

## 19.0 CONCLUSIONS AND STATEMENT OF SIGNIFICANCE

19.1 The Environmental Statement (ES) has been prepared on behalf of Moorland Energy Limited to accompany a planning application submitted to North Yorkshire County Council (NYCC), as the County Planning Authority (CPA), and the North York Moors National Park Authority (NYMNP) under the Town and Country Planning Act 1990 as amended by the Planning and Compulsory Purchase Act 2004 for the Ryedale Gas Project.

19.2 This Chapter provides a general summary and statement of significance of the impact of the Proposed Development on the environment. As advised by 'Preparation of Environmental Statement for Planning Projects that Require Environmental Assessment: A Good Practice Guide' conclusions on significance of impacts are essentially a matter of judgement. Generally, conclusions will not automatically be accepted or upheld by the planning authority or the general public, especially where judgements about degrees of nuisance or unquantifiable aspects are concerned. It is, therefore, the case that statements of significance contained in this Chapter represent the views of the team responsible for preparing the ES. These may differ from those held by the planning authority.

19.3 The Ryedale Gas Project includes five principal elements:

- Gas production from the existing Eberston Wellsite;
- The construction of two underground pipelines from the existing Eberston Wellsite to a new Gas Processing Facility;
- A new access road between the A170 and the proposed Gas Processing Facility;
- A Gas Processing Facility at Hurrell Lane, Thornton-le-Dale; and
- An Above Ground Installation (AGI) connection into the existing National Transmission System (NTS) pipeline to the south of the Gas Processing Facility on land off New Ings Lane.

19.4 Significant reserves of gas have been discovered at the existing Eberston Wellsite close to Dalby Forest. The aim of the planning application submitted by Moorland Energy is to provide the necessary infrastructure to link the Wellsite to the National Transmission System (NTS). This would be achieved through the construction of two underground pipelines between the existing Wellsite and the existing NTS at Thornton-le-Dale. In order that the gas meets the requirements of the Grid it is necessary to process the gas prior to connection and, to this end, a Gas Processing Facility is

proposed at Hurrell Lane. From the Gas Processing Facility, an underground gas pipeline links to the NTS via the AGI through a "hot tap" connection.

- 19.5 The need for this project arises because of the UK's increasing reliance on the importation of gas from abroad. From the early 1970's until recently, the majority of the UK's gas requirements were met by the North Sea and the Irish Sea with operators historically providing capacity in their production profiles in order to meet peak demand or unforeseen shortages of supply. As the existing fields have declined in production and gas sales contracts have been re-negotiated, this short-term capacity has largely disappeared. Whilst new pipeline connections between the UK and Belgium, the Netherlands and Norway have been commissioned in this period, these supply routes are essentially base-load capacities unable to cope with periods of abnormally high demand as pipelines are typically operated with little or no spare capacity.
- 19.6 The UK's reserves of oil and gas are declining making it a net importer. By 2010 it is estimated that 40-50% of UK gas will be imported, and rising to 80% by 2016. The current projections of gas demand imply that the UK will need to increase its gas import capacity by 15-30% by 2020. This implies a vulnerability to supply interruptions that can be ameliorated to a degree through the exploitation of new gas reserves. The Energy White paper published in May 2007 stresses that there is an urgent need to see significant private sector investment in infrastructure to ensure security of supply for the UK.
- 19.7 The Ryedale Gas Project would assist security of supply by adding gas directly to the NTS for distribution in the UK. The need for new investment in gas projects must, however, be balanced against the impact of the built development on the environment.
- 19.8 The layout and design of the Ryedale Gas Project has been influenced heavily by the Environmental Impact Assessment (EIA) and public consultation processes. The following statutory and non-statutory organisations have been consulted regarding the development through the EIA Scoping Exercise and pre-submission discussions:
- North Yorkshire County Council;
  - North Yorks Moors National Park Authority;
  - Ryedale District Council;
  - Forestry Commission;
  - Natural England;
  - English Heritage;

- Environment Agency;
- Yorkshire Water;
- Thornton Drainage Board;
- Thornton-le-Dale Parish Council;
- Wilton and Allerston Parish Council; and
- Ebberston and Yedingham Parish Council.

19.9 A comprehensive programme of public consultation has also been undertaken to inform the design of the Ryedale Gas Project. An information brochure was produced and provided to residents in the vicinity of the proposed site and press packs issued to the local media. In addition, Moorland Energy has launched a dedicated website regarding the Proposed Development and a two day public exhibition was held in the vicinity of the site in March 2010. Further details on the consultation process and the feedback received are contained within the Statement of Community Involvement that accompanies the Planning Application.

