DELEGATED

AGENDA NO.

REPORT TO PLANNING COMMITTEE

23 August 2006

REPORT OF THE CORPORATE DIRECTOR OF DEVELOPMENT AND NEIGHBOURHOOD SERVICES

06/1741/EIS LAND AT SEAL SANDS CONSTRUCTION OF 600MM DIAMETER HIGH PRESSURE NATURAL GAS PIPELINE. Expiry date: 1st September 2006

APPROPRIATE ASSESSMENT OF PROPOSED WORKS CARRIED OUT UNDER REGULATION 48 OF THE CONSERVATION (NATURAL HABITATS, &c) REGULATIONS 1994

SUMMARY

This proposal is for the construction of a 600mm diameter steel high-pressure gas pipeline to carry natural gas, together with the installation of fibre optic cables. The pipeline will run from the a new terminal in Redcar and Cleveland Borough under the River Tees crossing the Borough boundary to the PX Teesside Gas Processing Plant on Seal Sands. Liquid Natural Gas (LNG) is to be delivered to terminal by ship, vaporised at the terminal then transshipped via the new pipeline to Seal Sands for use in the National Transmission System. Planning permission for the pipeline element of the scheme within Stockton Borough falls to this Council to determine. The rest of the development (jetty works, Sub-terminal and pipeline links) are all located within Redcar and Cleveland Borough and the planning decision rests with that authority. However, the Council has been consulted, as an adjoining authority, for its views on that part of the development.

The development is necessary to meet a possible shortage of energy needs this winter and has the strong support of a number of public and private bodies.

The main consideration with the application is the need for the development and the potential impact on the local ecology given that the route of the pipeline is adjacent to the Seal Sands SSSI, which is part of the SPA and Ramsar site. English Nature has lodged an objection but it would be withdrawn if an "appropriate assessment" under the Habitats Regulations is carried which ascertains that the proposed development will not adversely affect the integrity of the SSSI or the SPA and Ramsar site. RSPB has lodged a similar objection.

An appropriate assessment has been carried out and the final views of English Nature are awaited. It is considered the proposal has no detrimental impact on matters of ecological concerns and is of vital importance for the maintenance of energy supplies for the northeast this winter.

RECOMMENDATIONS

It is recommended that:

- 1. As the "Competent Authority" Stockton on Tees Borough Council agree the "Appropriate Assessment" and accept its conclusions subject to the final views of English Nature; and
- 2. Subject to the withdrawal of the objection from English Nature, and imposition of any necessary mitigation measures by appropriate additional conditions, that planning permission for the development subject to the following conditions:
 - 1. The development hereby approved shall be carried out in accordance with the following approved plans or as otherwise may be subsequently agreed in writing with the Local Planning authority:

Drawing numbers: 721793/OA/79 rev D; and 721793/OA/80 rev D

<u>Reason</u>: To define the consent

2. The development shall not be operated except in accordance with the full implementation of all the mitigation measures specified in the Environmental Statement accompanying the planning application hereby approved.

<u>Reason</u>: To ensure no adverse effect on SPA integrity and damage/disturbance to SSSI interest features and in the interests of protecting the amenities of the surrounding area from the potential adverse impact of the development hereby approved.

3. On completion of any underground pipeline works the site shall be restored but not re-seeded unless otherwise agreed in writing with the Local Planning Authority.

<u>Reason</u>: to ensure satisfactory restoration of the site with natural revegetation after the completion of construction works in the interests of local amenities and the ecology of the area.

4. Pipeline construction and associated works within land adjacent to the Seal Sands SSSI section of the Teesmouth and Cleveland Coast SPA shall be completed before November 1st 2006.

<u>Reason</u>: To ensure that pipeline construction works avoid the risk of disturbance to wintering bird populations of international importance within the SPA.

5. No development approved by this permission shall be commenced until the site is investigated to determine the nature and extent of any landfill gas or contaminated materials present on the site. A report and risk assessment based on the results of the site investigation shall be carried out in accordance with the Stockton Borough Council Guidance on Landfill Gas Investigations using a suitably qualified environmental consultant and submitted to the recommendations, as necessary, shall be incorporated in to the construction works.

<u>Reason</u>: In the interests of public safety.

6. There shall be no discharge of foul or contaminated drainage from the site into either groundwater or any surface waters, whether direct or via soakaways.

<u>Reason</u>: To prevent pollution of the water environment.

7. Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bunded compound should be at least equivalent to the capacity of the tank plus 10%. If there is multiple tankage the compound should be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks plus 10%. All filling points, vents, gauges and sight glasses must be located within the bund. The drainage system of the bund shall be sealed with no discharge into any watercourse, land or underground strata. Associated pipework should be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets should be detailed to discharge downwards into the bund.

<u>Reason</u>: To prevent pollution of the water environment.

8. Prior to the commencement of any works on site, a settlement facility for the removal of suspended solids from surface water runoff during construction works shall be provided in accordance with details previously submitted to and approved in writing by the LPA. The approved scheme shall be retained throughout the construction period.

<u>Reason</u>: To prevent pollution of the water environment.

3. Redcar and Cleveland Borough Council be notified of this decision and advised that Stockton on Tees Borough as the adjacent authority has no objection to approval being granted for the section of pipeline within its area.

The submitted environmental information set out in the Environmental Statement has been taken into consideration in the permissions hereby granted.

The decision to grant planning permission has been taken having regard to the policies and proposals in the Structure Plan and Stockton on Tees Local Plan set out below Stockton on Tees Local Plan policies GP 1, IN 5, EN 1, EN34 Tees Valley Structure Plan policies EMP10, ENV4, ENV5, Planning Policy Statements 1 and 23 and Guidance Notes Nos, 4, 9 13, 24 and 25

BACKGROUND

1. The Teesside GasPort project is proposed by Excelerate Energy (Excelerate) as a facility for the delivery of natural gas via ship for distribution to the United Kingdom National Transmission System for gas. The GasPort Project utilises bespoke technology for gas vaporisation that would enable very rapid establishment of a facility for natural gas delivery to the National Transmission System. An important feature of the GasPort Project involves the delivery of Liquid Natural Gas by specially designed ships with on-board gas vaporisation technology called Energy Bridge Re-gasification Vessels (EBRV's). This significantly reduces the need for construction of land-based gas processing infrastructure, restricting both the land take and duration of construction period required for the project. Nevertheless, to implement the operation and the delivery of natural gas to National Transmission System (NTS), a number of onshore development works are still needed.

2. It is proposed to utilise a refurbished jetty to off load the gas from the EBRV's on the opposite side River Tees within Redcar and Cleveland located approximately one kilometre north west of the British Oxygen Company facility on Teesport. The GasPort Marine Jetty would comprise new mooring hooks, fendering, walkways, gas unloading tower, navigation lights, safety devices, vehicular access, car parking, infrastructure for transfer of waste from the ship and delivery of fuel oil to the ship. A new Sub-terminal for treatment of natural gas prior to distribution to the National Transmission System would be constructed in the vicinity of the Jetty. Distribution of the gas to the NTS would be via a new high-pressure gas pipeline from the terminal running under the River Tees crossing the Borough boundary to the PX Teesside Gas Processing Plant on Seal Sands. As this element of the scheme is within Stockton Borough, it falls to this Council to determine whether or not planning permission should be granted. The rest of the development (jetty works, Sub-terminal and pipeline links) are all located within Redcar and Cleveland Borough and the planning decision rests with that authority.

