Dear Sir

PLANNING ACT 2008 – RULE 8(1)(B) OF INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010 – SUBMISSION OF LOCAL IMPACT REPORT

LOCAL IMPACT REPORT UNDER SECTION 60 OF THE PLANNING ACT 2008 REGARDING THE PROPOSED UNDERGROUND GAS STORAGE FACILITY AT PREESALL SALT FIELD, LANCASHIRE

LCC REFERENCE NUMBER: PREE – 00043

I refer to the above proposed development and to the application that has been submitted to you for Development Order Consent for the project.

Please find enclosed a copy of a Local Impact Report (LIR) that has been prepared for the project under rule 8(1)(B) of the Infrastructure Planning (Examination Procedure) Rules 2010. This LIR has been prepared by the County Council in its role as Local Planning Authority.

The LIR was approved by the County Council's Cabinet Member for Economic Development, Environment and Planning at a decision making session on 1 June 2012.

Should you have any questions regarding this report, please contact me.

Yours sincerely

Stuart Perigo
Development Management Group
Local Impact Report under section 60 of the Planning Act 2008 in relation to the proposed underground gas storage facility at Preesall salt field, Lancashire

Report of Lancashire County Council as Local Planning Authority

1. Introduction

1.1 Halite Energy Group (Halite) has submitted an application for a Development Consent Order for the construction of an underground gas storage facility. This includes the creation of caverns by solution mining in salt; the construction of associated above and below ground infrastructure; construction of a new access road at Preesall; and the construction of a new gas pipeline between Preesall and Nateby interconnecting to the national transmission system with an associated pumping station.

1.2 The application will be determined by the Secretary of State after consideration by an Examining Panel of Inspectors and specialist advisor of the National Infrastructure Directorate (NID) which is part of the Planning Inspectorate (the Examining Panel). The NID is responsible for considering Nationally Significant Infrastructure Projects (NSIP's). The proposed development is a NSIP.

1.3 Local Authorities in whose areas applications for NSIP’s are submitted are invited to produce a Local Impact Report (LIR). The Planning Act 2008 requires that the Examining Authority (and Secretary of State) must have regard to the LIR in determining applications for a Development Consent Order. The definition of an LIR in the Planning Act 2008 is ‘a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area). The content of the LIR is a matter for the local planning authority concerned but the Planning Inspectorate has published guidance on its content. This report follows that guidance.

1.4 Wyre Borough Council is also a relevant local authority for the area affected by the proposed development. Wyre Borough Council has produced its own LIR which concentrates mainly on the impacts of the development in terms of the adopted and emerging development plan documents that have been
adopted or are in preparation by the Borough Council. The County Council’s LIR concentrates on the detailed environmental impacts of the scheme with regard to the previous development proposals for similar developments.

1.5 The Examining Authority has requested Halite to prepare statements of common ground (SOCG) on specific issues with relevant bodies including the County Council. Reference is made in this report to a number of such statements on which agreement between the applicant, the County Council (and in some cases Wyre Borough Council) can be reached and can be submitted to the Examining Authority. These are significant in that they seek to establish the acceptability of elements of the application and content of the supporting environmental assessment, both of which have sought to address the County Council’s concerns to previous applications and which are referred to in the site history section of this report. The SOCG are set out in Appendix 2.

2. Details of the Proposals

2.1 The application is for the development of an underground gas storage facility to store 900 million m$^3$ of natural gas (to give a working capacity of up approximately 600 million m$^3$) in 19 caverns with an operational design life of over 40 years and would be interconnected to the national gas transmission system via an underground pipeline to Nateby. The development would extend over an area of 506 hectares. The application is accompanied by an Environmental Statement (ES).

2.2 In preparing the scheme Halite has had regard to the Secretary of State’s decision to dismiss the appeal by Canatxx Gas Storage Limited (CGS) for non determination in 2007 (application 02/03/1415) and the refusal of CGS’s most recent planning application by the County Council in January 2010 (application 02/09/0159).

2.3 The primary issues addressed in the Environmental Statement are:

- Geology
- Landscape and Visual Impact
- Safety and security
• Perceived fear
• Sustainability of the use of salt
• Ecology
• Highway and public rights of way
• Noise
• Water quality/sea defences/flood risk
• Tourism and economic development
• Marine archaeology and cultural heritage
• Civil and military aviation and defence
• Air quality
• Land use
• Waste management
• Need

2.4 The proposed above ground development would extend over an area of 506ha on land either side of the Wyre Estuary. Development on the east side of the Wyre Estuary would include:

• Security and Support Facility – located within existing buildings at Higher Lickow Farm.
• Booster Pump Station – to be located next to Hackensall Sewage Treatment Works.
• Wellhead Compounds – located on the east side of the Wyre Estuary
• Gas Compressor Compound – located on the main Preesall site to the east of the Wyre Estuary
• Associated underground pipelines, access tracks and new access from the A585.

Development on the west side of the Wyre Estuary would include:

• Seawater Pump Station – located on the west bank of the Wyre Estuary.

2.5 Three pipelines are required as part of the project:
- Brine Discharge Pipeline – a pipeline under the River Wyre to the Booster Pump Station. The brine discharge is then conveyed through a pipeline across the Fleetwood peninsula and over the sea wall to a point approximately 2.3 kilometres offshore where it would be discharged to the Irish Sea.

- Electricity Pipeline – underground electricity cables from the United Utilities switchgear in the Stanah Switchyard to the proposed Gas Compressor Compound.

- Interconnecting underground gas pipeline to the national gas transmission system at Nateby with an associated pumping station.

2.6 Improvements to the road infrastructure in the area would be required. A new road is proposed from the A588 to Back Lane. Access to the suite would be taken from Back Lane linking the access road to the main buildings and wellheads via a series of tracks.

2.7 The main site construction works, buildings and pipelines would be constructed over a three-year period with the cavern creation process taking up to eight years to complete.

2.8 Halite has set out the proposals in the following documents. The documents are extensive and contain a considerable amount of detail much of which is very technical:

- Project overview – overview of the project and consultation process
- Preliminary Environmental Information – preliminary assessment of environmental effects of the Project; also provides details of alternative Project designs, layout and pipeline routes that have been considered.
- Preliminary Quantitative Risk Assessment – Examines risks posed by the Project.
• Planning and Indicative Drawings – Indicative drawings in respect of the proposed Project.
• Summary Geology Report – Geological stability of area proposed for underground salt caverns for gas storage.
• Golder Report – Summarises findings of salt permeability tests.
• Drilling Report – Review and analysis of proposed drilling programme and techniques required to create caverns.
• Pipeline Subsidence Report – Analysis of pipeline route stability.
• NTS Pipeline Report – Analysis of the proposed route for the pipeline from Preesall to Nateby and alternative route that have been considered.
• Preliminary Planning and Sustainability Statement – Overview of relevant planning policies and summary of how the project has responded to reasons for refusal of previous planning application made by Canatxx Gas Storage Limited.
• Preliminary Design and Access Statement – Overview of design principles for above ground structures forming part of the Project.
• Statement of Community Consultation – Sets out the community consultation programme, what we will consult on, who we will consult with, the proposed method of consultation.

2.9 Decommissioning – the application indicates the proposed operations would be phased over 40 years. However, at that time the caverns would be emptied of gas, filled with brine and the boreholes plugged with cement. The wellheads would be cut off 2m below the surface and the land restored. Ongoing monitoring of the caverns would be carried out throughout the operational life of the site and for a further as yet unspecified period. Retention of the cavern washing infrastructure would be investigated in view of its potential to be of assistance in enhancing flood protection of the area. Any retention would require planning permission and would be considered on its merits at the time of any application.

2.10 The applicant has reviewed the need for gas storage facilities since the previous application was considered and concludes there is greater need than
previous and that the need is supported by current Government policy and the National Policy Statement. The applicant maintains that the Preesall proposal would make a significant contribution (an additional 3 days' supply) to gas storage and supplies in the UK close to market need and be able to rapidly respond to fluctuations in market demand due to the design of the facility.

2.11 The applicant maintains the salt deposits at Preesall have been proven for gas storage and that safety issues would be addressed as part of the COMAH process regulated by the Health and Safety Executive. The proposed caverns would be located away from existing workings and in conjunction with engineering design and monitoring systems would ensure any gas leakage could be contained and mitigated.

2.12 Whilst the applicant accepts the disposal of saturated brine to sea is an unsustainable use of minerals, it is maintained that there is no alternative beneficial use for the salt. Proportionally the quantity of salt lost would be minimal and its loss would be outweighed by the benefits of contributing to the national need for gas storage.

2.13 The applicant strongly believes that the proposal has significant locational advantages due to its proximity to the existing NTS infrastructure; it would replace the depleting Morecambe Bay Gas Field; it would add significant capacity to the western leg of the western leg of the NTS; the salt is suitable; there is a local water source for solution mining; it would have a reliable electrical connection at Stanah; it would have high injection and withdrawal rates; it would have a fast reaction time; it would be reliable; it could be constructed at low cost and has flexibility.