### **Environmental Impact**

19.10 The ES has considered the likely significant environmental effects of the Proposed Development. Impact has been assessed using a variety of techniques including:

- ecological site surveys;
- landscape and visual appraisal including the preparation of photomontages from local viewpoints;
- air quality assessments and atmospheric dispersion modelling;
- predictions of noise levels, particularly from the Gas Processing Facility;
- traffic impact assessment;
- flood risk and drainage assessments;
- desk based and site walkover archaeological research;
- lighting assessment;
- agricultural land and soils;
- geological and hydrological surveys; and a
- socio-economic assessment.

19.11 The ES identifies the significant environmental impacts arising from the proposals on the environment. Clearly, the construction and operation of the Proposed Development has the potential to cause adverse effects on the environment. The construction of the 8.6km pipelines would affect a significant area of the countryside. However,

construction impacts will be a short-term and following remediation of the land, the route of the pipeline will be difficult to ascertain in the landscape. The operation of the pipeline does not give rise to any impacts on the area. The construction and operation of the Gas Processing Facility will have a longer term environmental impact, albeit, the impacts are confined to a small part of the overall project. The extent of the impacts is set out in each Chapter of the ES and a range of mitigation measures are recommended.

### **Mitigation**

19.12 In summary, the more significant environmental impacts and recommended mitigation measures are as follows:

- Construction of the Proposed Development has the potential to adversely affect fauna and flora on the site and without proper controls could risk wider impacts on adjoining land. Additional habitat creation and enhancement on site would offset any habitat loss that may occur as a result of the Proposed Development.
- Replacement landscaping is proposed to mitigate for the loss of hedgerow resulting from the construction of the pipeline. New landscaping is proposed to the Ebberston Wellsite, the Hurrell Lane Gas Processing Facility and the AGI to assist the assimilation of the development into the countryside and to assist the screening of the built development.
- The Ebberston Wellsite and the construction of the pipeline would have limited visual impact as development is within the existing site or is short term and temporary in nature. The Hurrell Lane Gas Processing Facility would have a visual impact although it has been sited to make use of the screening from the north provided by the disused railway embankment. A comprehensive landscaping scheme is also recommended to mitigate impact from the site.
- The main impacts on air quality arise from emissions from construction plant and traffic associated with construction activities, dust generation during construction works, and emissions from the Hurrell Lane Gas Processing Facility once operational. Dust and air emissions from construction activities would be mitigated through the use of best practice techniques. Atmospheric emissions from the Hurrell Lane Gas Processing Facility would meet European and national standards.

- The Gas Processing Facility would produce noise during daytime and night-time periods. “Noisy plant” items would be located within buildings or fitted with noise attenuation equipment to reduce noise breakout. The noise attenuation measures are proposed to ensure that there would be no more than minor adverse impact on local noise sensitive properties, with particular regard to the dwellings closest to the site.
- The main period for traffic movements is during construction of the Proposed Development. Delivery of pipes and equipment would generate traffic movements on local roads in the vicinity of the site. However, these impacts would be temporary and short-term. During operation, traffic movements would be limited.
- The route of the pipeline crosses ancient monuments and areas of archaeological importance. At the Ancient Monuments, the pipelines would be constructed below the surface to avoid any disturbance to these features. In the areas of archaeological importance, a ‘watching brief’ would allow for any remains of importance to be identified during construction.

19.13 The preparation of the ES has been undertaken in parallel with the design process. As a consequence, many measures to mitigate likely significant adverse environmental effects have been incorporated into the Proposed Development design in order to avoid, reduce or offset such effects. Best practicable construction techniques would be incorporated into the works. This will incorporate appropriate arrangements for monitoring of the works, and ensuring that the most effective practical mitigation measures are used to minimise disturbance to surrounding receptors. It is anticipated that the mitigation measures identified will be secured by an appropriately worded planning condition or any permission. A summary of the potential impacts, their extent and their significance is contained in **Table 19.1**.

## Conclusions

19.14 In the UK, there is a clear and demonstrable need for developing onshore gas reserves, to assist in securing security of supply and balancing gas consumption and resources at all times, including seasonal, daily and hourly fluctuations. The Ryedale Gas Project will make a contribution to UK gas supply by allowing the production of gas from the Ebberston Wellsite and its transmission to the NTS. Whilst the ES has identified some potential adverse environmental affects these, in the case of the construction of the

pipelines, are short-term and, in the case of the Hurrell Lane Gas Processing Facility, can be mitigated. Having regard to the assessment contained in this ES and summarised in Table 19.1, it is considered that, subject to the implementation of the mitigation measures, the proposed Ryedale Gas Project would not have any significant adverse impact on the environment such that the planning application should be refused.

