscape and Visual Effects

A landscape and visual impact assessment was carried using guidance given in Guidelines for Landscape and Visual Impact Assessment (Second Edition) and Landscape Character Assessment Guidance for England and Scotland 2002.

The site has been identified as lying within the Tees Lowland regional character area. The site is within an area of heavy industry and is surrounded by oil refining, gas works, chemical works and processing plants. The site does not fall within any statutory designation areas however, Seal Sands to the north is of national importance and the area of grassland immediately to the east is within the Tees Valley Structure Plan Strategic Wildlife Corridor.

The site comprises of an area of rough grassland with limited isolated naturally occurring scrub. The site is enclosed by chain link fence and palisade fence on all sides and has access gates off Seal Sands Road. Being in the river Tees floodplain, the land within the site and surrounding area is predominantly flat.

Short and medium distance views into the site from surrounding receptors are restricted due to the industrial nature of the area and existing processing plants and works on the site boundaries. Views are however available across the River Tees from the east, but again these views are from industrial areas. Long distance views are available from the Cleveland Hills although from this location the site is indistinguishable from the surrounding Teesside steel works, port activities along the Tees Estuary and ICI.

The loss of landscape vegetation on the site has been assessed as minor adverse to negligible due to the limited existing vegetation cover on the site. The surrounding visual receptors (existing processing plants, workers and road users) would have direct views of the development although due to the sensitivity and nature of these views this has been assessed as minor adverse to no impact.

1.1.9 Archaeology and Cultural Heritage

The study area, referred to within this document as the Tees Valley Biofuel site, has not been subject to extensive archaeological investigation in the recent past. However, there is some evidence of prehistoric, post medieval and industrial activity to the west of the site within a 4km area.

The OS First Edition map (Durham Sheet 51 Billingham) identified the main land frontage along the present route of the A178, suggesting the Tees Valley Biofuels site to be submerged for at least of the later medieval to the pre-industrial area possibly earlier.

Areas beneath the flood-line are considered unlikely to have archaeological features, structures or remains due to the inability of access during estuarine inundation. Navigation using floating craft could have been feasible but remains would potentially have been exposed when the marine influence receded. It is possible that craft wrecks could have become covered by marine deposits which would then protect them but there is no evidence to suggest this is the case in the immediate area.

1.1.10 Traffic and Transport

The development site is well served by an existing primary road network which is accessed via the A178/A1185 Seal Sands Roundabout.

There are weight restrictions on the A1085 at the Clarendons. This means that the route for all HGVs (construction and operational) to access the A19 trunk road network is via the A1185 Seal Sands Link Road and the A689.

The location of the site, 3.5 km to the west of the A178, militates against the use of more sustainable forms of transport by site staff such as buses, cycling and walking.

The volumes of traffic that will be generated both during construction and operation will not have any significant effect on the existing traffic using the highway network.

In order to mitigate the effects of construction and operation related journeys to work it is planned to consider work based travel plans.

1.1.11 Air Quality

During the construction phase, the potential for dust to be emitted will be heavily influenced by the nature of activities taking place. Operations likely to be carried out during the construction phase will include clearance, earthworks with some material import and export and vehicle movements.

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It is likely that a temporary elevation in dust levels will occur around the site, particularly where the above activities are evident during dry conditions. Exhaust emissions from wagons, plant and other equipment will be an additional source of emissions to air during the construction contract, but are considered to be limited.

Provided that good practice measures are implemented, the significance of potential air quality impacts on sensitive receptors during the construction phase of the scheme are assessed as being minor to adverse, reversible, short-term and occurring on only a local scale.

During the operation of the Tees Valley Biofuels development, the principle potential sources of air impact identified are likely to be from operational phase process emissions. It has been established that the potential significance of these impacts is moderate to minor.

1.1.12 Noise and Vibration

The most notable impacts of the proposed development are likely due to increases in noise and vibration during construction and operational phases (e.g. periods of earthworks, construction of site infrastructure and any piling activities) and increased impacts by HGV movements traveling to and from site. With respect to workers at adjacent premises, it is considered that the assessment associated with the IPPC permit (which will be required under the Pollution Prevention and Control Regulations 2000), will address any potential issues.

Given the site context, adjacent to existing industrial premises, at some distance from residential receptors and the surrounding road infrastructure already subject to a high percentage of HGV traffic, it is deemed that with appropriate mitigation the development will not have a detrimental impact on the surrounding environment. This is based on the requirement that Best Available Technique (BAT) will be adhered to within the design and operation of the proposed unit and mitigation measures are implemented through the use of an Environmental Management Plan.

1.1.13 Conclusion

Whilst direct and indirect impacts will occur, primarily due to land-take, construction and operational phases of the proposed development these relate to receptors/actions which can be mitigated/compensated for on immediately adjacent areas or offset through design and construction phasing. Further, the use of rapeseed oil (biofuel) and municipal waste (to feed the on site power station) is in broad agreement with national and regional sustainability objectives and will help SBC to meet current government targets in recycling, reduction of material to landfill and CO₂ emissions.

On balance any adverse impacts of the proposed development are considered to be outweighed by the positive benefits when mitigation is applied to both the construction and operational phases of the development.