3. **Description of the Application Site and Surroundings**

3.1 The development would extend over an area of 506 hectares, the main part of which covers an extensive irregularly shaped area comprising the River Wyre/estuary, open agricultural land with associated hedged field boundaries and salt marsh to the east of the Wyre Estuary. To the north is Hackinsall Sewage Works, Cote Walls Farm and golf course, beyond which is the settlement of Knott End; to the north east is Preesall; to the east Stalmine;
and to the south Staynall with Hambleton beyond. There are a number of scattered farmsteads in the area, which are typical to the rural area comprising old houses and a mixture of traditional and modern agricultural buildings and hard standings. There are two recreational static caravan parks at The Heads adjacent to the estuary, one of which is within the control of the applicant. The other is in private ownership. The area is accessed by a number of single width roads, agricultural access tracks and a number of public footpaths including the Wyre Way, which runs up the eastern side of the Wyre Estuary on the flood embankment. The land is generally flat but undulating in parts. There is evidence of former salt workings in the form of brine abstraction well heads throughout the site and extensive evidence of former abstraction activity to the east and north east in the form of water filled depressions some of which are significant, extensive, deep and security fenced. These are a result of either catastrophic cavern collapse or areas associated with a former ‘dry’ mine to the east of Cote Walls Farm the surface development of which has since been removed and the former workings are now flooded. Land to the east of the estuary is designated as Countryside Area and part of the site falls within an area designated as Defined Open Coastline in the Wyre Local Plan.

3.2 The area of Arm Hill and all the salt marshes (under which some of the caverns are proposed to be constructed along with the under Wyre interconnecting pipe and electricity lines) fall within Morecambe Bay Special Protection Area (SPA) designated due to its importance in supporting bird populations of European importance. This area also falls within the Wyre Estuary Site of Special Scientific Interest (SSSI) and a Ramsar site.

3.3 To the west is the Wyre Estuary and associated salt marshes (under which caverns are proposed to be constructed along with the under Wyre interconnecting pipe and electricity lines) beyond which lies the Fleetwood peninsula. The eastern side of the peninsula is fronted from north to south by Fleetwood Docks, the former Fleetwood power station site which has been reclaimed for ecological and recreational purposes, Jameson Road landfill/raise site and land associated with the former ICI works. The salt
marshes to the west of the estuary fall within the Morecambe Bay SPA, SSSI and Ramsar site.

3.4 A corridor of some 20m beneath the estuary would be required to accommodate the communications, seawater and brine discharge pipeline. The pipelines would be directionally drilled under the estuary emerging at Fleetwood Dock. The discharge pipeline corridor would then continue and run a course parallel to the rear of the Jameson Road waste water treatment works and a holiday caravan park, along Jameson Road over the disused railway before crossing the A 585(T) and running through the grounds south of the Nautical College of Fleetwood. It would then run to the rear of residential properties on South Strand and then parallel to West Way past Rossall Hospital to the coast. The discharge pipeline would then cross the sea wall before extending some 3km into the Irish Sea (previously 2km). The corridor crosses an area of mixed uses including areas of vacant and open land and playing fields some of which is designated Green Belt and is in close proximity to a number of Biological Heritage Sites, one of which is crossed at Rossall.

3.5 A smaller corridor is proposed similarly beneath the estuary to accommodate an electricity supply between a substation at Hillhouse and the proposed electrical sub-station near Burrows Farm. The supply would then run underground through agricultural fields to supply the above ground infrastructure.

3.6 The application site to the east of the Wyre Estuary lies in the open countryside and the locations where surface development is proposed would not comprise previously developed land in policy terms.

3.7 The proposed interconnecting gas pipeline to the national gas transmission pipeline at Nateby would pass beneath agricultural land. The proposed pumping station would similarly be located on agricultural land adjacent to existing agricultural buildings and accessed via a private farm track.

4. **Planning History**
4.1 There is an extensive history of brine working in the area to the east of the estuary and more recently associated with the former ICI works at Hillhouse to the west of the estuary. All these operations have now ceased although the legacy of the operations on the eastern side of the estuary in the form of well heads and extensive ground subsidence associated with former underground caverns is very apparent. One of the underground caverns located on the corner of Burrows Lane and Back Lane contains mercury waste (BW107). The well head and immediate surface area is security fenced.

4.2 In 1998 an application was made to the Department of Trade and Industry for the construction of a gas pipeline from Burrow’s Farm to St Michaels-on-Wyre in connection with a proposed gas fired power station at Fleetwood. However, no consent was issued and the application has now lapsed.

4.3 In 2003 a planning application was submitted to the County Council to the County Council for an underground gas storage facility (ref 02/03/1455). An appeal against non-determination was lodged in October 2004. The Development Control Committee resolved to object to the proposal on eleven grounds mainly relating to the lack of information on geological and ecological issues, unacceptable impacts of traffic, visual grounds and perceived fear in December 2004. The appeal was subsequently withdrawn and substituted by an appeal against non determination in connection with planning application 02/05/1415 referred to below.

4.4 In August 2004 an application for Hazardous Substance Consent was submitted to the County Council for the storage of 2 million tonnes of natural gas (Ref HSC/04/01). The application was refused by the Development Control Committee in December 2004 and against which an appeal was lodged.

4.5 In November 2004 a planning application was submitted to the County Council for an underground gas storage facility (ref 02/04/1415). The application contained additional information relating to the geology of the site and sought to address the concerns relating to the previous application. The information was considered insufficient and the application was not determined. An appeal against non-determination was lodged in June 2005.
The Development Control Committee resolved to object to the proposal in July 2005 on eleven grounds mainly relating to the lack of information on geological and ecological issues, unacceptable impacts of traffic, visual grounds and perceived fear.

4.6 In April 2005 an application for Hazardous Substance Consent was submitted to the County Council for the storage of 2 million tonnes of natural gas (Ref HSC/05/01). This was subsequently amended to 1.2 million tonnes. The application was considered in tandem with the above planning application (ref 02/04/1415). In view of the lack of information relating to geology the application was not determined. An appeal against non determination was lodged by the applicant.

4.7 Following a public inquiry the Secretary of State dismissed the appeals against the non-determination of the planning application and application for Hazardous Substance Consent in October 2007. The main issues considered by the Secretary of State were the following:

- Need, alternatives and principle of development
- Geology, storage technology, mining industry
- Risk (gas migration/explosion), risk assessment, fear as a material consideration
- Sustainability of the working/disposal of mineral salt
- Impact on internationally, nationally, and locally designated sites and protected species
- Landscape and visual amenity
- Impact on the Wyre Estuary/Wyre Way and other footpaths
- Highway safety and highway impact on amenity
- Noise impact on areas east and west of the Wyre Estuary
- Economic/tourism impact
- Human rights

4.8 In December 2009, a planning application was submitted to the County Council for the construction of underground caverns by solution mining for the storage of gas and for the construction of associated above ground
infrastructure (ref 2/09/0159). The application was refused in January 2010 on the basis it contained insufficient information to properly assess the geology of the area and its relationship to former workings; would introduce unacceptable industrial development into a rural area; would represent an unacceptable risk of gas migration and would result in fear and distress.

4.9 In December 2009 an application for Hazardous Substance Consent was submitted to the County Council for the storage of 1.2 million tonnes of natural gas (Ref HSC/09/01). The application was considered in tandem with planning application ref 02/09/0159. The application was refused in January 2010 on the basis it contained insufficient information to properly assess the geology of the area and its relationship to former workings; would represent an unacceptable risk of gas migration and would result in fear and distress and be contrary to the SEVESO 11 Directive in that it would not maintain appropriate distances between the storage areas and the Wyre Way which would have to be closed.

4.10 A planning application for the retention of two mineral exploration pads, associated capped well structures and access tracks, on land adjacent to the Wyre Way at Hay Nook and Bank End, Preesall was refused in January 2010 (ref 2/09/0549).

4.11 An application for an interconnecting gas pipeline to the national transmission line at Nateby was submitted to Wyre Borough Council and whilst the Borough Council resolved to grant planning permission subject to further details, no decision notice has been issued. The proposed pipeline forms part of the current application for the Development Consent Order.

5. Relevant Planning Policies including policies of the Development Plan

5.1 The development plan for the area comprises the following:

- North West Regional Spatial Strategy - The Regional Spatial Strategy: The Localism Act 2011 provides that the Secretary of State may revoke the whole or any part of the Regional Spatial Strategy by order. At the time of writing, no such order has been
made and therefore the policies of the RSS are still a material consideration although little weight should be attached to them.

- Lancashire Minerals and Waste Local Plan (LMWLP)
- Lancashire Minerals and Waste Core Strategy (LMWCS)
- Wyre Borough Local Plan (WBLP) (saved policies)
- Fleetwood – Thornton Area Action Plan

5.2 The relevant regional and local policies are set out in a SOCG titled Development Planning Policy. It should be noted there are no policies in the North West Regional Spatial Strategy, the draft North West Plan Partial Review, LMWLP and the LMWLPCS that address the use or creation of caverns in salt by solution mining for gas storage. The policies referred to are considered to be the relevant policies for the proposal and that the SOCG can be agreed. However, since the SOCG was prepared the National Planning Policy Framework (NPPF) has been published.