THE PROPOSAL

- 3. As mentioned above, planning permission is sought from Stockton Borough Council for the construction of a 600mm diameter steel gas pipe to carry natural gas, together with fibre optic cables. This application only relates to the section of pipeline within Stockton Borough. However, Redcar and Cleveland Borough Council is seeking the Council's views on that part of the development within its area.
- 4. The development comprises the following key elements:
 - The laying of an approximate 6km 600mm diameter steel gas pipe underground from the proposed GasPort Sub-terminal on the southern side of the River Tees within Teesport Estate in Redcar and Cleveland Borough to the Teesside Gas Processing Plant on Seal Sands. The pipeline passes under the River Tees through a tunnel bored by a Horizontal Directional Drill. Within Seal Sands the route first travels west then north adjacent to Seal Sands Road before again travelling west then south into the gas processing plant. The route of the natural gas pipeline is shown in Appendix A
 - The working width of the natural gas pipeline for the majority of its length will be 12m wide although this will extend to 15m in the vicinity of the Gas Plant The easement width will be 6.6m throughout;
 - The laying of fibre optic control cables along the gas pipeline route between the Gas Plant and the GasPort Sub-terminal.
 - Works to connect the pipeline to the existing gas processing plant (permitted development).
- 5. Justification for the GasPort Project is largely based upon the urgent need within the United Kingdom to secure cost-effective and flexible natural gas supplies in the short-term. As full commissioning of the GasPort Project can be achieved in less than one year, it is proposed as an important contribution towards

rationalising short-term gas procurement for the United Kingdom. Once established, the GasPort Project infrastructure is also able to maintain its contribution to UK natural gas procurement in the long term.

- 6. As the development has *potential* for significant adverse impacts on the environment, as judged against the Town and Country Planning (Environmental Impact Assessment (England and Wales) Regulations and the location adjacent to part of the Teesmouth and Cleveland Coast Special Protection Area (SPA), an **Environmental Impact Assessment (EIA)** has been submitted with the application. The EIA is a joint assessment covering all elements of the Gasport scheme, not just the pipeline element which is the only part within this Borough.
- 7. Because the site is adjacent to the Teesmouth and Cleveland Coast Special Protection Area (SPA) and Ramsar site and as the proposed works are not directly related to the management of the site, at the request of English Nature, an "appropriate assessment" of implications of the development for conservation objections needs to be carried out <u>prior to any planning decision</u> <u>being made</u>. This assessment has to be carried by the Borough Council as the "competent authority".
- 8. This study which is a joint one for both Councils) has been prepared in draft and has yet to be finalised with English Nature as the request was only made by English Nature late in the consultation period notwithstanding pre-application discussions with that body were made by the applicant.

APPROPRIATE ASSESSMENT

9. The "Appropriate Assessment" has been drafted in accordance with the Habitat Regulations 1994. The scope of the assessment and the ecological matters considered follows that recommended by English Nature utilising additional information provided by the applicant's ecological consultant. A copy of the draft assessment (which is a joint one prepared by and for both Stockton on Tees and Redcar and Cleveland Borough Councils) is attached as Appendix B.

ENVIRONMENTAL IMPACT ASSESSMENT

- 10. The Environmental Impact Assessment process has been undertaken by the applicant to establish the extent to which *potentially* significant adverse effects on the environment are likely to arise. The scope of the GasPort Environmental Impact Assessment has included the following areas of potentially significant environmental impact: socio-economic considerations; hydrology, flooding, hydrogeology and soils; ecology and nature conservation; archaeology and cultural heritage; landscape and visual amenity, noise and vibration, air quality, traffic and transportation, waste and surplus material; safety.
- 11. The Environmental Impact Assessment process undertaken for the GasPort Project has considered the value and importance of various key environmental receptors against the magnitude of change likely to arise form the proposals. This has enabled the identification of potentially significant impacts associated with the proposals. Where appropriate, specific measures to mitigate for potentially significant impacts have been identified. An assessment of any residual impacts has then been undertaken.
- 12. A copy of the Non-technical Summary is attached as Appendix C.

CONSULTATIONS

13. No comments/objections to the development have been received from:

- Ward Councillor
- Tees & Hartlepool Port Authority
- Northern Gas
- NEDL
- Countryside Commission
- Redcar and Cleveland Council
- Health and Safety Executive
- Fire Officer
- 14. The Environment Agency has no objection and recommends standard planning conditions concerning the storage of oils etc, surface water run-off during construction and the provision of a settlement facility. It also draws attention to ecological concerns and a particular potential to adversely affect intertidal and subtidal habitats. It therefore recommends a further condition. However, this matter appears to be related to that part of the development within the Redcar and Cleveland.
- 15. <u>English Nature</u> has **objected** to the development. It notes the site lies close to Seal Sands SSSI, which also forms part of the Teesmouth and Cleveland Coast Special Protection Area (SPA) and Ramsar site. It is concerned that the development has the potential to "likely have a significant effect" on the interest feature for which the site is internationally designated. Accordingly, it has requested the planning authority to undertake an "**Appropriate Assessment**" in accordance with Habitat Regulations 1994 so that the ecological implications of the proposals can be assessed. Of particular concern are disturbance to feeding and roosting birds during construction and potential indirect effects on habitat extent and character. However, whilst an objection is lodged it would be withdrawn if it can be ascertained that the proposed development will not adversely affect the integrity of the SSSI or the SPA and Ramsar site.
- 16. The <u>Head of Integrated Transport and Environmental Policy</u> has no adverse comments to make.
- 17. The Environmental Health Unit has no objections but recommends conditions to control possible noise disturbance, dust emissions and contamination from closed landfill sites.
- 18. <u>Northumbrian Water</u> comments that there is an existing public sewer within the site, which needs to be protected.
- 19. The <u>Royal Society for the Protection of Birds</u> (RSPB) objects to the application on similar grounds to English Nature. It also considers an "Appropriate Assessment" under the Habitat Regulations should be carried out but is also concerned that insufficient information has been submitted for such an assessment to be carried out. If permission is to be granted certain planning conditions need to be imposed relating to timing of the works, piling operations, storage of polluting materials the production of an environmental management plan.
- 20. The application has also been advertised on-site and in the press and affected landowners notified. No objections have been made but 5 letters of support have been received:
 - The <u>Managing Director of Terra Nitrogen (UK)</u> Ltd fully supports the proposal as the development will represent an important contribution to meeting the

urgent need for additional sources of gas and electricity supply this winter which local industry rely on.

- The <u>Department of Trade and Industry</u> believes this facility would be valuable from an energy policy perspective because of its potential contributions to national security of gas. It points out that the National Grid has launched its "Winter Outlook Consultation" and expectation is for another tight winter. But this would be mitigated if new gas import projects for next winter, such as this one, succeed in commissioning on time (and then deliver gas).
- The <u>Director of External Affairs for CE Electric UK</u>, writing as Chair of the North East Energy Partnership (a grouping of private and public sector representatives tasked by the Government with overseeing the implementation of its energy policy in the north east), supports the application. The concern is, given the experience of last winter that without positive action gas supplies to industrial users could be disrupted. The project is planned to come online in December and if it is do so there needs to be no delay from the planning process.
- The <u>CEO of Renew Tees Valley Ltd</u> fully supports the scheme recognising the need to ensure new gas supplies are available for this winters needs.
- <u>Tees Valley Regeneration</u> supports the development noting that a number of companies in the area have ceased operation or suspended production because of high gas prices and the shortage of imported gas supplies.

PLANNING POLICY

National Planning Policy

- 21. National Planning policies are set out in Planning Policy Guidance Notes (PPG) and the newer Planning Policy Statements (PPS).
- 22. Particularly relevant to this application are:

PPS 1 "Delivering Sustainable Development" PPG 4 "Industrial, Commercial Development and Small Firms" PPG 9 "Nature Conservation" PPG 13 "Transport" PPS 23 "Planning and Pollution Control" PPG 24 "Planning and Noise" PPG 25 "Development and Flood Risk"

- 23. In addition to supplementary planning guidance, the Government Energy White Paper: Our Energy Future Creating a Low Carbon Economy (2003) is also relevant to the GasPort Project.
- 24. Regard also has to be given to the emerging Regional Spatial Strategy.
- 25. Section 54a of the Town and Country Planning Act 1990 states that all planning applications have to be determined in accordance with the Development Plan(s) for the area unless material considerations indicate otherwise. The development plan for the purposes of the application comprises the Tees Valley Structure Plan 2004 and the Stockton Borough Local Plan 1997.