**TABLE 19.1 – SIGNIFICANCE TABLE**

POTENTIAL EFFECT	STAGE OF DEVELOPMENT CONSTRUCTION	DURATION OF EFFECT	EFFECTS	GEOGRAPHICAL IMPORTANCE				POTENTIAL SIGNIFICANCE OF RESIDUAL EFFECT
				N	R	D	L	
Transport	Construction	Temporary	Increase in HGV Movements on the Local Highway Network.			*	*	Minor Adverse
	Operation	Permanent	Operational traffic levels are restricted to maintenance and staff vehicles, the level of which is not significant				*	Not significant
Ecology & Biodiversity	Construction	Temporary	Disturbance to species of ecological importance, including Badgers.				*	Adverse
	Operation	Permanent	The Pipelines would have no effect on ecology and biodiversity. The Gas Processing Facility would generate noise and disturbance that would have an impact on ecology.				*	Not significant
Landscape & Visual Amenity	Construction	Temporary	Visual Effects during construction would be temporary.				*	Minor Adverse
	Completed development	Permanent	The pipelines would have no visual or landscape effect as the land would be re-instated for agricultural use. The Gas Processing Facility would have an effect on the surrounding landscape and in views from nearby residential properties and footpaths. A comprehensive landscape scheme is proposed to assist in the mitigation of this effect.				* * *	Moderate adverse
Lighting	Construction	Temporary	Effect of light spill, glare & sky glow on residential properties has the potential to affect amenity. Effects would be temporary and mitigation measures are proposed to limit light spill.				*	Negligible
	Completed Development	Permanent	Effect of light spill, glare and sky glow on residential properties and road users. Mitigation measures include the use of down-lighters and shields. Floodlighting of buildings or the site is not required.				*	Negligible
Noise and Vibration	Construction	Temporary	Noise and vibration effects on residential properties.				*	Negligible
	Completed Development	Permanent	Noise would be generated from the Gas Processing Facility. Mitigation includes ensuring that noisy plant is located within buildings or is protected by sound attenuation equipment.				*	Minor
Water Resources	Construction	Temporary	Run-off and potential contamination from construction activities.				*	Negligible
	Completed Development	Permanent	No increase in flood risk and permanent plant and buildings would be subject to the provision of appropriate drainage infrastructure.				*	Negligible
Cultural Heritage	Construction	Temporary	The proposed route of the pipeline crosses Scheduled Ancient Monuments. These will be avoided as the pipelines will be constructed underground so that there is no effect. Disturbance to listed buildings from light spill will be mitigated as summarised above.				*	Negligible
	Completed development	Permanent	Disturbance to listed buildings from light spill will be mitigated as summarised above.					
Archaeology	Construction	Temporary	Disturbance to potential archaeological remains mitigated by site investigation and 'watching brief'.				*	Negligible
Soils & Agriculture	Construction	Temporary	Temporary loss of agricultural land and soils during construction of the pipeline. Loss of agricultural land from the construction of the Gas Processing Facility.				*	Negligible
	Completed Development	Permanent	The route of the pipeline would be reinstated for agricultural use. The site of the Gas Processing Facility would, however, be lost for agricultural use.				*	Negligible
Air Quality	Construction	Temporary	Generation of dust would be mitigated by standard industry practice.				*	Minor Adverse
	Construction	Temporary	Exhaust emissions of Nitrous Dioxide (NO <sub>2</sub> ) & Carbon Monoxide (CO)				*	Minor Adverse
	Completed Development	Permanent	Emissions from the site would meet European and UK standards				*	Negligible
Socio-Economic	Construction	Temporary	Generate jobs and 'multiplier' effects brought about by increased expenditure and potential nuisance on adjoining properties.			*	*	Minor Beneficial
	Completed Development	Permanent	Effect on gas storage supply in the UK	*	*	*	*	Major Beneficial

**Notes:**

- i) Extent is defined as falling within the following categories: (N) National; (R) Regional; (D) District; (L) Local - no international effects have been identified.
- ii) Where a possible effect has been identified but on consideration any effects are regarded to be minimal, or a potential effect is regulated by statutory environmental controls to which the scheme will be compliant we have indicated this to be 'Not significant'.