5.3 National Planning Policy Framework

5.4 The National Planning Policy Framework (NPPF) was published on 27 March 2012 and sets out the Government’s policies for England. It replaces much of the previous national planning guidance contained in PPG’s, PPS’s, MPG’s and MPS’s although the supporting appendices have been retained. It sets out the Government’s planning policies for England and how these are expected to be applied. It sets out the Government’s requirements for the planning system and a framework for the preparation of local and neighbourhood plans. Planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise. The NPPF must be taken into account and is a material consideration in planning decisions. Planning Policies and decisions must reflect and where appropriate promote relevant EU obligations and statutory requirements. The Framework sets out the meaning of sustainable development for the purposes of the planning system. It sets out three dimensions to sustainable development: economic, social and environmental. At the heart of the NPPF is a presumption in favour of
sustainable development and for decision taking means approving development proposals that accord with the development plan. Where the development plan is absent, silent or relevant policies are out of date planning permission should be granted unless there any adverse impacts which would significantly and demonstrably outweigh the benefits when assessed against the policies in the Framework as a whole or when specific policies of the Framework indicate development should be restricted.

5.5 The NPPF refers to the statutory status of the development plan and provides that proposed development which accords with an up-to-date Local Plan should be approved unless material considerations indicate otherwise. At the heart of the NPPF is a presumption in favor of sustainable development. At the decision making stage, the NPPF states that the presumption in favor of sustainable development means that development proposals according with the development plan should be approved without delay.

5.6 Paragraph 17 of the NPPF sets out a list of core planning principles that should underpin decision making including driving and supporting economic development to deliver infrastructure, the need to achieve high quality design, protecting the Green Belts and countryside, supporting change to a low carbon economy, taking account of flood risk, contributing to the conservation and enhancement of the natural environment and heritage assets and managing patterns of growth to make fullest use of public transport, walking and cycling.

5.7 The NPPF is supported by Technical Guidance relating to flood risk pollution control and mineral extraction.

5.8 **National Policy Statements**

5.9 The Planning Act 2008 made provision for the administration of development consent for nationally significant infrastructure to be administered by a new independent body – the Infrastructure Planning Commission (IPC). There will be 12 National Policy Statements central to the new regime covering infrastructure for energy, transport, waste, water and waste water.
5.10 The overarching national Policy Statement for Energy (EN-1) sets out the Government's energy policy, explains the need for new energy infrastructure and instructs the (now) Planning Inspectorate on how to assess the impacts of energy infrastructure development in general. It sets out the urgency for new energy infrastructure and provides that the Planning Inspectorate should not need to consider whether there is a national need for new energy infrastructure each time it considers an individual application, but should balance the need for and other benefits of energy infrastructure against the adverse impacts of energy infrastructure. The benefits include the need for energy infrastructure, job creation and any long-term or wider benefits. The adverse impacts include environmental, social and economic as well as impacts identified in the application or otherwise. The Planning Inspectorate is required to take account of any longer term adverse impacts and any cumulative adverse impacts. If the Planning Inspectorate is satisfied that the adverse impacts outweigh the benefits of the proposed development taking into account measures to avoid, reduce or compensate for those adverse impacts, consent should be refused.

5.11 The National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines (EN-4) must be read in conjunction with EN-1. The efficient import, storage and transmission of natural gas and oil products is crucial to meeting energy needs during the transmission to a low carbon economy and requires new infrastructure. With regard to underground gas storage, applicants must undertake detailed geological modelling to assess the suitability of the geology for underground gas storage, demonstrate the suitability of the geology for underground gas storage, undertake assessments of the impacts of a proposal in terms of noise, water quality and resources, the disposal of brine and provide any necessary mitigation measures.

5.12 In addition, the following documents and publications are considered relevant to this proposal.

5.13 **European Policy**

- Energy for a Changing World – An Energy Policy for Europe sets out the need for Europe to deliver sustainable, secure and
competitive energy. The thrust is on sustainability and the need to reduce carbon emissions but forecasts imports of gas will continue to increase and the need for the security of gas supply. It recognises the risk of supply failure is growing and that additional storage facilities would help the security of supply.

- EU Habitats Directive
- EU Directive – Control of Major Accidental Hazards Involving Dangerous Substances

5.14 Relevant Publications

- Department for Business Enterprise and Regulatory Reform - Gas Storage in your area – Your questions answered
- British Geological Survey – Underground Gas Storage

6. Consideration of Specific Impacts

6.1 The proposal has a long and protracted planning history. The most recent planning application was refused for four reasons. In preparing the application for development order consent the applicant has had regard to the findings of the Secretary of State as part of the former appeal, the County Council’s reasons for refusing the last planning application and the National Planning Policy Statements.

6.2 The County Council is no longer the determining authority for developments of this nature and is now a consultee as part of the decision making process for the development consent order. There is an opportunity to comment on the proposal as a whole but the County Council can no longer rely on advice from other statutory consultees as it would in the normal planning application process.
6.3 In preparing the LIR reference has been made to Statements of Common Ground. The statements address a number of issues on where there is agreement between the applicant, the County Council, and in some cases Wyre Borough Council. The statements on matters that were not in dispute or which did not comprise a reason for refusal in connection with the last planning application as follows:

- Planning History
- Planning Policy
- Sustainable Use of Salt Land Use
- Tourism and economic development
- Civil and military aviation and defence

6.4 The following are areas which have been contentious previously or areas on some of which the Examining Authority has invited more detailed comment:

- Ecology
- Archaeology
- Landscape
- Landscape and Ecological Management Strategy
- Traffic and Highways
- Geology
- Above Ground Risk/Safety
- Hazardous Substance Consent

6.5 The Examining Authority has specifically invited comment by the County Council on matters relating to Traffic and Highways, Geology and the application for Hazardous Substance Consent.

7. Ecology

7.1 The application site falls within and in close proximity to a number of statutory and non-statutory designated sites of nature conservation importance. Morecambe Bay and the Wyre Estuary are designated a RAMSAR site, a SPA and a SSSI in view of their international importance for mudflat and salt
marsh habitats, and the fauna and birds they support. Morecambe Bay is also designated a SAC. The impacts of those parts of the development on the Wyre Estuary, the marine environment and on protected species are matters for Natural England and the Marine Management Organisation. SOCG have been prepared between the applicant and those bodies. There are a number of BHS’s designated on the Fleetwood peninsula for their vegetation, bird, invertebrate and mammal interest on the west side of the estuary. International and national protected species are recorded in close proximity to the BHSs and are which are for the County Council to address.

7.2 The development impacts on three areas, the Wyre Estuary and Preesall area, the zone of the proposed discharge pipeline across the Fleetwood peninsula and the marine environment in view of the outfall. The marine environment is a matter for the Marine Management Organisation. The Environmental Assessment refers to a number of desk and field surveys carried out throughout these areas in consultation with a number of specified ecological bodies/groups. It accepts there would be limited disturbance primarily through the development phase of the project. It also concludes that the protected areas are also at risk from the drilling operations and potential pollution associated with such, although mitigation measures would seek to minimise that risk. It accepts those fields on the landward side of the estuary, which support wintering wildfowl and provides a breeding habitat would be adversely affected and proposes a landscape and ecological management strategy to minimise the impacts and maximise the opportunities for protecting and creating habitats.

7.3 With regard to the Fleetwood peninsula, no statutory conservation sites would be affected but the proposed revised alignment of the pipeline would affect the Fleetwood Marsh Industrial Lands BHS with the loss of flora significant to Lancashire. It would also cross the Fleetwood Promenade BHS. The assessment recognises that during the construction of the pipeline there would be significant disturbance and temporary loss of habitat but maintains this is in the short term and maintains these impacts could be mitigated by reinstatement.
7.4 The EA acknowledges the construction of the brine outfall and its operation would cause short-term disturbance to intertidal and subtidal habitats during construction. More significantly they conclude that the discharge of brine would cause localised mortality of static species during the operational phase of the brine discharge pipeline although recovery is likely once discharge ceases. The assessment has undertaken a plume modelling exercise that concludes brine discharge would not impact on the Morecambe Bay area. Liverpool Bay is proposed as a Special Area for Conservation.

7.5 An assessment of the impacts of the proposal on the ecology of the area has been undertaken by the applicant. The assessment concludes that the proposal would not have an unacceptable impact on the ecology of the area or on the adjoining designated protection areas. What impacts there are could be mitigated for as part of the overall development proposals and delivered as part of the proposed requirements for the development consent order. This is a similar view to that taken on the previous application and which was for a larger area. The reasons for refusal did not include a reason relating to ecological matters. The assessment of the impacts on ecology is considered acceptable by the County Ecologist as are the proposed mitigation measures and which would be delivered as part of the development consent order requirements. A SOCG on ecology has been prepared and is considered to be acceptable by the County Councils ecologist. A Landscape and Ecological Management Strategy Plan (LEMSP) has also been prepared and is considered acceptable in respect of ecological issues. It is considered that the Ramsar Site, SPA, SAC, SSSI and statutorily protected species would not be adversely affected and mitigation measures could be provided to ensure their protection through the construction and operational phases of the development. Providing a detailed management strategy to protect farmland within the control of the applicant for the duration of the development to provide for birds associated with the Morecambe Bay SPA/Ramsar site, namely Pink Footed Geese, it is considered that the proposed habitat mitigation and management measures would satisfy the Conservation (Natural Habitats and Conservation) Regulations 1994 and the Habitat Directive.
7.6 The applicant acknowledges there would be a negative impact on the ecology of the area (and particularly within the marine environment) and proposes mitigation measures to address such. The County Council defers to the views of Natural England and the Marine Management Organisation in respect of impacts on protected species and the marine environment. In terms of the impacts of the development outside the marine environment, the mitigation measures set out in the SOCG and the LEMSP are considered acceptable in principle. However, notwithstanding the proposed measures, there would be a negative impact on the ecology of the area until such time as, and if, the proposed mitigation measures become established and which must provide for no net loss or an enhanced ecological diversity for the area. The County Council therefore concludes that there would be an unacceptable impact on the ecology of the area during the construction phase of the development which would be over a significant time period; the proposed mitigation measures may take some time to establish and for which there is no certainty of success. In the event the mitigation measures were to be unsuccessful, then there would be a net loss on the ecological diversity of the area and which would be unacceptable.