Tees Valley Structure Plan

26. The Tees Valley Structure Plan indicates the development is in an area broadly identified for potentially polluting or hazardous industrial development (Policy EMP 10).

27. Other relevant policies include:

ENV4 which seeks protect for the SPA and Ramsar site ENV5, which seeks to protect SSSIs

Stockton Borough Local Plan

- 28. Policy GP1 is the general policy and sets out ten criteria that all development proposals need to be assessed against. These criteria are as follows:
 - i. The external appearance of the development and its relationship with the surrounding area.
 - ii. The effect on the amenities of the occupiers of nearby properties.
 - iii. The provision of satisfactory access and parking arrangements.
 - iv. The contribution of existing trees and landscape features.
 - v. The need for a high standard of landscaping.
 - vi. The desire to reduce opportunities for crime.
 - vii. The intention to make development as accessible as possible to everyone.
 - viii. The quality, character and sensitivity of existing landscapes and buildings.
 - ix. The effect upon wildlife habitats.
 - x. The effect upon public rights of way.
- 29. Policy IN 5 of the adopted Stockton on Tees Local Plan permits within the Seal Sands area, potentially polluting or hazardous industrial uses provided they do not significantly affect neighbouring uses or discourage the development of adjacent sites.
- 30. Policy EN34 states that development will be permitted provided that:
 - The nature and extent of the contamination has been established,
 - The proposal will not add to the site's contamination,

• Measures are included to reduce the hazard posed by contaminants to an acceptable level at which it can be maintained,

• No significant adverse effect on the environment results from any disturbance of contaminants or their movement into surrounding ground during and after development.

31. Policies EN 1(a) and EN 1(b) states proposals in or likely to affect a SSSI or European (SPA) or Ramsar site will be subject to a special and rigorous scrutiny and examination to safeguard their integrity. No development will be permitted that has a significant adverse effect unless the benefits outweigh the costs and no other sites are available.

MATERIAL PLANNING CONSIDERATIONS

32. In view of the of the location and nature of the development, planning policy and consultation responses, the main material planning considerations with this development are the economic necessity for the development and the likely impact on the local ecology given its location adjacent to Sites of Special Scientific Interest and the SPA.

Need

- 33. The National Grid has highlighted that that the expectation is that it will be another tight winter for energy supplies without mitigation from new gas import projects. Local industry energy consumers are therefore concerned that gas supplies could be disrupted. Energy prices because of shortages are rapidly increasing. There is, therefore, an urgent need within the United Kingdom to secure cost-effective and flexible natural gas supplies in the short-term. The Department of Trade and Industry, which supports the present proposal, has recognised the United Kingdom's increasing reliance upon gas imports for domestic and industrial heating and electricity supply. Various strategic mid-term and long-term options are in place for procurement of gas supplies, but the Department of Trade and Industry has emphasised the need to secure supplies in the short term. As full commissioning of the GasPort Project can be achieved in less than one year, it is potentially an important contribution towards rationalising short-term gas procurement for the United Kingdom. Once established, the GasPort Project infrastructure is also able to maintain its contribution to UK natural gas procurement in the long term.
- 34. Any decision not to proceed with the GasPort Project has implications for shortterm energy supply at several levels. Locally, there is a risk of winter 2006/2007 energy supply problems for several key local industrial consumers. This risk is reflected in the provision of clear support for the GasPort Project from several key industrial stakeholders, including Terra Nitrogen, Bio fuels Corporation Plc, National Grid, Ofgem and the Major Energy Users' Council. At a more strategic level, a decision not to proceed with the GasPort Project has the potential to result in supply shortfalls and energy price increases during the 2006/2007 winter and subsequent years.

Ecological implications

- 35. Balanced again the clear need, at least in the short term, to secure continued gas supplies, is the need to protect the environment given the location adjacent to part of the Teesmouth and Cleveland Coast Special Protection Area (SPA) an area national and international importance. It is important that these areas are fully protected from any inappropriate new development.
- 36. English Nature (EN) and RSPB have both objected to the proposal concerned as the potential to damage the Spa and Ramsar site. EN, whilst objecting to the proposal has stated this objection would be withdrawn if it can be ascertained that the proposed development will not adversely affect the integrity of the SSSI or the SPA and Ramsar site. Of particular concern are disturbance to feeding and roosting birds during construction and potential indirect effects on habitat extent and character To establish the extent of the likely impact on these concerns, and as requested by both EN and RSPB, an "Appropriate Assessment" has been drafted in accordance with the Habitat Regulations 1994. The scope of the assessment has followed that recommended by English Nature utilising additional information provided by the applicant's ecological consultant.
- 37. This assessment concludes that without mitigation there is the potential for adverse effects of the proposals on wintering bird populations associated with the Seal Sands SSSI, which is part of the Teesmouth and Cleveland Coast SPA. However, mitigation measures are available that will entirely avoid the risk of disturbance to the SPA wintering bird populations, and that these could be implemented through a condition on planning permission granted for the proposals. These mitigation measures involve avoidance of potentially disruptive pipeline construction works during the period of greatest sensitivity (i.e. before November 2006). These mitigation measures will also extend to protection of

ground nesting breeding bird species from disturbance by avoidance of the nesting season for pipeline construction activities.

- 38. With regard to other matters of concern raised by English Nature relating to issues such as indirect impacts on qualifying features of the SPA through effects on air quality and groundwater, implications of piling (none is proposed) the Assessment demonstrates that these impacts are unlikely to occur.
- 39. Whilst, the response from English Nature to the assessment is awaited, it is considered that from the planning standpoint, adequate safeguards and mitigation measures can be secured by use of appropriate planning conditions to protect features of ecological importance, particularly timing of the works, sufficient to satisfy the concerns of both EN and RSPB.

CONCLUSION

40. This application potentially represents a conflict of the needs of industry against possible damage to areas of national and international ecological interest. However, it should be recognised that any disturbance to roosting birds will be very short-term, the pipeline works will be completed in weeks and timed to avoid critical nesting periods. No piling is proposed (an error in the ES). Furthermore, the disturbed land will be restored back to an appropriate state. All these matters can be controlled by planning conditions, though in order to do so and have the development operational before the winter the planning decision needs to be made without delay. Accordingly, notwithstanding the final views of English Nature have not yet been received; it is considered the proposed pipeline development or visual amenities. Therefore, approval is recommended subject to appropriate conditions and the objection from English Nature being withdrawn.

Director of Development & Neighbourhood Services

Contact Officer: Peter Whaley - Telephone No. 01642 526061

Financial Implications:

None

Environmental Implications:

See report

Human Rights Implications

The provisions of the European Convention of Human Rights 1950 have been taken into account in the preparation of this report.

Community Safety Implications

None

Background Papers:

Application file: 06/1741/EIS

Ward and Ward Councillors:

Billingham South Councillor J O'Donnell & Councillor M Smith

APPENDIX A

Route of Pipeline

Draft Appropriate Assessment

DRAFT

TEESMOUTH AND CLEVELAND COAST SPECIAL PROTECTION AREA AND RAMSAR SITE

Appropriate Assessment carried out under Regulation 48 of the Conservation (Natural Habitats, & c.) Regulations 1994

Application: The construction of a liquid natural gas delivery and processing facility, associated pipeline and other infrastructure for national supply.