8. **Archaeology / Cultural Heritage**

8.1 An assessment of the impacts of the proposal on the archaeology of the area has been undertaken by the applicant. The assessment concludes that the proposal would not have an unacceptable impact on the archaeology of the area. What impacts there are could be mitigated for as part of the overall development proposals and delivered as part of the proposed requirements for the development consent order. This is a similar view to that taken on the previous application and which was for a larger area. The reasons for refusal did not include a reason relating to archaeological matters. The assessment of the impacts on archaeology is considered acceptable by the County Archaeologist as are the proposed mitigation measures which are proposed as a requirement in the development consent order. A SOCG on archaeology has been prepared and is considered to be acceptable by the County Archaeologist and can be agreed. It is therefore concluded that there would be no unacceptable impacts on the archaeology and cultural heritage of the
area subject to the mitigation measures proposed as part of the Draft Development Consent Order.

9. Landscape

9.1 Throughout the previous proposals for underground gas storage in the Preesall area the County Council has consistently expressed concern to the impact of such on the landscape. The impact on landscape was a major issue at the public inquiry and a reason for the refusal of planning application 2/09/0159. Whilst the current proposal is smaller than previous applications in terms of the quantities of gas to be stored, covers a smaller area and has been designed in a way to minimise its impact on the landscape, there continue to be above ground development as part of the proposal which is considered to have an impact on the landscape, most particularly associated with the proposed gas compressor station and well head compounds. The development to the west of the Wyre Estuary remains very similar to that previously proposed and with which no issues were raised. This continues to be the case subject to detailed design of the proposed water pumping station and sea wall crossing and which could be required as part of the requirements.

9.2 A visual appraisal of the development has been undertaken by the applicant as part of the EA, which concludes that most of the impacts would be temporary and those impacts that would be permanent would be mitigated by landscaping in time.

9.3 The appraisal recognises that there would be some disturbance as part of the pipeline construction across the Fleetwood peninsula but that this would be for a short term temporary period and impacts would be mitigated by a sensitive programme of works, reinstatement of disturbed land and mitigation of impacts throughout the construction period.

9.4 To the east of the Wyre Estuary, the proposal falls within a rural area predominately used for agricultural purposes. There is evidence of former salt workings in the form of water bodies associated with the subsidence of a former dry salt mine and which are now used for recreational purposes;
catastrophic failures associated with the collapse of former caverns which did not retain a salt roof and some of which now form water bodies and which are all security fenced; and evidence of more recent salt extraction in the form of well heads associated with caverns which were developed by retaining a salt roof. One brine well holds waste mercuric sulphide; this wellhead is similarly security fenced but falls outside the control of the applicant.

9.5 The main visual impact associated with the development would be during the construction phase and from the above ground plant, access tracks, wellheads and secure compounds, buildings and associated features such as storage compounds, parking areas etc for the operational life of the site to be located on the eastern side of the estuary and which would introduce significant changes to the landscape over the operational life of the site and possibly beyond if certain elements of the infrastructure are retained beyond the decommissioning stage.

9.6 As part of the assessment of the most recent planning application (Ref 2/09/0159) the County Council appointed consultants to undertake an assessment of the landscape and visual impacts of the proposal on the landscape. The consultants have been retained and have undertaken an assessment of the landscape impacts of the current proposal.

9.7 With regard to the assessment and that undertaken to assess the previous application it is considered that the landscape to the east of the estuary is of high quality and is characterised by two distinct landscape character tracts; the low lying mud flats and salt marshes associated with the estuary and an established agricultural landscape of the coastal plain comprising medium sized fields enclosed by hedges and scattered farmsteads. The area lies within the Coasts and Estuaries and Amounderness landscape tracts defined in the Landscape and Heritage SPG to the former Lancashire Structure Plan and which has been retained for development control purposes. This gives priority to the conservation of sand dunes, salt marshes, coastal cliffs and grasslands, beaches and other intertidal habitats. The site also lies within the Open Coastal Marsh, Coastal Plain and Suburban Landscape Character Types.
With regard to the impacts of the proposal on the coastal environment to the west of the Wyre Estuary the impacts are considered to be temporary and reversible and would be implemented during the earliest stages of construction. Permanent impacts would be limited and would not have a permanent detrimental effect on the open character of the coast. The viewing platform at the sea wall has potential to enhance the coastal environment. In terms of impacts on the urban environment, the scheme would not result in long term, permanent or irreversible adverse impacts and certain aspects have the scope to make a positive contribution to the urban environment. During operation and after implementation of mitigation measures there would not be a permanent loss of land that otherwise contributes to open space and recreational needs. Mitigation proposals largely relate to reinstatement of land and features disturbed during construction, the long term maintenance of which provide opportunities to increase the amenity value of the area and positively contribute to the setting and context of other areas of urban regeneration.

With regard to the impacts on the rural environment to the east of the Wyre Estuary, the scheme would have generally adverse impacts on the areas of open countryside and this would conflict with the aims of the policies for the rural area, which specifically aim at protecting or enhancing the rural environment.

The proposals for mitigation and enhancements would go some way to improving the visual appearance of the scheme in the rural environment and reducing the overall adverse impact of the development. The Hyder LVIA has considered these elements and concludes that in this area, and in spite of high quality design and mitigation, there would still be residual impacts on the landscape. Notwithstanding the design and mitigation measures proposed, it is still considered that the cumulative effects of the scheme would have significant adverse impacts on the character and quality of the rural environment as part the construction and establishment phases to year 18 and also on the visual receptors although it is acknowledged that such effects beyond that period may become neutral with only character areas LCA4B and
4c, the Wyre Way and footpaths in the vicinity or cross the site being subjected to a slight adverse impact.

9.11 The development would introduce built elements into the area to fundamentally alter the character of the area from that which is currently rural (with the potential to enjoy undisturbed recreational activities that have only distant views of urban features on the west of the estuary) and fundamentally altering the character of the area to a more urban character, particularly with the presence of the gas compressor station, associated stacks, well head compounds and access tracks.

9.12 The introduction of industrial built features, tracks and roads as well as the temporary and permanent disturbance to the existing landscape components would increase disturbance to the area.

9.13 Whilst proximity to the proposed underground gas storage facility and the interconnecting pipeline to the national transmission line may deliver operational convenience, it would be preferable for the industrial buildings, plant and equipment elements of the development that are not essential for the solution mining of the salt, such as the compressor complex, to be sited remotely on the western side of the estuary as part of the existing industrial development thereby reducing the visual impact of it in the rural environment on the east side of the estuary. However, it is now acknowledged that there is no land to the west of the Wyre Estuary that would meet the requirements of the Health and Safety Executive to facilitate the relocation of the major most intrusive element in the form of the gas compressor station and associated stacks.

9.14 **Impacts on amenity**

9.15 The proposal is likely to have direct and indirect impacts on trees located in each of the study areas and this would be in conflict with the broad principles of policy relating to protection of trees. However, it is considered that given strict controls ensuring the establishment and success of replacement planting and additional planting to mitigate any loss the impacts could be mitigated and/or offset.
9.16 In overall terms the focus of the most significant landscape and visual impacts are in the Wyre and Preesall study area. Whilst it is acknowledged that the applicant has sought to design the proposal in a way that would minimise the impacts, it is considered that such mitigation would only reduce the impact after a significant period (the applicant maintains that the mitigating effect of the landscaping would reduce the visual impact to an acceptable level after year 19) and that such impact up to this time would be unacceptable. Further, there is no certainty that the landscaping would be successful to achieve the desired level of visual mitigation. By its nature the landscaping would, or is likely to be of a deciduous nature reflective of the species in the area. Consequently, the tree planting designed to mitigate the visual impact of the above ground infrastructure would only be effective after year 19 and only then effective for part of the year when in leaf.

9.17 Impacts on the coastal and urban environments have been assessed with reference to the Irish Sea study area and the Fylde Peninsula study area. There would be limited impacts on the coastal environment in relation to the Wyre Estuary and Preesall study area. Although the impacts on these areas would be largely adverse in nature, they would also be temporary and reversible. The nature of these impacts would not be strictly in accordance with planning policy. However, the temporary and reversible nature of the different components mean that the proposal would not fundamentally conflict with the overall long term aims of the policies.

9.18 There are also components of the proposal located in the Irish Sea study area and the Fylde Peninsula study area that would be permanent. These include the viewing platform and the Seawater Pump Station. Due to the nature and proposed design of these components in the context of their proposed setting and immediate environment, the proposal concludes that these components would result in beneficial impacts. This conclusion is considered reasonable and both of the components, albeit by different functions, would have a positive contribution to the seascape or townscape in the locality. In the relevant policy context these components of the proposal would comply with planning policy in general subject to detailed design and which could be
addressed by the proposed requirements to the Draft Development Consent Order.

9.19 It is considered that the limited adverse impacts of the proposal on seascape and urban environments and the potential for positive contributions to these areas would not be outweighed by the adverse effects of the proposal on the rural environment and the harm to the amenity of the areas to the east of the Wyre Estuary.

9.20 It is considered that notwithstanding the amended design of the proposed booster pump station, the proposed compressor station, associated stacks, yards, wellheads and access roads are significantly larger developments than any that are currently present in the area. They would be substantial in scale and would remain visually incongruous in the area being uncharacteristic in design. It is considered that they would have some adverse visual impact in the otherwise predominately rural landscape characterised by low hills, hedgerows and woodland and designated as a Countryside Area in the Wyre Borough Local Plan. They would be visually prominent in the area until such time as landscaping could reduce that impact, and given the location of the site and the prevailing winds, the landscaping could take longer to become established to a degree that it would seriously contribute to mitigating the visual impacts of the buildings. It is considered that any change in design would not reduce the overall impact of the proposed compressor station, associated stacks, yards wellheads and access roads in the rural environment and they would remain of significant incongruous scale throughout the long term operational life of the site. It is also considered that the proposed ground recontoring and associated landscaping would alter the nature of the rural open environment and would not be in-keeping with the existing field patterns and network of trees, woodland and hedgerows although it is accepted that the mound profiles including the slackening of slopes to create a more undulating profile would help integration and which the Examining Authority should be invited to consider.

9.21 The wellhead compounds would introduce a significant large scale industrial element to an area which, whilst having some industrial past, is predominantly
devoid of such infrastructure and is an open rural agricultural landscape. Even following construction of the caverns when the well head compounds may be reduced in scale, they would still be significant in scale, particularly in relation to the rural nature of the area and when viewed from the Wyre Way. It is considered they would remain dominant, particularly throughout the development period when they would require large supporting secure compounds and would throughout that period and on subsequent completion, be surrounded by security fencing. This type of development would adversely affect the visual amenities of the area particularly throughout the development period but more significantly during the operational life of the site for a substantial period of time.

9.22 The development as a whole would bring a permanent significant change to an area that is locally protected for its landscape value in conjunction with the adjoining areas of protected ecological interest. Whilst the buildings could be redesigned to be more in keeping with a rural environment, their scale and purpose and external associated infrastructure would still far exceed that which could normally be associated with agricultural practices. It is considered that any changes that could be made to the proposal to reduce this level of impact would not address the fundamental concern regarding visual impact. The relocation of elements of the development that are not essential to the extraction of salt by solution mining and a significant reduction in the scale of above ground infrastructure associated with the extraction of salt may assist in reducing the visual impact but for which alternatives have not been considered. Consequently these elements are seen to be contrary to policy in that they are not essential to the extraction of salt and for which no special circumstances have been demonstrated. The applicant is of the view that the level of above ground infrastructure with its associated landscape mitigation would minimise its visual impact to an acceptable degree and that the visual impact associated with such would in any event be outweighed by the national need. The applicant is also of the view that this level of development and associated infrastructure is needed irrespective of the number of caverns that would be created. Given the reliance on the HSE and the COMAH process to determine the capability of the salt to accommodate the development and in
view of the uncertainty of such and the level of contribution this development could make to national need, the level of infrastructure proposed may prove excessive and the balance of acceptability or otherwise of the landscape and visual impact of the development against national need becomes more difficult to measure.

9.23 Nevertheless, the development within the area to the east of the estuary of the scale and design proposed is considered unacceptable and contrary to Policies EM1, DP7, RDF3 and RT9 of the Regional Spatial Strategy, Policies 2 and 7 of the LMWLP, Policies SP14,ENV2 and TREC12 of the saved policies of the Wyre Borough Local Plan. However, this impact must be considered against the capability of the site being developed and the contribution it would make to national need.

9.24 In general, it is acknowledged that the proposal includes mitigation proposals but irrespective of such it is considered there would remain a long term, years 9 to 18, an adverse residual impact on the landscape and visual amenity of the area and which is recognised by the applicant. Whilst landscape mitigation planting will reduce any residual effects this would not be for a considerable period of time and is entirely dependent on the success of such.

9.25 Where development proposals are in accordance with policy at any level the critical factor is adhering to aims that target the highest possible standards of design in order to generate the largest benefits from proposed mitigation and enhancements. In overall terms it is considered that these do not offset the level of adverse impact on landscape character, landscape features and on visual receptors.

9.26 On balance the County Council considers that the negative effects of the proposal on the open countryside and rural environment would strongly outweigh the positive influences on the coastal and urban environments. Mitigation measures would not be sufficient to reduce the overall harm of the urban features in the rural environment and there would be a fundamental change to landscape character from the introduction of urban features (as seen to the west of the estuary) further to the east.
A SOCG has been prepared in respect of landscape along with a Landscape and Ecological Management Strategy Plan (LEMSP). The SOCG only sets out the methodologies that have been employed in preparing the EA and application. The methods used to assess the impact of the proposal are acceptable and therefore the SOCG can be agreed. The LEMSP currently focuses on biodiversity/ecology and although it does include information relating to landscape mitigation it lacks detail and further information is required to demonstrate how the proposed planting and seeding would be undertaken, managed and maintained in order to achieve the critical longer term objectives of visual screening and landscape integration. However, the LEMSP is a strategic plan and the details are proposed to be submitted under the provisions of the requirements. It is therefore considered that the LEMSP can be agreed in respect of landscape matters.

10. Highway Safety Considerations

10.1 The proposed development involves works on both sides of the estuary. A Traffic Assessment has been carried out by the applicant. The applicant has set out an overall phasing plan for the works and prepared an estimate of traffic volumes.

All the works to the west of the estuary involving the construction of the sea water pump station, the brine discharge pipeline and the out fall would be constructed in the first year of the project. Access would be primarily taken from the A588 and the A585 (T) to the respective elements of the development. The assessment concludes that in the context of the overall urban complex of the Fleetwood peninsula, the volume of generated traffic would be part of the normal economic activity and would not be significant.

10.2 The works on the east side of the estuary involving the construction of the booster station, compressor station, access roads, service tracks, drilling pads and underground pipelines are proposed to be undertaken over a period of three years. All HGV traffic would access the site from the south. An access road to by-pass the difficult junction of the A588 with Cemetery Lane is proposed along which all vehicular access to the site is proposed to be taken.
It is proposed to retain the road throughout the operational life of the suite for service and emergency vehicle access.

10.3 The majority of HGV movements would be associated with the delivery of granular material for tracked surfaces, building sub bases and some of the drilling pads. The main routes to the site would be via the A588 through Hambleton from the south.

10.4 The assessment concludes that the volumes of traffic would not be significant in terms of the A588. The applicant further concludes that there are very special circumstances associated with the development which would outweigh the impacts on the highway.

10.5 An assessment of the impacts of the proposal on the highways of the area has been undertaken by the County Council's Assistant Director (Highways). The assessment concludes that the proposal would not have an unacceptable impact on the local highway network in the area. What impacts there would be could be mitigated for as part of the overall development proposals and be delivered as part of the proposed requirements for the development consent order, most particularly in the form of vehicle routing into the site. This is a similar view to that taken on the previous application and which was for a larger area. The reasons for refusal did not include a reason relating to highway matters. The assessment of the impacts on the local highway network is considered acceptable as are the proposed mitigation measures and which are proposed as part of the draft development consent order requirements. Should the proposal be supported, it is considered that the proposed access to the site could be found acceptable subject to landscaping. Retaining the access throughout the operational life of the site would ensure vehicles associated with the operations are removed from Cemetery Lane. It would also provide a direct access to the site for emergency vehicles without other parts of the local highway network, which is of a lower standard, having to be used.

10.6 With regard to public rights of way, the development on the western side of the Wyre Estuary would affect the public footpath No 13 along the western bank of the River Wyre at the point of the proposed directional drilling for the
electricity connection at a point close to a public car park, picnic spot and recreational area. Similarly there would be some disruption at the point the discharge pipeline would cross the sea wall at the point a new viewing platform is proposed as part of the development. Construction development at these points would be temporary and completed within the first year of development. Whilst such disruption may be inconvenient, it is considered that it could be satisfactorily addressed by requirement and would not constitute a sustainable reason for objecting to the proposal. It is accepted that the introduction of a viewing platform on the sea wall would introduce a feature which would enhance the amenity of the public access.

10.7 The discharge pipeline would also pass under the alignment of the railway track and for which there is a policy in the Thornton Area Action Plan to bring the track back into operational use but any impact on the track would only be temporary.

10.8 With regard to the eastern side of the estuary, the proposal would affect a number of public rights of way between Knot End and The Heads (particularly the Wyre Way (No. 42) which runs north/south parallel to the salt marsh on the elevated sea defence, and a bridleway (No. 2a). It would be necessary to divert or stop up some of these footpaths on a temporary or permanent basis during the construction phase and subsequent operational phase. This would inevitably result in limited access throughout the duration of the construction phase of the development and on completion of the development works it would introduce an industrial element in the form of large buildings, compounds, plant, equipment, lighting, fencing, access tracks and drilling platforms and associated vehicle movements over an extensive area in a rural environment to the detriment of the amenities of the footpath and bridleway network.