Introduction

- 1. This Appropriate Assessment has been undertaken as a requirement of Stockton-on-Tees and Redcar and Cleveland Borough Councils in order to enable the determination of the two planning applications submitted by Excelerate Energy Ltd. The planning applications concern the establishment of a gas delivery, processing and supply facility on land to the north and south of the River Tees within the Teesmouth industrial complex. Part of the proposals site lies adjacent to the Teesmouth and Cleveland Coast Special Protection Area and Ramsar Site (hereafter the SPA) and is within the consultation zone for the SPA.
- 2. As the relevant 'competent authority' with respect to the *Conservation (Natural Habitats, & c.) Regulations 1994*, Stockton-on-Tees Borough Council and Redcar and Cleveland Borough Council are obliged under Regulation 48 (1) to "make an appropriate assessment of the implications for the site (the SPA) in view of that site's conservation objectives".

Conservation Objectives

3. The conservation objectives for the European interest of that part of the Seal Sands SSSI component of the SPA that could be affected are as follows: -

Subject to natural change, to maintain*, in favourable condition, the habitats of the populations of waterfowl that contribute to the internationally important wintering waterfowl assemblage of the SPA, with particular reference to wintering waterfowl populations that regularly exceed 20000 birds. In addition, individual bird species with populations of European importance that utilise Seal Sands SSSI include Redshank, Knot, Ringed Plover, Sandwich Tern and Little Tern.

(* Maintenance implies restoration if the feature is not currently in favourable condition).

4. The conservation objectives for the SPA are, in accordance with paragraph 6 of Planning Policy Statement 9, the reasons for which the SPA was designated. In total, the SPA includes land within the following SSSIs: Cowpen Marsh, Durham Coast, Redcar Rocks, Seal Sands, Seaton Dunes and Common and South Gare and Coatham Sands.

Proposal

5. The proposal involves the establishment of new infrastructure for gas delivery, processing and supply to the national transmission system:

- i. Construction and operation of a new facility for gas processing within Teesport Estate land on the south side of the Tees;
- ii. Refurbishment of the former Shell jetty on the south side of the Tees to provide a reception terminal for gas supply;
- iii. Liquid natural gas supply by ship at the refurbished jetty;
- iv. New pipeline construction on the south side of the River Tees to supply nitrogen gas to the processing facility for conditioning the liquid natural gas;
- v. New pipeline construction on the south and north sides of the River Tees to transport conditioned gas to the existing PX terminal for connection and supply to the national gas transmission system.
- 6. These proposals have been based upon the results of consultations, engineering studies and comprehensive Environmental Impact Assessment. Element (v) above includes a section of pipeline that would cross a corridor of land along the southern edge of the SPA.

Impact of the Proposal on the SPA Interest Features

- 7. The scope of this Appropriate Assessment has been determined by English Nature, identifying specific elements of potential impacts on the SPA. These are reviewed in turn below with a description of mitigating elements of the project proposals:
 - i. The scope of the appropriate assessment should include disturbance to feeding and roosting birds during construction of the pipeline route adjacent to the Seal Sands SSSI portion and the SPA.

This matter has been reviewed during consultations with both English Nature and the Industry and Nature Conservation Association (INCA) during the GasPort Environmental Impact Assessment process. Both consultees confirmed that there are seasonal sensitivities concerning ground-nesting birds along the pipeline route and wintering birds associated with the SPA, both at low tide while feeding on the intertidal foreshore and at high tide while roosting on land along the pipeline route.

Pre-application consultations have confirmed that an acceptable mechanism for avoidance of significant adverse impacts on these ecological receptors is to programme the works within this area to avoid periods of sensitivity. This mitigation commitment is made within Chapter 8 of the Environmental Statement, and this is recognised within Annex 1 of English Nature's objection letter. It is anticipated that this programme constraint would be imposed as a Condition on any planning permission granted for the GasPort proposals as referenced in paragraph 15 of this Appropriate Assessment.

ii. The scope of the appropriate assessment should include indirect effects on habitat extent and character, for example possible hydrological impacts on the Intertidal Project Area of Seal Sands SSSI and the SPA.

It is understood that the special ecological character of both the Seal Sands SSSI Intertidal Project Area and the SPA is associated with the distinctive environment of the intertidal foreshore and the ecological effect of tidal inundation. As the GasPort project will have no direct or indirect impacts on tidal processes and will not encroach upon the intertidal foreshore or associated communities and habitats there will be no adverse impacts on these important ecological characteristics. If a consideration of hydrological characteristics and vulnerability to impact is extended to include hydro geological features, it is understood that features of special interest within the Intertidal Project Area of Seal Sands SSSI and the SPA are maintained independent of any hydro geological associations with surrounding land. In the event that hydro geological sensitivity is considered likely, the GasPort Environmental Statement considers this issue in Chapter 7. This recognises that:

- The potential for hydro geological effects is limited, and that the extent of any effect would be local to the pipeline trench excavation;
- Construction of the GasPort project pipeline would not result in the introduction of any new contaminants;
- The risk of adverse impacts on hydrogeology would be rigorously controlled through regulation by the Environment Agency;
- Even when a worst-case scenario is used, residual impacts on hydro geological features are considered as negligible.

Recent site investigation works (July/August 2006) have been undertaken within land adjacent to Seal Sands SSSI along the proposed pipeline route. Early analyses from borehole samples have confirmed that no contaminated materials are present within 3-4 metres of the ground surface within this area, and that no water table has been recorded within ground that would be excavated for the proposed pipe trench. This confirms the conclusions of EIA work undertaken for the GasPort proposals that there is negligible risk to the groundwater environment from the pipeline works proposed for the seal sands pipeline section.

iii. The scope of the appropriate assessment should include indirect effects on habitat extent and character, for example possible air quality impacts on SSSI sand dune vegetation communities.

It is understood that SSSI sand dune communities at the eastern edge of Seal Sands SSSI are closest to the GasPort Marine Jetty and Sub-terminal, the only potential source of NOx emissions. This is a distance of around 2km. The air quality assessment undertaken for the GasPort project utilised a worst-case approach for dispersion modelling, and through this rationale defined a 2km x 2km modelling area. This places sand dune areas potentially vulnerable to adverse air quality effects at the extreme edge of a worst-case dispersion area. Within this area, NOx threshold contraventions have not been predicted. In fact, slightly elevated NOx levels are predicted by the dispersion modelling as occurring within the immediate vicinity of the GasPort Marine Jetty and Sub-terminal. As such these very parochial elevated levels are separated from potentially vulnerable sand dune areas by around 2km.

iv. The scope of the Appropriate Assessment should include noise disturbance to SPA bird populations using the Vopak Foreshore and Bran Sands Lagoon, caused by piling operations.

The noise assessment presented in the GasPort Environmental Statement contains an erroneous reference to piling. There has never been any proposal for piling on the GasPort project, and this reference is an error that was not identified in the Environmental Statement review process. As such, any issues associated with any form of noise effect of piling are of no relevance to the need for an Appropriate Assessment.

8. In addition to the preceding general issues identified as the scope for consideration through Appropriate Assessment, other matters raised by English Nature have been addressed as part of this assessment:

Implications of the likelihood of the need for relocation of the GasPort Marine Jetty and GasPort Sub-terminal in 2008.

In the event that the GasPort Marine Jetty and Sub-terminal were to be relocated, this would be facilitated through a planning application. Issues relating to the environmental impact of the proposed location and mechanism of relocation would be investigated through the new planning application. It is presently impossible to identify the need for any relocation of the GasPort facility and as such it is impossible to identify with certainty candidate locations for relocation.

Maintenance dredging regime.

It is noted no change to maintenance dredging regime is proposed.

Potential of the pipeline trench immediately to the east of the Teesmouth National Nature Reserve Intertidal Project ('The Long Drag Pools') in any capacity to affect the hydrology of the intertidal lagoon adjacent

It is understood that the key ecological interest of the Intertidal Project is maintained by tidal flux rather than by the area's hydrology. The hydrology and hydrogeology assessments presented in the GasPort ES assume a worst-case situation and predict that the pipeline proposals are unlikely to adversely affect the physical or chemical characteristics of local surface water and groundwater. Recent borehole sampling analyses have confirmed the minimal risk to hydrology and hydrogeology of the proposed pipe trench excavation.

Implications for the intertidal and sub-tidal habitat and associated and associated benthic invertebrate communities

It is accepted that the purpose of the statement in Table 8.2 of the ES was to note that none of the benthic invertebrate species recorded in previous studies were considered as having special intrinsic interest. Also that It was not the intention to suggest that the community assemblages as a whole lacked interest. With regard to the EIA process for the GasPort project, reference to benthic invertebrates was included as a feature of the EIA context rather than a description of an ecological receptor vulnerable to adverse impacts of the scheme. It is accepted that notwithstanding the general nature conservation interest of benthic invertebrate communities, they are not vulnerable receptors to the proposals and that the conclusions regarding ecological impact within the Environmental Statement remain valid.

Indirect impacts.

The project will avoid indirect impacts on areas of special habitat interest. Potential indirect impact pathways include disruption to hydrology, hydrogeology and air quality and none of these have been identified as mechanisms for transfer of impacts to special habitat areas.

Scheduling of the pipe laying activities in the sensitive corridor south of Seal Sands.

Any planning approval granted will ensure such works are scheduled during the period August to October inclusive

Potential hydrological effects on the Intertidal Project arising from pipe laying undertaken immediately to the east.

The GasPort EIA work indicates that there will be no hydrological impacts of the proposals on the Intertidal Project area.

Potential impacts on semi-natural habitats caused by emissions.

It is noted that the air quality assessment used air dispersion modelling to predict that changes to ambient NOx levels would occur in very close proximity to the GasPort Marine Jetty and Sub-terminal, and would not extend towards any of the Teesmouth dune systems.

Control and implementation of mitigation measures

Implementation of the relevant mitigations measures set out in ES will be controlled by appropriate conditions on the planning permission.

Conclusion

- 9. Without mitigation as agreed with English Nature and INCA, there is the potential for adverse effects of the proposals on wintering bird populations associated with the Seal Sands SSSI that are associated with the Teesmouth and Cleveland Coast SPA. Mitigation measures are available that will entirely avoid the risk of disturbance to the SPA wintering bird populations, and it is anticipated that these would be implemented through a condition on planning permission granted for the proposals. These mitigation measures involve avoidance of potentially disruptive pipeline construction works during the period of greatest sensitivity. These mitigation measures will also extend to protection of ground nesting breeding bird species from disturbance by avoidance of the nesting season by pipeline construction activities.
- 10. With regard to other matters of concern raised by English Nature concerning issues such as indirect impacts on qualifying features of the SPA through effects on air quality and groundwater, this Assessment demonstrates that these impacts are unlikely to occur.
- 11. In accordance therefore with regulation 48(6) of the *Conservation (Natural Habitats, & c.) Regulations 1994,* therefore, it is anticipated that Stockton-on-Tees Borough Council will have regard to the following conditions or restrictions subject to which any planning permission for the development will be granted:
 - i. Pipeline construction and associated works within land adjacent to the Seal Sands SSSI section of the Teesmouth and Cleveland Coast SPA will be completed before November 1st 2006.

<u>REASON</u>: To ensure that pipeline construction works avoid the risk of disturbance to wintering bird populations of international importance within the SPA.

APPENDIX C

Environmental Statement

Non-Technical Summary

Teesside GasPort Environmental Statement Non-Technical Summary

Introduction

This Non-Technical Summary accompanies an Environmental Statement produced in support of development the proposed River Tees GasPort Project natural gas reception, processing and pipeline facility. The Environmental Statement provides a detailed review of information produced as a result of Environmental Impact Assessment work undertaken on the GasPort proposals. This Non-Technical Summary provides a synopsis of key findings from the GasPort Project Environmental Impact Assessment.

The following information is presented in this Non-Technical Summary:

- An overview of the Teesside GasPort Project, summarising in particular key components of the project and its justification;
- An overview of the Environmental Impact Assessment process that has been undertaken for the GasPort Project, summarising key stages in the process,
- A review of key information on specific aspects of the Environmental Impact Assessment described in the GasPort Project Environmental Statement.

Teesside Gasport Project Overview

The Teesside GasPort project is proposed by Excelerate Energy (Excelerate) as a facility for the delivery of natural gas via ship for distribution to the United Kingdom National Transmission System for gas. The GasPort Project utilises bespoke technology for gas vaporisation that would enable very rapid establishment of a facility for natural gas delivery to the National Transmission System. An important feature of the GasPort Project involves the delivery of Liquid Natural Gas by specially designed ships with on-board gas vaporisation technology called Energy Bridge Re-gasification Vessels (EBRV's). This significantly reduces the need for construction of land-based gas processing infrastructure, restricting both the landtake and duration of construction period required for the project.

Justification for the GasPort Project is largely based upon the urgent need within the United Kingdom to secure cost-effective and flexible natural gas supplies in the short-term. The Department of Trade and Industry has recognised the United Kingdom's increasing reliance upon gas imports for domestic and industrial heating and electricity supply. Various strategic mid-term and long-term options are in place for procurement of gas supplies, but the Department of Trade and Industry has emphasised the need to secure supplies in the short term. As full commissioning of the GasPort Project can be achieved in less than one year, it is proposed as an important contribution towards rationalising short term gas procurement for the United Kingdom. Once established, the GasPort Project infrastructure is also able to maintain its contribution to UK natural gas procurement in the long term.

Any decision not to proceed with the GasPort Project has implications for short term energy supply at several levels. Locally, there is a risk of winter 2006/2007 energy supply problems for several key local industrial consumers. This risk is reflected in the provision of clear support for the GasPort Project from several key industrial

stakeholders, including Terra Nitrogen, Biofuels Corporation Plc, National Grid, Ofgem and the Major Energy Users' Council. At a more strategic level, a decision not to proceed with the GasPort Project has the potential to result in supply shortfalls and energy price increases during the 2006/2007 winter and subsequent years. Several factors have prompted selection of the River Tees as a location for the GasPort Project. The natural gas delivered from EBRV's will occasionally require combination with nitrogen gas prior to distribution through the National Transmission System, and the Teesside location takes advantage of nitrogen gas availability at the BOC Plant within the Teesport Estate. With regard to natural gas delivery, this would utilise a refurbished jetty (GasPort Marine Jetty) on the River Tees approximately one kilometre north west of the British Oxygen Company facility. The GasPort Marine Jetty would comprise new mooring hooks, fendering, walkways, gas unloading tower, navigation lights, safety devices, vehicular access, car parking, infrastructure for transfer of waste from the ship and delivery of fuel oil to the ship.

A new Sub-terminal for treatment of natural gas prior to distribution to the National Transmission System would be constructed in the vicinity of the GasPort Marine Jetty. This facility is referred to as the GasPort Sub-terminal and is principally concerned with warming the vaporised gas and adding nitrogen as required to provide the correct calorific value for the National Transmission System. The GasPort Project connection to the National Transmission System would be provided within the existing gas terminal facility at Seal Sands operated by PX Holdings Limited, referred to as the PX Gas plant.

Transfer of nitrogen gas from the BOC Plant would utilise a new section of 200mm diameter steel pipeline, at a length of approximately 3km operated at a pressure of 99barg. Transfer of conditioned natural gas from the GasPort Sub-terminal to the National Transmission System connection within the PX Gas Plant would utilise a new section of 600mm steel pipeline, at a length of approximately 6km, operated at a pressure of 75 bar. The new pipelines required for the GasPort Project would be laid in trenches excavated to 1.2 metres depth, and would pass beneath the River Tees using Horizontal Directional Drill techniques. This method avoids the disruption required for excavation of a pipe-laying trench across the river.