10.9 The development, both during the construction phase and throughout its operational life, irrespective of the proposed mitigating measures to attenuate visual impact, would be visually very prominent when viewed from the Wyre Way and the local highway network and which is addressed as part of the appraisal on landscape and visual impact.
10.10 It is considered that the overall impacts upon the amenities of the highway network (vehicular and foot) would be adverse and during the construction phase would be significant but do not of themselves constitute a sustainable reason for objecting to the proposal.

10.11 A SOCG on highways has been prepared and is considered to be acceptable by the County Council's Assistant Director (Highways) and can be agreed. It is therefore concluded that there would be no unacceptable impacts on the local highway network subject to the mitigation measures proposed as part of the Draft Development Consent Order and which include vehicle routing.

11. **Geology/Risk**

11.1 The presence and capability of the salt to safely accommodate the proposed creation of underground caverns by solution mining to store natural gas has always been a fundamental concern of the County Council. It has successfully maintained that there was insufficient information submitted in support of previous applications to demonstrate the capability of the salt to accommodate the development. As part of the assessment of previous proposals specialist consultants were appointed and have been retained to assess the current proposal. A full review of the geological deposit and its capability to accommodate proposed caverns has been undertaken by the applicant resulting in the identification of smaller specific geological areas capable of safely accommodating the proposed caverns and which form the subject of the current proposal. Notwithstanding the applicants assessment relies on existing geological information and no further geological investigations have been carried out (contrary to the recommendations made by the assessor supporting the planning inspector in a previous appeal and subsequently supported by the Secretary of State), it concludes that there are areas of geology that could safely accommodate the proposed caverns and remove the risk of migrating gas.

11.2 An assessment of the proposal has been undertaken by the specialist consultants on behalf of the County Council. The assessment concludes that the revised assessment by the applicant is sufficient to demonstrate that there are salt deposits that could safely accommodate the creation of underground
gas storage caverns. A SOCG on geology has been prepared and is considered to be acceptable and can be agreed. It is therefore considered that the applicant has demonstrated that there is a geological occurrence that could safely accommodate the proposed underground caverns. The safe storage of gas would then be a matter COMAH regulated by the Health and Safety Executive. It is therefore concluded that the geology of the site in the area of the proposed caverns is capable of safely accommodating the proposed development.

11.3 Monitoring of the existing brine wells has been a constant concern of the County Council in connection with the previous applications and continues to be so. Most particularly the County Council has expressed concern to the stability of existing caverns, the proximity to proposed caverns and the alignment of above ground infrastructure and roadways including the alignment of the proposed interconnecting pipeline to the National Transmission System through the site and the alignment of the proposed electricity supply line adjacent to an unstable cavern at Height o th' Hill. This concern has been highlighted by a recent incident involving the failure of BW45 resulting in a significant spillage of brine and consequent contamination of land. Further monitoring has identified a number of brine wells that are similarly under pressure and require remedial action. A proposed means of addressing such by the operator is currently being considered by the Environment Agency. This would involve the de-brining of the wells to a level that would allow pressurised air to be released in a controlled way. The incident involving BW45 and proposed means of dealing with caverns is not addressed as part of the application. However, further information on this matter has been requested by the Examining Panel as set out in Appendix 4 – Question 17(iv). The County Council maintains its concern regarding the stability of previous caverns and welcomes the question asked by the Examining Panel. It is therefore recommended that the Examining Panel should be satisfied that the former caverns are stable and do not pose any risk to the above and below ground infrastructure proposed as part of the application for the Development Order Consent before any consent is issued.
11.4 With regard to risk, the applicant maintains the safe storage of gas in salt is proven and that this is supported by the Health and Safety Executive (‘An Assessment of Underground Gas Storage Technologies and Incidents for the Development of Risk Assessment Methodology’ 2008; ‘Failure Rates for Underground Gas Storage’ 2008). The report concludes that storage of gas in salt caverns has extremely low incident rates and casualty numbers and that geological failure of a storage cavity in salt is extremely low to the extent that it can be considered negligible. If the applicant's conclusion on the capability and integrity of the salt to safely accommodate gas storage is accepted, the County Council would defer to the regulatory regime of the Health and Safety Executive and not maintain an objection on perceived fear but with the acknowledgement that such fear may remain irrespective of the proposed safety measures to be employed. In this respect the SOCG relating to above ground safety can be agreed.

11.5 The issue of geology has always been a major concern to the County Council. Notwithstanding the further assessment of geological information by the applicant and the acceptability of such by the County Council's specialist advisors, the County Council requests that the Examining Authority is satisfied that the applicant has demonstrated that the geology is present in a form that is capable of safely accommodating the proposed caverns and that the proposed standoffs between the caverns and the existing caverns as part of previous solution mining operations are sufficient to ensure the integrity of the proposed caverns in a way that would be safe and not give rise to the migration of gas through the geology of the area or be at risk from seismic movement.

12. **Hazardous Substance Consent**

12.1 The HSC application boundary reflects the boundary of the planning application. The proposal is for the underground storage of 600,000 tonnes of natural gas making it an upper tier establishment. The quantities exceed the specified thresholds for natural gas and therefore HSC is required. The SEVESO II Directive on the control of major-accident hazards requires local authorities to have regard to the objectives of the Directive, which are:
• To prevent major accidents and limit the consequences of such accidents for man and the environment;
• In the long term, to maintain appropriate distances between establishments and residential areas, areas of public use and areas of particular natural sensitivity or interest; and
• In relation to existing establishments, for technical measures so as not to increase

12.2 Relevant Guidance/documentation
• SEVESO II Directive
• The Planning (Hazardous Substances) Act 1990
• The Planning (Hazardous Substances) Regulations 1992
• The Planning (Control of Major-Accident Hazards) Regulations 1999
• Circular 04/200 - Planning Control for Hazardous Substances

12.3 The EEC Directive 96/82/EC requires Member States to introduce controls to prevent major accidents, which involve dangerous substances, and to limit their consequences for man and the environment. It requires the identification of lower and upper tier establishments where dangerous substances are present. Top tier establishments where the quantity of dangerous substances exceeds the specified quantity are required to prepare a safety report, provide public access to the report, prepare testing of on-site and off-site emergency plans and inform members of the public likely to be affected by a major accident. The Health and Safety Executive control these requirements.

12.4 Article 12 of the Directive requires land use planning controls to apply to both upper and lower tier establishments to ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in land use planning policies. These objectives are to be pursued through the siting of new establishments.
In the UK there is a system of control through the HSC process under the provisions of the Planning (Hazardous Substances) Act 1990. The provisions to this legislation give hazardous substance authorities the opportunity to consider whether the proposed storage or use of the proposed quantity of the hazardous substance is appropriate in a particular location, having regard to the risks arising to persons in the surrounding area and the environment. In this instance however the application for Hazardous Substance Consent is a matter for the Examining Authority and the Secretary of State. The Examining Authority must have regard to any material considerations and in particular, but without prejudice to the generality of the foregoing:

a) To any current or contemplated use of the land to which the application relates;

b) To the way in which land in the vicinity is being used or is likely to be used;

c) To any planning permission that has been granted for development of land in the vicinity;

d) To the provisions of the development plan;

e) To any advice which the Health and Safety Executive have given following consultations in pursuance with Regulations under Section 7(2) (Section 9 of the Hazardous Substances Act 1990).

The HSC controls do not duplicate the requirements of the Health and Safety Act. Rather, the controls acknowledge that even after all reasonably practicable measures have been taken to ensure compliance with Health and Safety legislation there will remain the residual risk of an accident that cannot entirely be eliminated. The HSC controls seek to ensure that this residual risk, to people in the vicinity or to the environment, is taken into account before a hazardous substance is allowed to be present in a controlled quantity. The extent of the risk in any particular case will depend upon where and how a hazardous substance is to be present; and the nature of existing and prospective uses of the application site and its surroundings. The Health and Safety Executive are required to provide advice on the nature and severity of the residual risk to persons in the vicinity arising from
the presence of the hazardous substance and the Environment Agency are required to advise on the risk to the environment.

12.7 Guidance for the consideration of applications for HSC is set out in Circular 04/2000. The issues for consideration are the nature and severity of the residual risk arising from the presence of the natural gas to:

- Persons in the vicinity; and
- The environment.

12.8 Risks to Persons

12.9 The development involves the underground storage of 600,000 tonnes of natural gas in underground caverns along with associated surface development over an area of 505.6 hectares (excluding the discharge pipeline). There would be seven wellhead compounds to facilitate a total of 19 caverns. The wellhead compounds once complete, would operate on an un-manned basis and be surrounded by security fencing.

12.10 The Inspector to the previous public inquiry and the Secretary of State concluded that the proposed development was unacceptable and would not accord with the SEVESO II Directive in that the proposal neither limited the consequences of accidents for the public, who are encouraged to use the area for recreation, nor maintained appropriate distances between establishments and areas of public use. The Secretary of State accepted the conclusions of the Inspector that the proposal would not accord with the objectives of the SEVESO II Directive and that any measures to maintain appropriate distances could only be achieved by the closure of a length of the Wyre Way and that amounted to sufficient reason to refuse the previous application. The Secretary of State also concluded that the accuracy and adequacy of the current level of geological knowledge of the site was insufficient to allow the granting of a meaningful HSC and that amounted to a further reason for justifying a refusal.