Construction of all elements of the GasPort Project would be complete by December 31st 2006. This will require local site clearance, demolition and refurbishment works at the GasPort Marine Jetty and GasPort Sub-terminal. Elsewhere, the majority of construction works would involve trench and backfill pipe laying with subsequent ground reinstatement. Some localised excess spoil from trench excavations may need to be removed from site. Deliveries of materials and equipment for pipe laying and other construction activities would be required at occasions during the construction phase. With regard to the GasPort Marine Jetty, renovation work includes local maintenance dredging of the riverine muds and silts to maintain a sufficient area at the jetty to accommodate the draft of ships moored at the Gasport Marine Jetty.

Operation of the Project would require vaporisation vessels to supply Liquid Natural Gas to the refurbished GasPort Marine Jetty on around 16-20 occasions per year. At e-ach visit, complete vaporisation and gas transfer to the GasPort Sub-terminal would require around 7 to 8 days. While in use, the GasPort Sub-terminal would have on-site staff based within a site security building and control room. This facility would have vehicle access and parking, and would be enclosed by a perimeter security fence.

Overview of Teesside GasPort Environmental Impact Assessment

The GasPort Project is presented to Stockton on Tees Borough Council and the

Redcar and Cleveland Borough Council as an Environment Impact Assessment Application in accordance with the Town and Country Planning (Environmental Impact Assessment (England and Wales) Regulations, 1999. This form of application is made because the GasPort Project is considered to have the *potential* for significant adverse impacts on the environment, as judged against the 1999 Regulations. The Environmental Impact Assessment process is undertaken to establish the extent to which *potentially* significant adverse effects on the environment are likely to arise. The process for determination of the GasPort Project application is described within the Town and Country Planning Act, 1990 and the Planning and Compensation Act, 1991. In addition to town and country planning statute, both general and specific elements of the GasPort Project would potentially require consents issued against a variety of other legislative Regulations.

The scope of the GasPort Environmental Impact Assessment has included the following areas of potentially significant environmental impact: socio-economic considerations; hydrology, flooding, hydrogeology and soils; ecology and nature conservation; archaeology and cultural heritage; landscape and visual amenity, noise and vibration, air quality, traffic and transportation, waste and surplus material; safety.

The Environmental Impact Assessment process undertaken for the GasPort Project has considered the intrinsic value and importance of various key environmental receptors against the magnitude of change likely to arise form the proposals. This has enabled the identification of potentially significant impacts associated with the proposals. Where appropriate, specific measures to mitigate for potentially significant impacts have been identified. An assessment of any residual impacts has then been undertaken.

The Environmental Impact Assessment process for the GasPort Project has drawn from consultations with the following organisations: Environment Agency, English Nature, Industry and Nature Conservation Association, Redcar and Cleveland Borough Council, Stockton on Tees Borough Council, Teesport Archaeology, the Health and Safety Executive and PD Teesport. In addition, the various assessments described in this Non-technical Summary have drawn from desk study review of relevant existing information and from site surveys.

A summary of key information provided by each of the assessment chapters contained within the GasPort Environmental Statement is provided below.

Environmental Impact Assessment Overview

Planning Policy Context

The GasPort Project Environmental Statement has considered implications for key policy considerations at national, regional and local levels. In particular, these include national Planning Policy Guidance notes, Planning Policy Statements and Regional Planning Guidance Notes, supplemented by a review of the Tees Valley Structure Plan (2004), the Tees Valley City Region Development Programme (2005), the Redcar and Cleveland Local Plan (1999) and the Stockton-on-Tees Local Plan (1997).

These documents combine to provide a framework of strategic planning objectives, development control policies and guidance on policy implementation for local and regional planning decisions. The GasPort Project proposals have been reviewed to identify any situations where general or specific elements of the project are considered likely to support or contravene the objectives of the policy context. In a number of cases, the GasPort Project is considered to be supportive of the planning context, in particular where policies concern economic development and regeneration. Elsewhere, the Project is considered to have a largely neutral effect on

planning policies. The potential for policy contravention is associated with policies concerning the portion of ecology and nature conservation interests. This relates to the risk of disturbance to bird populations of European importance on the Seal Sands Special Protection Area that is adjacent to one section of proposed gas pipeline. However, the ecological impact assessment prepared for the GasPort Project describes an impact mitigation strategy that avoids the risk of these impacts from arising.

Socio-economic Considerations

The GasPort Project assessment of implications for socio-economic considerations focuses on implications for revenue generation within the locality, employment prospects and recreational amenity as a quality of life factor.

The Socio-economic Assessment concludes that the GasPort Project does not detract from local development plan priorities for employment generation and economic regeneration. A small number of employment opportunities will be created by the project, in particular through construction phase activities. In addition, quality of life aspects of recreational amenity provision would not be adversely affected by the proposals. In general, the principal benefits to socio-economic considerations concern the value of increased gas supply efficiency to economic performance.

Hydrology and Flooding

An assessment of the potential for adverse impacts of the GasPort Project on local water resources has been undertaken. In addition, a consideration of risk to the Project from predicted flood risk at the GasPort site has also been carried out, focusing on the GasPort Sub-terminal in particular. Both these assessments have considered statutory and non-statutory considerations that relate to general hydrological sensitivity and to local priorities, as communicated through local development plan policies.

This assessment has drawn from a combination of desk study review of archive data on surface water characteristics, and flood risk associated with river and tidal effects. In addition, site assessments have been undertaken. Standard evaluation frameworks have been used to assess the quality of watercourses within the locality of the GasPort Project site, and information on licensed and known unlicensed domestic and industrial groundwater abstractions has been considered. In addition, information on the location and status of licensed water discharge points has been included in the assessment. The impact assessment has considered likely effects of both the construction and operation phases. With regard to the construction phase, this concentrates on potential effects of pipe trench excavation and accidental spillages on surface water hydrology. Flood risk and water supply effects have been considered for both the construction and operation phases of the project.

A series of impact mitigation measures have been identified to avoid the potential for adverse impacts on water resources in particular. It is proposed that these would form part of an Environmental Management Plan for the GasPort Project that would provide an implementation framework for the majority of impact mitigation measures identified through the Environmental Impact Assessment. The Environmental Management Plan would provide details of site management considerations that would help to avoid accidental spillages of silt and other potential contaminants such as fuel oils during construction activities. With regard to flood risk, the Environmental Management Plan specifies the avoidance of flood sensitive areas for storage of materials that could create a pollution hazard if flooded.

When the effect of these mitigation measures for the protection of water resources and avoidance of flood risk is considered, the Environmental Impact Assessment process concludes that residual impacts would be not significant.

Geology, Hydrogeology and Soils

The GasPort Project Environmental Impact Assessment has included an assessment of potential adverse impacts on groundwater characteristics and any features of geological, geomorphological or soil resource interest. The assessment has drawn from a combination of desk study review of relevant policy guidance on hydro geological impact assessment and protection, and existing information on the character of existing geological, soil resource and hydro geological characteristics of the GasPort Project site and surrounding area.

This assessment has provided a review of site history to identify the likelihood of contaminated ground being present within the GasPort site. This has identified that following early 20th Century coastal marshland reclamation and several phases of subsequent industrial use, all areas within the GasPort Project site comprise made ground, with areas likely to contain areas of contaminated land. An area of particular interest in this respect includes land adjacent to Seal Sands that is recorded as a former landfill site. No geological or geomorphological features within the GasPort Project area, groundwater's are classified as minor aquifers. These are shallow features, confined by underlying impermeable Mercia Mudstones, classified as a non-aquifer. Consequently, no part of the GasPort site is situated with and Groundwater Protection Zone.

With regard to the potential for adverse impacts of the GasPort Project on geology, geomorphology, hydrogeology and soils, the assessment has focused on the risk of groundwater contamination. In addition, the potential for adverse health effects on construction workers has been considered in terms of exposure to contaminated sediments excavated from the pipe trench. Other potential effects on hydrogeology have been included in the GasPort Environmental Impact Assessment, but have not identified the potential for significant adverse impact.

The potential for adverse effects of groundwater and human health has been identified through the desk study assessment. The GasPort Project Environmental Statement identifies the need for confirmation of this issue through formal ground investigation prior to implementation of construction activities. In addition to hydrogeology and human health impacts associated with excavation of contaminated substrates, the assessment also identifies the risk of groundwater impacts from accidental contamination with construction materials.

A series of impact mitigation measures are identified within the GasPort Project Environmental Statement for the avoidance of potential impacts of contaminated soils on hydrogeology and human health. These concentrate on avoidance of accidental contamination through careful site management, to be directed through implementation of an Environmental Management Plan for the project. These provisions would focus on any contaminated land areas identified through the proposed ground investigation.

When the effect of these mitigation measures on the management of contaminated land and groundwater impacts are considered, the Environmental Impact Assessment process for the GasPort Project concludes that residual impacts would non significant.

Ecology and Nature Conservation

An ecological impact assessment has been undertaken for the GasPort Project,

providing a review of key features of ecology and nature conservation interest within the Project site and surrounding area and an assessment of potentially impacts that could arise from the GasPort proposals. Mitigation measures have been proposed where the potential for these impacts has been identified. The ecological assessment has drawn from a combination of desk study review of existing information and from site surveys.

The ecological assessment has established that the GasPort Project site and surrounding area includes several sites that have been designated at high levels for their nature conservation interest. These include the Seal Sands Site of Special Scientific Interest in the extreme north east of the Project area, designated at a national level. In addition, the Teesmouth and Cleveland Coast SPA, Ramsar Site and European Marine Site extends across Seal Sands and the surrounding area, designated at an international level. In general, the designation of these areas recognises their outstanding importance for wintering wetland bird populations. This interest also extends to adjacent non-designated areas that are known to be used for high-tide roosting by birds from Seal Sands, and as nesting habitat for breeding birds. Nature conservation law protects wild birds from disturbance while nesting. In addition to these areas, several additional sites have been designated for their nature conservation interest at a local level. These include a section of the River Tees adjacent to the GasPort Marine Jetty and several wetland sites to the west of the Project area.

With the exception of a short section of pipeline trench to the wet of the Project area, no element of the GasPort Project directly affects any sites designated for their nature conservation interest. The affected area concerns the edge of the Seal Sands Site of Special Scientific Interest where the pipeline will need to be laid. During the construction phase there would be disturbance from pipe laying activities. However, this part of the Site is considered by English Nature to have lost its key features that formerly qualified for designation as a Site of Special Scientific Interest. Elsewhere, there is the risk of disturbance to wintering birds from pipe laying activities adjacent to

Seal Sands, and the potential for disturbance to ground nesting birds within pipe laying areas. In addition to these effects, there would be very local impacts of disturbance to areas of undisturbed grassland vegetation.

The GasPort Project Environmental Impact Assessment has identified that avoidance of these impacts would be achieved by ensuring that pipe laying activities are not undertaken during periods of the year when local bird populations are sensitive to disturbance (March to July for nesting birds and November to March for wintering birds). In addition to proposals for reinstatement of vegetation within areas affected by pipe laying activities, these measures would ensure that residual impacts on ecology and nature conservation are not significant.

Archaeology and Cultural Heritage

The GasPort Project Environmental Impact Assessment has included a desk study assessment of archaeological interests within the Project site and surrounding area. This has established that no archaeological sites or listed buildings are present within the Project site. A series of entries are included on the Sites and Monuments Record for sites within 1km of the GasPort Project area, mainly associated with the medieval and post-medieval salt industry, and with World War II sites. The assessment has concluded that the area has low potential for remains dating from the prehistoric period to the post-medieval period.

The archaeological assessment has concluded that the GasPort Project would have no impact on the archaeological or cultural heritage resource, and that no further archaeological assessments would be required.

Landscape and Visual Amenity

An appraisal of landscape character, quality and visual amenity has been undertaken for the GasPort Project site, supporting an assessment of potential for impacts arising from the proposals. Relevant legislation has been considered to establish the extent of any recognised areas of landscape and visual interest, and site surveys have been undertaken to support the assessment. These have comprised surveys to define the character and quality of the Project's landscape context, and to establish the extent of key public and private views. This has focused on the definition of a Zone of Visual Influence for the proposals. The impact assessment has concentrated in particular upon the intrinsic sensitivity of the landscape to change in its visual character and consequent visual amenity.

Four distinct landscape character areas have been defined for the GasPort Project and surrounding area, comprising Residential Areas, the Coastline, Industrial and Port Areas and Wetland Marshes. Within the Zone of Visual Influence for the Project, key visual receptors have been identified for Industrial / Port side zones, Bird hides adjacent to Seal Sands, Public Rights of Way, the Durham Heritage Coast and Public Highways.

In general, the assessment has concluded that impacts of the GasPort Project on landscape character, quality and visual receptors would be neutral, with slight adverse impacts during the temporary construction phase. However, the extent of these construction phase impacts would be localised, and no significant adverse impacts would result.

Noise and Vibration

The GasPort Project environmental Impact Assessment has considered implications of the proposals for noise nuisance. The assessment has considered the likely noise effects of all key elements of the scheme, both during construction and operation phases. Elements of the project considered most likely to create noise effects are operation of liquid natural gas carriers during gas transfer to the onshore GasPort Sub-terminal and operation of the GasPort Sub-terminal itself. In addition, the assessment has given careful consideration to the potential for noise impacts related to traffic associated with the construction and operation of the proposed development.

The noise assessment has included a review of existing statutory provision for the definition of noise nuisance levels and the protection of sensitive receptors from noise impacts caused by development projects. Baseline information on existing noises levels within the GasPort Project area has been taken from existing studies. This has been used to run predictive models that consider the baseline situation against predicted noise power levels for the liquid natural gas vessels, GasPort Sub terminal and other relevant elements of the GasPort Project. The potential for significant noise impacts has been considered against guidelines provided by the provided in the draft Institute of Acoustics / Institute of Environmental Management and Assessment and the World Health Organisation. In addition, relevant British Standards have also been considered.

With regard to the baseline noise environment, the Environmental Impact Assessment recognises that the GasPort Project site and surrounding area is influenced by noise associated with heavy industry, road-related traffic with a high percentage of Heavy Goods Vehicles (HGVs), port related facilities and large shipping movements. The noise impact assessment has identified a variety of potential receptors, drawn largely from recent Environmental Impact Assessment work undertaken within the area. Key residential receptors have been identified 2.5km to 3.0km from the site. In addition, potentially sensitive ecological receptors have been identified (bird populations using the Bran Sands and North Gare mudflats in particular). Noise effects on people in the workplace have also been considered. The noise assessment has considered both daytime and nightime noise nuisance issues, and has taken into account prevailing wind as an influence on noise dispersion.

The noise assessment concludes that deep piling works required for the GasPort Marine Jetty refurbishment would be the noisiest element of the project. Noise impacts associated with this element of the project would be short term, and confined to the daytime only. Consequently, there would be no change in night time ambient noise levels. Daytime noise impacts are considered as negligible and insufficient to require specific mitigation measures. Noise impacts on ecological receptors are noted within the impact assessment, but mitigation is achievable through avoidance of periods when important bird populations are present. This is described further in the ecological impact assessment. Operation of the liquid natural gas ships and the GasPort Sub-terminal are assessed as resulting in a negligible increase in noise nuisance for sensitive receptors. In addition, the assessment concludes that no significant elevation of workplace noise levels would arise for operatives based within the GasPort Sub-terminal.