12.11 The most recent application submitted to the County Council for Hazardous Substance Consent was refused as it was considered that insufficient geological information had been submitted, that the applicant had failed to
demonstrate that gas would not be at risk of migrating, the risk of migration would generate fear and the proposal would not maintain appropriate distances between establishments and areas of public use contrary to the provisions of the SEVESO II Directive and that any measures to maintain appropriate distances could only be achieved by the closure of a section of the Wyre Way within the application boundary.

12.12 The nearest inhabited dwellings are Sportsmans Caravan Park and Riverside Cottage located close to the south west boundary of the proposed development. A caravan park between the two properties is owned by the applicant as is Cote Walls Farm which is located within the site.

12.13 The major hazard events involving loss of gas from a wellhead include the following:

- Vehicle damage.
- Damage by a deliberate act.
- Aircraft strike.
- Catastrophic failure of a wellhead resulting in an unconfirmed loss of gas followed by ignition.

12.14 It is accepted some of these risks could be minimised by, for example, the employment of appropriate security measures. However, in a worst case scenario of catastrophic failure of a wellhead leading to an unconfirmed loss of gas followed by ignition, there would be danger to humans within a given radius and the risk of spontaneous ignition of wood and similar combustible materials in close proximity. The applicant advises that the opportunity of this happening would be reduced by the design of the caverns and risers, the employment of emergency shutdown valves and best practice.

12.15 The applicant acknowledges the need to ensure the health and safety of the local community, workers at the site and any other people. Along with HSC the project would also be covered by the Control of Major Accident Hazards Regulations 1999 (COMAH) under the control of the Health and Safety Executive. This legislation seeks to ensure all workers, members of the public and others are not put into danger. The applicant commits to ensuring
that all aspects of the design, construction and operation of the facility meet or exceed the standards imposed by law and accepts responsibility for the health and safety of its employees, contractors, customers and members of the public. It would also ensure all environmental standards are met or would be exceeded and undertake operations in a way to cause least disturbance.

12.16 There have been a number of incidents involving the escape and migration of gas from underground storage caverns most particularly in America where gas ignited causing extensive damage and risk to property and inhabitants. These incidents were referred to as part of the previous application. There were a number of causes for these incidents, which primarily related to the mis-management of the operation and non-compliance with accepted practices and regulations. Nevertheless, following one incident, changes to State law were introduced requiring stand-offs for facilities of this nature from residential properties/areas. Whilst there are no current requirements or guidance for stand-offs in English law it is accepted that the legislation within which an operation of this nature would operate would be more stringent to minimise the risk of something comparable occurring. Nevertheless, even when operating within a strong legislative regime, incidents for unseen reasons can occur and these can be of a significant scale.

12.17 However, irrespective of what safety systems are employed, they are inevitably reliant on man-made plant, equipment and the maintenance and employment of technological safety measures, which have an inherent risk. It is accepted that there are many industrial processes, plant or equipment that are relied upon in this way, but perhaps not of a scale as the current proposal and involving such quantities of a hazardous substance.

12.18 The applicant has accepted that geological failure constitutes a major risk to the project. There has been extensive working of the salt deposits in close proximity to the proposal resulting in large underground caverns, one of which contains mercury, which in their own right could pose a risk to the proposed operations. The applicants proposed cavern creation techniques (bottom up) are designed to enable minerals other than salt (insolubles such
as mudstone inclusions and discrete beds) to fall to the base of the cavern. However the geological occurrence of such minerals creates the potential to allow gas migration through the surrounding rock strata. Any such migration could present very significant public dangers dependent upon where and in what concentrations the gas emerges or is able to collect. The integrity of local geology is considered to be very important in determining the acceptability of any particular proposal. The applicant has provided geological information as part of the application for a Development Consent Order.

12.19 The applicant is of the view that the geology is capable of supporting the proposed development. It is accepted that best practices may be employed and that the operation of the site would have to comply with COMAH (Control of Major Accident Hazards. The applicant would be responsible for ensuring the development is carried out in accordance with all relevant legislation, including the Health and Safety at Work Act. The Hazardous Substances Act 1990 makes it clear that nothing in any consent granted can require or allow the building or the operation of an establishment which does not comply with the relevant statutory provisions. The HSC has previously concluded that the risks to the surrounding population arising from the proposed operation(s) are small and that there were no significant reasons, on safety grounds, for refusing HSC. The current project is smaller and a SOCG has been agreed with the HSE.

12.20 Risks to the Environment

12.21 The Wyre estuary and Morecambe Bay area are subject to a number of national and international designations that reflect their importance for wildlife and nature conservation. The Wyre Estuary is designated as a Site of Special Scientific Interest (SSSI) and falls within the Morecambe Bay Ramsar site, Special Protection Area (SPA) and SAC, in view of their international importance for mudflat and salt marsh habitats, and the fauna and birds they support. There are a number of BHS designated for their vegetation, bird, invertebrate and mammal interest on the west side of the estuary.
12.22 An assessment of the impacts of the proposal on the environment in terms of the marine and estuarine ecology and water quality has been undertaken as part of the assessment of the Development Consent Order. It is now considered that the impacts on ecology for the County Council’s purposes would either be acceptable or could be made acceptable through requirements.

12.23 Whilst any gas leakages/migration and consequent fire/explosions would be likely to have an adverse impact on those interests of acknowledged importance, the risks arising from the proposed operation(s) are small and on this basis there are no significant reasons, on safety grounds, for objecting to the HSC.

12.24 If it is accepted that the salt and geology is capable of safely storing natural gas and that a COMAH assessment would satisfactorily ensure that appropriate distances between establishments and residential areas, areas of public use and areas of natural sensitivity or interest and that the residual risk arising from the presence of natural gas to persons in the vicinity and to the environment, then it must be concluded that the storage of gas for the HSC purposes is acceptable. However, this was not the view of the Secretary of State in determining the previous application.

12.25 The County Council remains concerned to the proximity of a facility of this nature to residential properties and recreational users of the area. However, the SOCG with the Health and Safety Executive is acknowledged and therefore the County Council would request that the Examining Authority is satisfied that the risk to the nearest residential properties and recreational users of the area is acceptable before issuing a Hazardous Substance Consent for the development.

13. Development Consent Order Obligations

13.1 The applicant is required to prepare a draft Development Consent Order. This would provide for:

- Works Provisions relating to works in the highway, discharge of water, protective work to buildings and authority to survey land
• Acquisition and Possession of Land which provides for powers of acquisition, temporary possession of land and compensation.
• Miscellaneous and General – including application of landlord and tenant law, deemed consent of the Marine and Coastal Access Act 1909, felling or lopping of trees, protective provisions, service of notices etc.

13.2 It includes a series of schedules relating to the development:

• Schedule 1 – Authorised development which sets out in detail the individual elements of the development.
• Schedule 2 – Streets subject to Street Works – which identifies all those highways that would be affected by the development.
• Schedule 3 – Streets subject to alteration or layout.
• Schedule 4 – Streets and Rights of Way to be temporarily stopped up.
• Schedule 5 – Access to Works – identifies all those points of access to the various elements of the development.
• Schedule 6 – Land of which temporary possession may be taken
• Schedule 8 – Protective provisions.
• Schedule 9 – Requirements

13.3 For the County Councils purposes, as Highway Authority, it is considered there are no issues the County Council would wish to raise with Schedules 1, 2, 3, 4 and 5.

13.4 For the County Councils purposes as land owner, there are no issues with Schedule 6 that cannot be resolved with the applicant.

13.5 Schedules 7 and 8 do not affect the interests of the County Council.

13.6 With regard to Schedule 9, the requirements are effectively the planning conditions which regulate the development. The requirements have been
drafted with regard to the guidance provided by the Planning Inspectorate (formerly the IPC). Generally the requirements appear acceptable. Requirements 8 and 27 refer to works to be carried out in accordance with those details set out in the Environmental Statement. Clarification is sought whether it is acceptable to refer to the Environmental Statement or whether the measures referred to should be specified in the requirement itself. Minor issues are raised in respect of the following requirements:

- Requirements 3, 5, 7(2), 8(1), 9, 10 (3), 11(1), 18(1), 19(1) 20(1), 21, 23(1)24, 25(1), 29(1), 30(1), 32(1), 34(3), 37(1), 28(1) – the details required by these requirements should be agreed 'in writing' by the relevant planning authority.
- Requirement 9 (b) – refers to the importing of materials. It should be clarified what materials are to be imported, for what purposes and the implications of such identified.
- Requirement 10 – refers to works being carried out to a 'reasonable standard' – the standard should be defined and the term 'reasonable' removed as it is imprecise.
- Requirement 15 (2) - only requires the wheel cleaning facilities to be available for use. The requirement should require the facilities to be used to ensure that no debris from any work site is deposited by vehicle wheels upon the public highway.
- Requirement 17(1) – all temporary access routes 'shall' be closed rather than 'are to be'.
- Requirement 17(2) – Reference to the Lancashire County Council Environment Directorate Specification entitled 'Tree and Shrub Planting with Grass Seeding and Protective Fencing is no longer a document used by the County Council and there is no replacement document. Reference to such should therefore be deleted.
- Requirement 18 (1) – it is not clear that the submission of details for temporary fencing includes the submission of permanent fencing as referred to in 18(4).
- Requirement 33 (1) – reference to aftercare – It is questioned whether aftercare can be required as part of a requirement for a
non mineral related development. If this is the case it is recommended that aftercare should be provided for as part of the Heads of Terms.