Air Quality

The GasPort Project Environmental Impact Assessment has included a detailed assessment of likely impacts on air quality. This has included a review of the legislative regulatory context to the project for defining and maintaining air quality standards, a review of key information on the existing baseline air quality context to the project, and on likely emissions to air that would arise during construction and operation phases of the GasPort Project. Predictive models have been used to support an assessment of likely changes to existing baseline air quality, focusing on the potential for exceeding specific thresholds of significant air quality impacts. The air quality assessment concentrates on air quality objectives for oxides of nitrogen, Sulphur Dioxide, microscopic particulates, Carbon Monoxide and chemical compounds referred to as Volatile Organic Compounds. The air quality thresholds for these characteristics considered in the GasPort assessment principally concern human health objectives. In addition, air quality objectives for maintenance of semi natural vegetation have also been considered. Air quality objectives set within national standards have been used in this assessment, supplemented by local objectives described by the Tees Valley Environmental Protection Group. The assessment has not identified any sensitive human air quality receptors within the GasPort Project site or surrounding area. The various sites of high nature conservation interest within the locality are considered as potentially sensitive air quality receptors.

Air quality modelling has been undertaken that considers flue heights, meteorological conditions and possible influence of local turbulence and eddying patterns on dispersal patterns for potential air pollutants. Dispersal modelling has been undertaken for a 2km x 2km area centred on the GasPort Marine Jetty. Existing baseline air quality data has been obtained from standard national land local air quality monitoring stations.

Potential construction phase impacts on air quality are principally associated with the risk of dust creation during demolition and excavation activities. Construction phase vehicle movements would also create the risk of air quality pollutants such as particulates, nitrogen dioxide and carbon monoxide. The impact assessment

considers that potential air quality effects of these emissions would be trivial. By comparison, the only source of non-trivial operational phase emissions is that generated by the ship's boilers during re-gasification prior to gas delivery to the GasPort Sub-terminal. The air quality assessment has modelled two boiler operation scenarios with potentially different implications for air quality. These options involve the use of either gas or heavy fuel oil to run the boilers.

The impact assessment has predicted concentrations and dispersal profiles for oxides of nitrogen sulphur dioxide, particulates and volatile organic compounds in particular. Very low levels of impact on local air quality are predicted, and these avoid areas with sensitive human or ecological receptors. Notwithstanding the prediction of no significant adverse impacts on air quality, the assessment identifies a series of precautionary mitigation measures. These include dust suppression by water-spraying and sweeping, the use of covered vehicles for transport of spoil and material, the use of wheel washes, reduced stockpiling of construction materials. With regard to the operation phase, the assessment recommends that standby operation of diesel generators should be minimised, and that boiler combustion analyzers should be used to ensure that boiler efficiency requirements are met.

Traffic and Transportation

The GasPort Project Environmental Impact Assessment has included Traffic Impact Assessment. In particular, this has looked at the extent of additional traffic movements that would be created by either construction or operation phase of the Project. The impact assessment has the likelihood of these new traffic movements giving rise to significant adverse environmental impacts. The assessment comprises an initial review of relevant national, regional and local policies relevant to an assessment of traffic impacts of a major new development project. This is then followed by a review of existing data on current traffic movements on the surrounding road network and an assessment of the potential implications of new traffic movements created by the GasPort proposals.

The policy review concludes that the GasPort Project supports relevant Government and local development plan policies. In particular this relates to policies that encourage the best use of existing infrastructure, the transfer of bulk goods and the efficient distribution and access to markets of a valuable energy resource without the subsequent need for road freight. In addition, the proposals support policy objectives aimed at the growth of sustainable transport use and in particular those that encourage sustainable distribution, with minimal residual impact on the strategic road network, particularly at roundabouts on and between the A66, A1053 (T), A174 (T) and A19 (T).

With regard to the main Traffic Impact Assessment, this concludes that following the construction phase, traffic generated by the GasPort project will have no significant impact on local road network. Limited traffic movements will occur when gas vaporisation vessels are in dock, and on-shore travel by the vessel's crew is likely to require taxi or private hire mini-bus movements due to a lack of opportunities for use of public transport.

New transportation requirements are expected to peak during the construction phase, associated in particular with HGV movements required to delivery of pipe, plant and construction materials, and with car and minibus traffic associated with construction personnel. The number of delivery journeys would be minimised by such measures as locally sourcing construction materials where possible, utilising off highway areas where possible to move plant and equipment. In addition, staff groups would be transported by minibus and car share where possible. The GasPort Project Traffic Impact Assessment predicts that construction phase HGV movements would have a Moderately Significant, localised and temporary residual impact on the road network. The movement of cars and personnel during this period will have a short term localised impact on the on the local road network, generally considered to be a Non Significant, temporary residual impact. The Traffic Impact Assessment assumes a maximum of 3 HGV movements per gas vaporisation vessel visit to the GasPort Marine Jetty. Other visits to the site would include security staff, and other official personnel associated with gas vaporisation vessel movements. These movements are likely to be spread over the 7-8 day mooring period, and the resulting impacts are considered to be negligible.

In general, traffic generated by the GasPort Project would have a slight adverse impact upon local roads during the construction phase of the project. A Traffic Management Plan would be produced to control the routing and timing of traffic movements. During the operation phase, the Project would generate minimal traffic given the low servicing needs of the operation and the likelihood that most activity will occur outside peak hours.

Waste and Surplus Material

The GasPort Project Environmental Impact Assessment has considered environmental impact issues associated with the production of waste and surplus material during pipeline trench excavation works, pipeline installation, commissioning and operation and the disposal, reuse and/or recycling of this waste. The legislative context to waste management is considered, and the assessment draws from a review of site conditions, including information on contamination potential provided elsewhere within the Environmental Statement.

The assessment has considered all activities within the GasPort Project that have the potential to generate waste material. This material includes non-contaminated and contaminated spoil form pipe trench excavations, waste concrete, used tarmac, scrap metal, canteen waste, waste packaging, pipe off cuts, waste wood, portable toilet waste, used spill kits for oil spills etc, former landfill waste, contaminated water (groundwater, water used in commissioning of pipeline), and HDD Drilling mud (produced from boring under the River Tees).

With regard to the potential impacts of these waste materials arising from the GasPort Project, the principal receptors considered include uncontaminated surface and near surface soils, controlled surface water and groundwater, ecological receptor and human receptors. Construction phase impacts considered in the assessment include pollution from accidental liberation into the environment of potentially harmful wastes, in particular to uncontaminated land and water. In addition, the potential for exposure of workers to potentially harmful wastes has been considered, and in both these cases these impacts are considered as potentially of Moderate to Major significance. During the operation phase, of particular concern is the potential for waste water arising from pipe testing activities to become contaminated. Uncontrolled disposal of these waste waters has the potential to create impacts of Moderate to Major significance.

The GasPort Project Environmental Impact Assessment identifies a number of impact mitigation priorities for waste management. These include the reduction of waste generated (reuse and recycling), careful storage of waste materials, risk reduction for accidental spillage of waste materials, control of Non Hazardous and Hazardous Waste, managed disposal of waste material and specific water Pollution Prevention Controls. It is proposed that these measures are implemented through the GasPort Project Environmental Management Plan. This would ensure that the residual environmental impacts of waste management are not significant.

Safety

The GasPort Project Environmental Impact Assessment has included a consideration of project safety considerations, emphasising special features of the gas vaporisation vessel design and operation that have been included to reduce the risk of accidental events arising that could result in adverse environmental impacts. This assessment has identified over thirty international safety regulations that have regulated gas vaporisation vessel design, construction and operation. These concern both the reduction of risk to the environment and to the health and welfare of workers.

The assessment also describes the programme of safety training and audit that is required of the thirty members of each gas vaporisation vessel crew. The safety audit process includes a rigorous programme of integrity testing for all elements of the vessel that concern environmental protection.