13.7 Subject to clarification of the above, should the Secretary of State be minded to grant a Development Consent Order, it is considered that the requirements set out in Schedule 9 of the Draft Development Consent Order are acceptable.

14. **Draft Heads of Terms**

14.1 The applicant has proposed heads of terms for a proposed development consent obligation under Section 106 of the Town and County Planning Act 1990 (as amended). The principle parties to the obligation are proposed to be:

- Lancashire County Council
- Wyre Borough Council
- Halite Energy Group Limited

14.2 The draft heads of terms provide for the:

- Continued management of the Community Liaison Panel.
- Establishment of a corporate social responsibility fund.
- Use of local employment and services.
- DE-commissioning at the end of the Project.
- The monitoring of funding.

14.3 The applicant has also made a commitment to including additional terms in respect of the following:

- Enter into an agreement to provide funding for the appointment of an officer or consultant responsible to the relevant planning authority for ensuring compliance with the requirements of the development consent order.
- The delivery of a monitoring programme for existing caverns by:
Prior to the commencement of any part of the development, Halite Energy Group or successor in title will submit to the LPA details of the brine well monitoring that has been previously carried out.

Following consultation with the Health & Safety Executive, Halite Energy Group or successor in title submit a monitoring programme and Maintenance Action Plan for approval by the LPA; and

The monitoring programme and Maintenance Action Plan will be implemented in accordance with the approval unless otherwise agreed with the HSE or the LPA.

The provision of a bond to ensure that if the project were to commence and for whatever reason fail to be completed or suspended or cease operation and not be recommenced for a specified period, those above and below ground construction works that had been carried out be removed and the land affected be restored in accordance with a restoration scheme to be first submitted to and agreed in writing by the relevant planning authority.

14.4 Schedule 9 Requirement 12 to the Draft Development Order Consent requires signage to be erected specifying the preferred route for traffic entering and leaving the site during the period of construction. It is considered vehicle routing and the procedures for non compliance with such should be included in the Heads of Terms rather than a requirement.

14.5 The development is for an underground gas storage facility. Requirement 33 to Schedule 9 provides for a restoration and aftercare scheme to be submitted. It is questioned whether aftercare can be required as part of a requirement for a non mineral related development. If this is the case it is recommended that aftercare should be provided for as part of the Heads of Terms.

14.6 The relevant planning authority in this case is Wyre Borough Council. One of the draft heads of terms relates to the monitoring of existing brine wells.
Whilst these historically were the subject of planning permissions granted by the County Council, no conditions are attached relating to the monitoring of the caverns. The incorporation of such a requirement would offer a long term opportunity to monitor the condition of the existing caverns and their relationship to the proposed caverns and above ground infrastructure.

14.7 As part of the proposed heads of terms, it is proposed to establish a corporate social responsibility fund to promote and fund activities that support the sustainability of the local community particularly through actions relating to community safety and security, heritage and education. The applicant proposes to contribute a sum of £50,000 during the first year of construction and a sum not less than that such for each year of the construction period with further grant funding to be agreed through an established social enterprise director/trustees for any period thereafter. Whilst such a contribution would benefit the local community, it is considered that it is not sufficient to offset the true impacts of the proposal in the local community. Should such a proposal be supported as part of the heads of terms to the development consent order, it is recommended that the contribution should be increased by 50%.

14.8 Should the Secretary of State be minded to issue a Development Consent Order, it is recommended that the consent should be subject to the above Heads of Terms being entered into prior to the issue of the order.

15. **Examining Authority's first Written Questions**

15.1 Following the preliminary meeting, the Examining Authority issued a number of requests and for further information directed principally to the applicant and the specific named bodies but invites comments from any party. The County Council is not a specific named body. The matters upon which the Examining Authority invite further comment relate to the following:

- Geology
- Assessment of significant effects on Morecambe Bay SPA and Ramsar site, and the impact on the SSSI's.
- Impact of the brine discharge to the Irish Sea and associated works
• Noise impacts
• Landscape impacts
• Brine Well number 43 and disposal of waste arisings
• Access
• The pipeline to Nateby
• Hazardous Substance Consent
• Compulsory Acquisition
• Corporate Structure (of the companies involved in current ownership of the land and the financial strength of such to meet the residual liabilities of the proposed project including decommissioning.

15.2 The matters upon which the County Council would wish to comment on in respect of geology and landscape impacts and the need to ensure there are financial provisions in place are addressed in the relevant sections to the report above.

16 Comments on Representations

16.1 The application for Development Order Consent has been subject to a number of representations from local residents and other interested parties. The Planning Inspectorate guidance on producing Local Impact Reports suggests that it may be appropriate for the Local Planning Authority to comment upon such representations in an LIR.

16.2 The main issues raised in representations relate to the specific environmental impacts of the development and have been covered in the appropriate sections of this LIR.

17 Conclusions

17.1 The Planning Act 2008 requires the Secretary of State to have regard to any Local Impact Report that is submitted by a relevant planning authority.

17.2 The need for underground gas storage facilities of this nature is emphasised in the National Policy Statements EN-1 and EN-4, although there is still a
need to assess the impacts of a proposal. As with the previous applications at Preesall, it is accepted there is a need for additional gas storage in the UK to maintain a secure supply of energy into the future and to avoid surges in gas prices. It is also accepted that this proposal, if developed to the scale proposed, would make a contribution to meeting the need. However, it is clear from the application that the progressive contribution of this scheme could only be realised over a period of 8 years and would not contribute to meeting the immediate need for gas storage. It would, by the applicant's estimation, contribute a further three days of supply.

17.3 The level of contribution that this proposal could make to the national storage of gas (3 days equivalent) is acknowledged providing the site could be safely developed and to the scale proposed. However, it is noted that the revised proposal is only half that previously proposed and therefore the benefits it may deliver are proportionally not as great when considered against the impacts it may generate. It is accepted that some of the main issues raised in previous applications have been addressed as part of this proposal and the impacts of which are considered acceptable or could be made acceptable, most particularly those elements of the proposal located on the Fleetwood peninsula. Other issues including highway impacts, impacts on footways and bridleways, noise and effects on tourism did not constitute reasons for refusal on the last planning application although the presence of a hazardous substance in the quantities proposed is of concern given the proximity to the Wyre Way. The current proposal is smaller and, in respect of these issues, would generate less impact and which could be found acceptable or made acceptable by the requirements. It is now acknowledged that the applicant has demonstrated the capability of the geology to safely accommodate the development to the scale proposed. The landscape and visual impacts of the proposal on the environment are more difficult to assess. All these issues are material to the balance to be drawn between the harm that may be caused by the proposals and the benefits that it would deliver.

17.5 It is acknowledged that the design of the site has changed from that previous. However, the County Council remains concerned that the visual impact of the proposal and most particularly those associated with the gas compressor
station, wellheads and associated infrastructure and tracks on the landscape on the eastern side of the Wyre estuary, during the development phase and operational life of the site until such time as (and if) the proposed planting mitigation proposals are successful (19 years). The nature of these elements of the proposal would be significant due to their design, scale and alien nature in a rural environment and adjacent to the SSSI and Ramsar sites. These elements of the proposed development would result in the introduction of an industrial development which by reason of their scale, design and location would be detrimental to the quality of the open character of the countryside, coastal plain, estuary landscape and Wyre Way. Such impacts would not be sustainable for the purposes of the National Planning Policy Framework and would be contrary to the intentions of Policy EM1, DP7, DF3 and RT9 of the Regional Spatial Strategy, Policies 2, 7, 25 and 31 of the Lancashire Minerals and Waste Local Plan, Policies SP14, ENV2 and TREC12 of the saved policies of the Wyre Borough Local Plan. The County Council considers that such impacts are contrary to the development plan policies, unacceptable and are not outweighed by the contribution the proposal would make to the national supply of natural gas. The County Council therefore maintains an objection to the proposal on the basis that it would have an unacceptable impact on the visual amenities of the area and for which mitigation would take some considerable period of time and without certainty of any success.

17.6 The issue of geology has always been a major concern to the County Council. Notwithstanding the further assessment of geological information by the applicant and the acceptability of such by the County Councils specialist advisors, the County Council requests that the Examining Authority is satisfied that the applicant has demonstrated that the geology is present in a form that is capable of safely accommodating the proposed caverns and that the standoffs between the caverns and those associated with previous solution mining operations are sufficient to ensure the integrity of the proposed caverns in a way that would be safe and not give rise to the migration of gas through the geology of the area or be at risk from seismic movement.

17.7 With regard to Hazardous Substance Consent the County Council remains concerned to the proximity of a facility of this nature to residential properties
and recreational users of the area. However, the SOCG with the Health and Safety Executive is acknowledged and therefore the County Council would request the Examining Authority to be satisfied that the risk to the nearest residential properties and recreational users of the area is acceptable before issuing a Hazardous Substance Consent for the development.

17.8 With regard to the SsOCG prepared by Halite and referred to in this report, the contents are agreed.

17.9 With regard to the Draft Development Order Consent, the County Council recommends the changes as set out in the report above.

17.10 With regard to the questions raised by the Examining Authority, the County Council invites the Examining Authority to consider the matters raised in this report, most particularly in respect of geology and monitoring the stability of the existing caverns within the site.

17.8 This Local Impact Report contains the views of Lancashire County Council in its role as a relevant planning authority and which the Examining Authority is requested to consider as part of the overall assessment of the proposal.

Lancashire County Council

June 2012